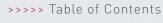


2021
PRODUCT
Solution Guide





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# About **Axiomtek**

### Empowering IoT Innovation

Over the past 30 years, Axiomtek has been among the major design and manufacturing companies in the field of industrial computers and embedded systems. Since its establishment, Axiomtek has successfully gained worldwide recognition for our innovative designs and outstanding customer satisfaction. As a valuable & reliable industrial manufacturer, Axiomtek is devoted to producing state-ofthe-art solutions that support users in achieving success. Axiomtek takes pride and ownership in what we do through our commitment to excellence.

Vision To be atop of the embedded computer industry, recognized by our partners as a trusted source of reliable products and dependable services

Mission To empower IoT innovation with reliable products and trusted services

**Systems** 

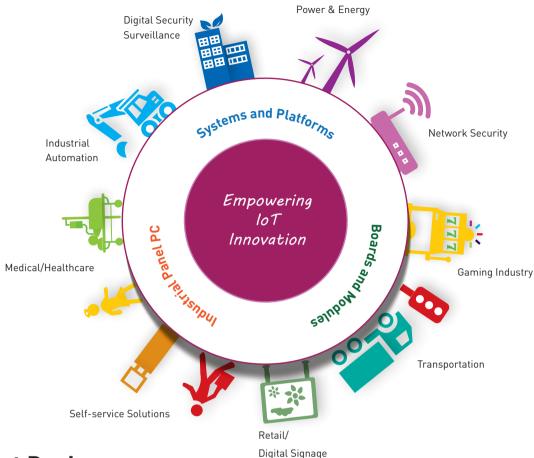
Value Passion: We are passionate about our vision, our goals and our commitment to serve our employees and customers.

> Integrity: We earn your trust through honest and ethical business practice. Innovation: Our focus is on developing new products using the most advanced technologies and customer-based experiences.

Partnership: We commit to long-term mutual success with customers, employees and stakeholders.

Leadership: Our goal is always to be the leader in our targeted markets.

Diversity: We strive to diversify our products and services to serve specific industry needs.



### **Product Design**

### Boards and Modules

- Leading technology and comprehensive form factors
- Fast design-in services, time-to-market
- Custom BIOS services and flexible I/O modules supported
- Wide range temperature design capability for heavy-duty applications
- Quick turnaround time for ID/ME and working sample design
- Supporting Intel® Smart Display Module (Intel® SDM) for retail sector

### Industrial Panel PCs

- Design for human machine interface, medical, kiosk, etc.
- EN 50155/EN 50121-4 certified for rolling-stock and railway applications
- Value-added systems with remote and local diagnostic functions
- Peripherals integration for medical, kiosk, POS and security applications
- Specific environmental design capability with certification upon request

### Systems and Platforms

- Heavy-duty design capabilities: extended temperature, fanless operation, anti-dust/water, anti-vibration, EMS and ESD
- Professional certified compliance and industrial standards
- Embedded OS and API capabilities to value-added custom systems
- IEC 61850/IEEE 1613 certified for power grid and substations
- Intel® OPS and Intel OPS+ signage player for retail applications
- EN 50155/EN 50121-4/EN 45545 certified for rolling-stock and railway management
- E-Mark and ISO 7637 certified for in-vehicle applications
- IEC 60945/DNV 2.4 certified for marine
- Intelligent remote management solution for IIoT (AMS.AXView)
- ATEX and C1D2 certified for anti-explosion

### >>>> Strength and Services



### Strength and Services

### Manufacturing Capacity

Over 8,000 square meters of factory space, along with the latest manufacturing equipment gives us the capacity to fully serve OEM/ODM businesses and while achieving high quality prompt deliveries at low cost. Our manufacturing site is equipped with the most advanced SMT assembly lines and optical inspection systems utilizing the lead-free technology. Being ISO 9001, ISO 45001, ISO 14001, ISO 13485 and UL certified factory has also been engaged in manufacturing high density single-sided, double-sided, and multi-layer boards (up to 12 layers). With manufacturing facility and logistic centers in Taiwan, USA and China. Axiomtek is well positioned to meet the demanding business needs so as to ensure business success of Solution Integrators anywhere and anytime.









### Vertical Market Focus

Axiomtek's products are widely used in vertical markets such as gaming, automation, transportation, self-service, networking security, healthcare, digital video surveillance, power utility and digital signage applications. Axiomtek provides complete Embedded Board & SoMs, Industrial & Embedded Computers, Touch Panel Computers and all competitively priced solutions offered to system integrators, distributors, VAR's, and resellers. Axiomtek will also continue to emphasize the value of our selling partners and customers, and will maintain strong vertical market knowledge to develop and provide more efficient OEM/ODM programs.

### eRMA Service

Axiomtek's online eRMA service allows customers to access the most up-to-date information on repairs and also print test reports directly. All RMA tracking information is also conveniently available to view online.

### Software Service

To optimize system resources in demand, TCO (Total Cost of Ownership), system reliability and design of TTM (Time-to-Market), Axiomtek has established the embedded OS service force since 1999. Based on a platform concept, we combine two elements, a hardware SBC body and an embedded OS soul both constituting what we believe a perfect match for many application target applications.

### Quality Assurance

Axiomtek is an ISO 9001, ISO 45001, ISO 14001, ISO 13485 (for medical panel computers/monitors only) and TÜV certified company. We maintain stringent quality standards in our manufacturing processes, ensuring products go through rigorous quality checks at every stage of its production cycle. As a global citizen, Axiomtek is committed to providing green products that are compliant with WEEE and RoHS regulations.















### Global Support

Axiomtek maintains a global network of international subsidiaries and distributors in more than 40 countries. To maximize service efficiency, Axiomtek employs an international service network. Our worldwide technical support and sales service among our 16 office locations located in Taiwan, North America, Europe, China, Malaysia, Thailand and Japan ensures we deliver dedicated and prompt services. Through our global network of international subsidiaries, customers obtain faster services and the most competitive pricing. Each project is fully supported by a group of experienced engineers, mechanical engineers, field application engineers, and sales coordinators from our worldwide offices. From concept to design, Axiomtek provides a comprehensive set of services to help you shorten your product development cycle and speed up your "Time to Market" gaining a competitive advantage. It has never been this easy to develop a project! With years of experience and knowledge, Axiomtek is your best partner for industry applications.

### Technical Support

Outstanding technical support is important to Axiomtek, therefore we have organized our customer service department into a team of technical support professionals from our headquarters as well as team members from global regions, providing real-time technical support and professional knowledge.

### Partnership

As an Intel®, Microsoft®, NVIDIA® NXP and AMD partner, Axiomtek has ample awareness of market trends and can rapidly develop advanced applications that enhance the competitiveness of our customers.

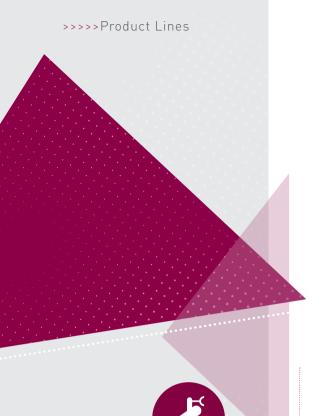












### Automation

To be at the forefront of the automation industry with a comprehensive suite of industrial and embedded solutions embraced by customers seeking the highest level of reliability, trust, and confidence in extreme environmental and mission critical products.



### Networking

To work with our customers on IIoT innovation and make the world better connected than ever before, we offer a complete network appliance portfolio and flexible COTS customization services encompassing firewall, routing, VPN, vCPE, gateway, and edge intelligence.

### **Strategic Business Focus**

Providing over 400 products through product lines of Industrial PCs (IPCs), Single Board Computers (SBCs), System on Modules (SoMs), Fanless and Rugged Embedded Systems (eBOX, ICO and rBOX), Intelligent Transportation Systems (tBOX and UST), Touch Panel Computers (TPCs), Medical Panel Computers (MPCs), Intelligent Retail Solutions, Industrial IoT Gateway, EtherCAT Master Controllers and Network Appliances (NAs), Axiomtek products are widely used in industrial automation, smart energy, transportation, kiosk, gaming, smart retail, healthcare, network infrastructure, and more.



### Retail

To support the retail industry's quest to be the best in class. Our advanced, feature-rich, easy-to-deploy retail computer products are formulated for cutting edge retail applications, delivering consistent, seamless positive shopping experiences through the use of technology.



### Transportation

To offer exceptional value with end-to-end solutions targeting municipal rail, bus, heavy-duty vehicle and marine applications. We strive to deliver highly operational, low carbon footprint systems to generate compelling analytics for a better and safer transportation experience.



### Medical

To offer best-in-class, high interoperability and easy-to-deploy medical-grade computing products to serve in the medical field- giving health care professionals the tools they need to accomplish their goals.



### Gaming

To offer standard form factor x86-based embedded boards, fanless embedded systems, displays, and embedded OS support for gaming machine suppliers as well as system integration service and ODM/OEM service. We concentrate on keeping ourselves in line with the latest market trends of new generation gaming machines.

### **Global Website**

### www.axiomtek.com

Axiomtek's multi-language website is designed using the latest Responsive Web Design technology (RWD) with rich, valuable, interactive information. Through our multi-language website you can access a wide variety of resources such as products, solutions, press releases, articles, eCatalogs, videos, downloads and more! Major sections of the Axiomtek multi-language website are as follow:

### Multi-languages



Visitors can select from a wide selection of languages including, English, German, Spanish, Italian, Japanese, Traditional Chinese and Simplified Chinese.

### Solutions



Here, you can refer to any vertical market in which your product offering is applicable. Configuration diagrams show how Axiomtek's products can be implemented into specific applications, and help customers build a successful solutions.

### Supports



Axiomtek is devoted to providing the best customer services possible. Customers can obtain real-time update information such as manuals, drivers and a FAQ database. Axiomtek's creative eRMA online service offers a non-stop RMA service. Customers can access eRMA service, obtaining the most update information on repair and print test reports directly.

### Partner 7one



Partner Zone is exclusively provided for Axiomtek sales representatives, channel partners and distributors. Here you can find the latest marketing information and collateral such as datasheets, brochures, press releases, product images, as well as product and company presentations.

### RWD Design



Axiomtek website is designed to provide a better viewing experience, with a focus on simplicity. You will be presented with a clear view of products, news, and solutions with minimal distraction. Our site offers an excellent user experience across a wide range of devices.

### Various Products



Axiomtek offers Embedded Boards & SoMs, Industrial & Embedded Computers, Network Appliances and Touch Panel Computers. Customers can view product photos, features and ordering information and download complete product datasheets.

### eCatalogs & Videos



Here, you can find our environmentally-friendly paperless online catalogs and videos for additional product information.

### Resources



With 30 years of experience in a variety of industrial applications, we offer a wealth of resources to help you learn more about our products, solutions, and the latest trends in technology.

### **eNewsletters**

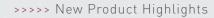


To provide customers with real time news from Axiomtek, customers can sign up our eNewsletters by visiting our eNews page directly for the latest product news, service updates, event invitations, and more!

### Social Links



Axiomtek social media links can keep you up-to-date on product information, solutions, news and events. Axiomtek is devoted to providing various platforms to let people get information faster and easier. Search "Axiomtek" at any of social links to visit us and be sure to bookmark them and check back often!





# New Product Highlights

### 3.5" Embedded Board



### CAPA55R >>Page 52

3.5" Embedded SBC with 11 Gen Intel® Core™ i7/i5/i3, Celeron® Processor, DisplayPort++, HDMI, LVDS, 1 GbE LAN and 2.5 GbE LAN

- 11th gen Intel® Core™ i7/i5/i3 & Celeron® processor
- 2 DDR4 SO-DIMM for up to 64GB of memory
- 1 GbE LAN and 1 2.5GbE LAN
- 3 M.2 expansion slot

### Pico-ITX SBC



### PICO52R >> Page 60

Pico-ITX SBC with 8th Gen Intel® Core™ i7/i5/i3 & Celeron Processor, DisplayPort, HDMI, LVDS and 2 GbE LAN

- 8th gen Intel® Core™ i7/i5/i3 and Celeron® processor
- 1 DDR4 SO-DIMM for up to 16GB of memory
- 2 USB 2.0 and 2 USB 3.0
- 2 GbE LAN
- M.2 Key E
- Intel® AMT 11 supported

### **Embedded Vision Board**



### MIRU130 >> Page 66

Machine Vision SBC with AMD Ryzen™ Embedded V1807B and V1605B APU, DisplayPort, HDMI, 2 GbE LAN, 2 IEEE 802.3at PoE GbE LAN and Vision-specific I/O

- AMD Ryzen™ Embedded V1807B and V1605B APU
- 2 DDR4 SO-DIMM for up to 16GB of memory
- 2 GbE LAN and 2 IEEE 802.3at PoE GbE LAN
- 2-CH camera trigger outputs
- 2-CH LED lighting control
- CH incremental quadrature encoder input
- 4 isolated DIO

### Mini-ITX Motherboards



### MAN0526 >> Page 71

Mini-ITX SBC with LGA1151 9th/8th Gen Intel® Core™ Processor, Intel® Q370, VGA, DisplayPort++, eDP, 2 GbE LAN and HD Audio

- LGA1151 9th/8th gen Intel® Core™ i7/i5/i3 processor
- Intel® Q370 chipset
- 2 DDR4 SO-DIMM for up to 32GB of memory
- 4 USB 3.0 and 4 USB 2.0
- 6 COM ports
- 2 SATA-600 and 1 M.2 Key M
- PCle x16 and M.2 Key E



### MAN0540 >> Page 72

Mini-ITX SBC with LGA1200 10th Gen Intel® Core™ i9/i7/i5/i3 Processor, VGA/DisplayPort/HDMI/eDP, 2GbE LAN and Audio

- LGA1200 10th gen Intel® Core™ i9/i7/i5/i3 processor
- Intel® H410 chipset
- 2 DDR4 SO-DIMM for up to 64GB of memory
- 4 USB 3.2 Gen1 and 1 USB 2.0 ports
- 6 COM ports

### ATX Motherboards



### IMB525R >> Page 77

ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® C246, USB 3.1 Gen, SATA 3.0, Dual LAN, VGA, DisplayPort, DVI-D, and HDMI

- LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E, Pentium® or Celeron® processor (Coffee Lake Refresh)
- Four 288-pin DDR4-2666/2400 ECC DIMM for up to 128GB of memory
- DisplayPort, DVI-D, HDMI and VGA with triple-view supported
- 5 SATA-600 with RAID 0/1/5/10
- 1 PCI Express Mini Card slot
- 2 USB 3.1 Gen2 and four USB 3.1 Gen1
- TPM 2.0 supported (optional)



### IMB524R >> Page 78

ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® H310, USB 3.1 Gen1, SATA 3.0, PCI Express Mini Card Slot, VGA, DisplayPort, DVI-D, and HDMI

- LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor (Coffee Lake Refresh)
- Two 288-pin DDR4-2666/2400 DIMM for up to 64GB of memory
- DisplayPort++, DVI-D, HDMI and VGA with dual-view supported
- 4 SATA-600
- 1 PCI Express Mini Card slot
- 4 USB 3.1 Gen1 and 5 USB 2.0
- TPM 2.0 supported (optional)



### IMB523R >> Page 79

ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® Q370, USB 3.1 Gen2, SATA 3.0, PCI Express Mini Card Slot, VGA, DisplayPort++, DVI-D, and HDMI

- LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor (Coffee Lake Refresh)
- Four 288-pin DDR4-2666/2400 DIMM for up to 128GB of memory
- DisplayPort, DVI-D, HDMI and VGA with triple-view supported
- 5 SATA-600 with RAID 0/1/5/10
- 1 PCI Express Mini Card slot
- Two USB 3.1 Gen2 and four USB 3.1 Gen1
- TPM 2.0 supported (optional)

### ATX Motherboards



### **IMB700** >> Page 82

ATX Motherboard with LGA4189 Socket Intel® Xeon® Scalable Processor. Intel® C621A, 3 PCIe x16, 3 PCIe x8, VGA, NVMe

- Intel® Xeon® Scalable Ice Lake-SP platform
- Six 288-pin DDR4-3200 RDIMM, LRDIMM for up to 384GB of memory
- 3 PCle x16. 3 PCle x8
- Supports M.2 Key M
- TPM 2.0 supported (optional)
- Supports multiple graphic cards
- Supports internal USB dongle



### IMB530 >> Page 83

ATX Motherboard with LGA1200 Socket 10th Gen Intel® Core™ i9/i7/i5/i3, Xeon® E Processor, Intel® W480E, ECC DDR4, USB 3.2 Gen2, NVMe, Dual LAN, VGA, DisplayPort++, DVI-D, and HDMI

- LGA1200 socket 10th gen Intel® Core™ i9/i7/i5/i3, Xeon® E, Pentium® or Celeron® processor (Comet Lake) Four 288-pin DDR4-2933 ECC/non-ECC un-buffered Long-DIMM, up to 128GB
- DisplayPort++, VGA, DVI-D and HDMI with triple-view supported
- Supports M.2 Key M 2280
- 2 USB 3.2 Gen2 and 4 USB 3.2 Gen1
- TPM 2.0 supported (optional)

### Slot CPU Cards







- Intel® C246/Q370/H310 chipset
- 2 DDR4-2666/2400 Long-DIMM for up to 64GB of memory
- Supports Intel® AMT and vPro (C246/Q370)
- TPM 2.0 supported (optional)
- Supports M.2 Key M (C246/Q370)



### SHB250R >> Page 88

PICMG 1.3 Half-size CPU Card with LGA1151 9th/8th Gen Intel® Core™ i7/i5/i3. Xeon® E. Pentium® or Celeron® Processor. Intel® C246/Q370/H310. SATA 3.0. USB 3.1 Gen1, LAN and DVI-I

- LGA1151 9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E (C246), Pentium® or Celeron® processor
- Intel® C246/Q370/H310 chipset
- 2 DDR4-2666/2400 SO-DIMM for up to 64GB of memory
- Supports M.2 slot
- Supports Intel® AMT and vPro (C246/Q370)
- TPM 2.0 supported

### ARM-based Embedded Board



### SCM180 >> Page 92

SMARC v2.0 SoM with i.MX8M Quad/Dual 1.5 GHz/1.3 GHz (Industrial) SoC, 4GB RAM, 64GB eMMC, CAN, MIPI CSI/DSI and HDMI 2.0

- SMARC 2.0 (82 x 50 mm)
- Ultra-Low Power i.MX8M Dual/Quad A53 Core
- Single M4 Core
- HDMI 2.0a up to 4K
- MIPI DSI or dual-channel LVDS
   MIPI CSI
- 10/100/1000 Mbps Ethernet
- USB 3.0, USB OTG
- PCIe 2.0
- CAN 2.0B
- Audio

### PCI Express Cards



### **AX92324** >> Page 104

2-port 10GbE PoE PCI Express Card

- Intel® Ethernet Controller X550-AT2, up to 10 Gbps data rate
- Supports 15.5KB Jumbo Frame and IEEE 1588
- Compliant with IEEE802.3at to deliver 25.5W per port
- PCI Express x4 compliant
- PoE power on/off via Power Manager software and API
- Operating temperature range from 0°C to 55°C



### **AX92352** >> Page 106

2-CH Encoder Card with Real-time trigger I/O

- Synchronizes devices via real-time I/O
- Applied to area scan and line scan applications
- Integrates multiple I/O
  - 2-CH 32-bit incremental quadrature encoder input
  - 4-CH trigger input

  - 4-CH trigger output 8-CH isolated DI, 8-CH isolated DO
- Programmable interrupt functions
- PCI Express x1 compliant



### **AX92353** >> Page 107

4-CH Lighting Control Module

- 4-CH independent constant current LED drivers (up to 1 A)
- Supports strobe and trigger mode
- Intensity control by software
- Supports duration and delay time for LED output

### **Embedded Systems**



### **eBOX560-52R-FL** >> Page 127

Fanless Embedded System with Intel® Core™ i5-8665UE/8365UE/Celeron®4305UE, HDMI/DisplayPort, 2 GbE LAN, 2 COM, 2 USB 3.0, 2 USB 3.0 and 12VDC Power Input

- Intel® Whisky Lake-U processor onboard
- M.2 Key E 2230 for Wi-Fi
- 260-pin DDR4-2400 SO-DIMM max. up to 32GB
- Supports 2 COM, 4 USB and dual view
- Multiple mounting designs: Wall mount, DIN-rail and VESA mount

### eBOX630-528-FL >> Page 137

Fanless Embedded System with Intel® Core™ i7/i5/i3 & Celeron® ULT Processor. 2 HDMI, 1 VGA, 3 GbE LAN, 6 USB, Dual PCI Express Mini Card Slots and 9 to 36 VDC

- 8th gen Intel® Core™ i7/i5/i3 & Celeron® ULT processor (Whiskey Lake-U)
- Dual Channel DDR4 2400 SO-DIMM up to 64GB memory
   Supports 2 HDMI, VGA, 3 GbE LAN, 4 COM and 6 USB
- Trusted platform module (TPM 2.0 onboard)
- Fanless -40°C to +70°C\* operating temperature
- 9 to 36 VDC wide range DC power input
- AMS.AXView intelligent remote monitoring software supported

### Edge Al Systems



### AIE100-903-FL >> Page 153

Fanless Edge AI System with NVIDIA® Jetson Nano™ SoM, 1 HDMI, 1 GbE LAN, 1 GbE PoE and 2 USB

- NVIDIA® Jetson Nano™ with Maxwell™ GPU architecture with 128 NVIDIA CUDA® cores
- High AI computing performance for GPU-accelerated processing
- Ideal for edge AI smart city applications
- Optional IP42 cover kit for semi-outdoor applications
- Supports one 15W GbE PoE for camera
- Wide operating temperature from -30°C to +60°C
- JetPack supported



Fanless Edge AI System with NVIDIA® Jetson Xavier™ NX SoM, 1 HDMI, 1 GbE LAN, 1 GbE PoE and 2 USB, Remote Management Service Empowered by Allxon

- NVIDIA® Jetson Xavier™ NX with Volta™ GPU architecture with 384 NVIDIA CUDA® cores
- High AI computing performance for GPU-accelerated processing
- Ideal for edge AI smart city applications
- Supports one 15W GbE PoE for camera
- ullet Wide operating temperature from -30°C to +50°C
- JetPack supported
- Supports 24/7 secure remote monitoring, control, and OTA deployment empowered by Allxon



Fanless Edge AI System with NVIDIA® Jetson AGX Xavier™ SoM, 2 HDMI, 2 GbE LAN, 4 GbE PoE, 6 USB, 2 COM or 2 CAN and 8-CH DI/DO

- NVIDIA® Jetson AGX Xavier™ with 512-core Volta GPU with 64 Tensor cores GPU
- High AI computing performance for GPU-accelerated processing
- Ideal for intelligent edge applications, machine learning and computer vision
- Supports M.2 NVMe PČle x4 SSD slot
- Wide operating temperature from -30°C to +50°C
- JetPack supported



### Transportation Embedded Systems



### tB0X510-518-FL >> Page 177

Compact Size Fanless Embedded System with 7th Gen Intel® Core™ i7/i5/i3 & Celeron® Processor for Railway PC

- CE, LVD, FCC, and EN 50155 certified and EN 50124 compliant
- 7th gen Intel® Core™ i7/i5/i3 or Celeron® processor (Kaby Lake)
- Fanless and wide operating temperatures from -40°C to +70°C
   Compact size with 1 PIM [Plug-in I/O Module] slot for various I/O requirements
- 24 to 110 VDC wide range power input for railway applications
- Single-sided I/O design for easy maintenance
- OVP, UVP, OCP, RPP power protection design



### UST200-83H-FL >> Page 181

Robust and Compact DIN-rail Fanless Embedded System with Intel® Atom® x5-E3930 Processor for In-Vehicle Gateway Application

- CE, FCC certified; ISO 7637-2 compliant
- Intel® Atom® x5-E3930 processor
- Extreme cost-effective with fanless and cableless design
- Wide operating temperature range from -40°C to +70°C
- Supports 12 & 24 VDC typical in-vehicle power input
- Smart Ignition for power on/off schedule, vehicle battery protection and different power mode
- 1 COM or CAN, 2 USB, 2 GbE LAN
- 8-bit programmable DIO for IoT gateway applications
- Supports SocketCAN
- AMS.AXView intelligent remote monitoring



### UST210-83K-FL >> Page 183

Robust and Compact DIN-rail Fanless Embedded System with Intel® Atom® x5-E3940 Processor for In-Vehicle Gateway Application

- CE, FCC certified; ISO 7637-2 compliant
- Intel® Atom® x5-E3940 processor
- Extreme cost-effective with fanless and cableless design
- Wide operating temperature range from -40°C to +70°C
- Supports 9-36 VDC & 12/24 VDC typical in-vehicle power input
- Smart Ignition for power on/off schedule, vehicle battery protection and different power mode
- Support COM, CAN, USB, GbE PoE LAN
- 8-bit programmable DIO
- Supports SocketCAN
- AMS.AXView intelligent remote monitoring



### UST510-52B-FL >> Page 187

Fanless Embedded System with 9th/8th Gen Intel® Core™, Pentium® and Celeron® Processor for Vehicle PC

- CE, FCC and E-Mark certified; EN 50155 compliant
   9th/8th gen Intel® Core™ & Pentium® processors (LGA1151 up to 65W) with Intel® Q370
- Fanless and wide operating temperatures from -40°C to +70°C
- Up to 16 port GbE PoE by various connector type (RJ-45/ M12)
- 9 to 36 VDC power input with Smart Ignition Management
- Convenient and accessible two 2.5" SATA drives

### DIN-rail Embedded System





### ICO300-83M >> Page 217

Robust DIN-rail Fanless Embedded System with Intel® Atom® Processor E3930, Isolated COM, LAN and DIO with ATEX/C1D2 Certification

- Cost-effective with fanless and cableless design
- Intel® Atom® processor E3930
- 6 isolated COM, 2 USB 3.0, 3 GbE LAN
- 1 isolated DIO (8-in/8-out) for IoT applications
- Wide operating temperature range from -40°C to +75°C
- 9 to 36 VDC wide range power input
- OVP, UVP, OCP, RPP power protection design
- 2 mini-PCIe and 1 M.2 slot for expansion
- Supports 5G connectivity

### Industrial Systems



### IPC960-525-FL >> Page 249

Fanless Industrial System with LGA1151 Socket 9th/8th Gen Intel® Core™ i7/i5/i3 & Celeron® Processor, Intel® H310/Intel® Q370, and Front-access I/O

- LGA1151 Socket 9th/8th gen Intel® Core™ processor, up to 65W
- M.2 Key B slot for 5G wireless connection (optional)
- Supports RAID 0,1 (Intel® Q370)
- Supports Power-on delay function Supports TPM 2.0
- Supports AMT 12 (Intel® Q370)
- 2-slot/4-slot expansion kit for further expansion



### IPC962-525 >> Page 251

2-slot Industrial System with LGA1151 Socket 9th/8th Gen Intel® Core™ i7/i5/i3 & Celeron® Processor, Intel® H310/Intel® Q370, Front-access I/O, PCIe and PCI Slots

- NVIDIA® GPU card, up to 125W
- Supports NVIDIA® Tesla T4 GPU Card
- LGA1151 socket 9th/8th gen Intel® Core™ processor, up to 65W
- M.2 Key B slot for 5G wireless connection (optional)
- Supports RAID 0,1(Intel® Q370)
- Supports Power-on delay function
- Supports TPM 2.0
- Supports AMT 12 (Intel® Q370)



### **IPC964-525** >> Page 253

4-slot Industrial System with LGA1151 Socket 8th/9th Gen Intel® Core™ i7/i5/i3 & Celeron® Processor, Intel® Q370, Front-access I/O, PCIe and PCI Slots

- NVIDIA® GPU card, up to 125W
- LGA1151 socket 9th/8th gen Intel® Core™ processor, up to 65W
- M.2 Key B slot for 5G wireless connection
- Supports RAID 0,1
- Supports Power-on delay function
- Supports TPM 2.0
- Supports AMT 12

### Machine Vision System



### MVS100-323-FL >> Page 257

Mini Vision System with Intel® Atom® x5-E3940 Processor, Vision I/O, 2-CH PoE and 2-CH LED Output

- Integrated real-time vision I/O
  - 2-ČH trigger input
  - 2 trigger output
  - 2-CH LED lighting control
- 4-CH isolated DIO
- Supports camera interfaces
  - 2 IEEE802.3af GbE LAN ports (PoE)
- Power input: 24 VDC
- -10°C to +55°C operating temperature range
- Supports TPM 2.0 function

### Industrial Chassis



### **AX61135TM** >> Page 269

1U Expandability Rackmount Chassis for ATX Motherboard

- Supports 12" x 9.6" standard ATX motherboard
- Two 4 cm system fan
- Supports 1U Flex ATX power supply
- Internal 2 x 3.5" HDD or internal 2 x 2.5" HDD

### Intelligent Medical Systems



### mB0X100 >>Page 291

Medical Grade Fanless Slim System with 8th Gen Intel® Core™ i7/i5/i3 & Celeron® Processor for Smart Healthcare Applications

- 8th gen Intel® Core™ i7/i5/i3 & Celeron® processor (Whiskey Lake-U), TDP 15W
- 2 DDR4-2400 SO-DIMM for up to 64GB memory
- 1 HDMI and 1 DisplayPort with 4K UHD supported
- 2 COM & 2 GbE LAN supports 4kV isolation
- Swappable 2.5" SATAIII SSD tray with security lock
- Antimicrobial coating chassis (optional)



### mB0X600 >>Page 292

Medical Grade System with Intel® Xeon® & 8th Gen Intel® i7/i5/i3 processors for Smart Healthcare Applications

- Intel® Xeon® & 8th Gen Intel® i7/i5/i3 processors (Coffee Lake), TDP 45W
- 2 DDR4-2400 SO-DIMM for up to 64GB memory
- 1 HDMI and 2 DisplayPort++ with 4K UHD supported
- 2 COM and 2 GbE LAN supports 4kV isolation
- Supports half-size PCI Express x16 slot
- Swappable 2.5" SATAIII SSD tray with security lock
- Antimicrobial coating chassis (optional)

### Intelligent Medical System



2U Rackmount Server with Dual Intel® Xeon® Gold 6226R Processors, Intel® C621 PCH for HPC in Medical Applications

- Dual Intel® Xeon® Gold 6226R processors
- 256GB DDR4-2666 ECC registered DIMM
- Micron 6.4TB PCIe NVMe U.2 SSD, 9300 pro series
- Supports PCIe x16 data center accelerator card
- 1200W Redundant Power ATX power supply
- Supports HDMI full HD output
- Supports dual 10G Base-T & dual SFP+

### Heavy-duty Fanless Touch Panel Computers

### **GOT315W-521** >> Page 317

15.6" WXGA TFT Multi-touch Panel Computer with 8th Gen Intel® Core™ i5 & Pentium® G5400T Processor

- 15.6" WXGA projected capacitive multi-touch widescreen
- Fanless design with 8th Gen Intel® Core™ i5 & Pentium® G5400T processor
- Supports WLAN module & antenna (optional)
- Supports 1 2.5" SATA HDD/SSD
- 2 LAN, 4 USB, 2 COM, 1 HDMI, 1 DP and 1 VGA
- IP65-rated aluminum front bezel
- Supports panel mount and VESA mount and wall mount

### GOT3187WL-834 >> Page 325

18.5" WXGA TFT Multi-touch Panel Computer with Intel® Celeron® Processor J1900

- 18.5" projected capacitive multi-touch wide screen
- Resolution up to FHD
- Fanless design with Intel® Celeron® Processor J1900
- 2.5" 7/9.5 mm SATA HDD & CFast™ or mSATA
- 3G, WLAN module & antennas (optional)
- 2 GbE LANs, 2 USB 3.0, 2 USB 2.0 and 2 COM
- IP65 aluminum front bezel
- Supports panel mount and optional VESA arm/desktop stand/wall mount
- 0°C to +40°C wide operating temperature range
- Adjust RS-232/422/485 setting via BIOS

### **GOT3217WL-845-PCT** >> Page 329

21.5" FHD TFT Multi-touch Panel Computer with Intel® Pentium® Processor N3710

- 21.5" FHD 10-point multi-touch projected capacitive widescreen
- Fanless design with Intel® Pentium® processor N3710
- 2.5" 7/9.5 mm SATA HDD & mSATA
- 3G, WLAN module & antennas (optional)
- 2 GbE LANs, 2 USB 3.0, 2 USB 2.0 and 2 COM
- IP65-rated aluminum front bezel
- Supports panel mount and VESA mount (VESA arm/desktop stand/wall mount optional)
- Adjustable RS-232/422/485 setting via BIOS







### **Transportation Monitor**



### **P718W** >> Page 359

18.5" Full HD TFT LCD Railway Monitor for Passenger Information System (PIS)

- EN 50155, EN 45545 certified
- IP42-rated front bezel design
- 18.5" Full HD TFT LCD with high brightness of 500 nits
- Supports HDMI, DVI-D and VGA
- 24 to 110 VDC power input
- Supports VESA arm (100 x 100 mm)
- -25°C to +55°C wide operating temperature range
- Anti-fog glass
- Supports 5 OSD keys

### Modular Panel PCs



### **ITC150WM** >> Page 395

15.6" FHD TFT-LCD Modular Panel PC with Intel® Smart Display Module (SDM) CPU Card

- 15.6" full HD TFT-LCD
- Aspect ratio: 16:9; brightness: 300 nits
- Slim bezel shape under 40 mm thickness
- Projected capacity touch supported, 10-point touch
- Swappable Intel® SDM CPU card design
- Metal frame structure for various application
- Supports add-on modules and mounting kits (optional)



### ITC210WM >> Page 397

21.5" FHD TFTLCD Slim Bezel Modular Panel PC with Intel® Smart Display Module (SDM) CPU Card

- 21.5" full HD TFT-LCD
- Aspect ratio: 16:9; brightness: 250 nits
- Slim bezel shape under 48.5 mm thickness
- Projected capacity touch supported, 10-point touch
- Swappable Intel® SDM CPU card design
- Metal frame structure for various application
- Supports add-on modules and mounting kits (optional)

### Self-service Kiosk



### SSK315 (REGATA Kiosk) >> Page 400

15.6" Self-Service Kiosk with Intel® Smart Display Module (SDM) CPU Card, Direct Bonding PCAP, 2D Barcode Scanner, Thermal Printer and NFC

- 15.6" optical bonding LCD with wide viewing angle; 400 nits of brightness
- Supports Intel® Smart Display Module Small (Intel® SDM-S) and Intel® Smart Display Module Large (Intel® SDM-L) with Intel® Core™ i5/i3 and Intel® Celeron® processor (Whiskey Lake)
- Push button design for easy maintenance
- Supports floor stand and counter-top stand
- Dual illuminating status LEDs
- Modular design
- All-in-one seamless design

### SMB Network Appliances



### NA870 >> Page 408

2U Rackmount Network Appliance Platform with Dual LGA4189 Socket Intel® Xeon® Scalable Processors, Intel® C621A (Ice Lake-SP) and up to 66 LAN

- Dual LGA4189 socket Intel® Xeon® Scalable processors (Ice Lake-SP)
   12 DDR4-2400 R-DIMM for up to 384GB of memory
- Max. up to 66 LAN ports
- 8 expandable LAN modules supporting 1GbE/10GbE/25GbE/40GbE/Fiber/Copper/Bypass
- Supports 2U redundant power supply
- Supports IPMI (onboard) for optional
- High computing power for SDN, NGFW, IDS, IPS and UTM applications

### NA592 >> Page 412

1U Rackmount Network Appliance Platform with LGA1200 Socket Intel® Core™/ Xeon® W-1200 Processor, Intel® W480/Q470 and up to 26 LAN

- LGA1200 socket 10th gen Intel® Core™/Xeon® W-1200 processor (Comet Lake)
- 4 DDR4-2666 U-DIMM for up to 128GB of memory
- Max. up to 26 LAN ports
- 2 expandable LAN modules supporting 1GbE/10GbE/25GbE/40GbE/Fiber/Copper/Bypass
- Supports 1U redundant power supply for optional
- Supports IPMI for optional
- Suitable for network security, cloud computing and data centers applications

### SOHO Network Appliance



### NA347 >> Page 422

Fanless Ultra Compact Network Appliance with Intel® Celeron® Processor N3350 and up to 3 LAN for Entry Level SD-WAN, VPN and Security Gateway

- Intel® Celeron® processor N3350 (Apollo Lake)
- 1 DDR3L-1866 SO-DIMM for up to 8GB of non-ECC memory
- 3 GbE RJ45 ports (Intel® i211)
- 1 mini-PCIe slot for WiFi or LTE module
- 1 M.2 2242 Key B slot (SATA)
- Small form factor with fanless and noiseless design
- Suitable for SD-WAN, VPN and IOT security gateway applications

### DIN-rail Network Appliance



### iNA100 >> Page 431

DIN-rail Industrial-grade Network Appliance Platform with Intel® Atom® x5-E3930 Processor and 4 LAN

- DIN-rail design with fanless and noiseless design
- Intel® Atom® x5-E3930 processor (Apollo Lake)
   One DDR3L-1866 SO-DIMM for up to 8GB of memory
- Four GbE RJ-45 (Intel® i211)
- PCI Express Mini Card slot for wireless module
- Supports 2 COM, 4 GbE LAN, 2 USB 3.0 and 1 HDMI
- Suitable ICS cybersecurity/critical infrastructure protection

# NOTES

### >>>> Solution Zone



# Al at the Edge: The Eye of IoT

Artificial intelligence (AI) is everywhere these days. In response to the growing needs driven by AI, Axiomtek is dedicated specifically to AI inference, GPU computing, machine learning, image processing, the artificial intelligence of things (AIoT), and much more. It delivers edge AI embedded systems in a wide range of form factors and configurations – from the low power consumption yet high-performance embedded systems to the server-grade industrial PCs – to meet the demands of various AI applications, helping our customers achieve operational improvements, increased productivity, performance boost, and efficiency gains in the domains of manufacturing, transportation, agriculture, smart cities, and retail industry.





# eBOX800-900-FL

Smart City Surveillance

The outstanding eBOX800-900-FL is powered by the NVIDIA Jetson™ TX2 module, which has a powerful 256-core NVIDIA® Pascal GPU and a hexcore ARMv8 64-bit CPU complex to deliver exceptional Al computing performance. It adopts a full IP67-rated extruded aluminum and heavy-duty steel case for dust protection and water resistance. To withstand extreme temperatures and drastic weather conditions such as lightning strikes, the eBOX800-900-FL comes with a wide operating temperature range of -30°C to 60°C and a builtin 10kV surge protection. It also features M12-type I/O connectors and four N-jack waterproof antenna openings to ensure operational stability in rugged environments. The eBOX800-900-FL is ideal for Al edge computing and deep learning applications in smart city, smart manufacturing, smart transportation and much more.





### AIF100-903-FI

Face Mask Detection System & Social Distancing Detection

During this critical time in our world, the precautionary measures of face mask detection, temperature check, and social distance detection are becoming increasingly important, especially in the public areas, office buildings, retail, and hospitals. The AIE100-903-FL, an ultracompact edge AI system powered by the NVIDIA® Jetson Nano™ module, has a powerful quad-core ARM® Cortex®-A57 MPCore processor and NVIDIA Maxwell™ GPU architecture with 128 NVIDIA CUDA cores. To facilitate integration with an IP camera, this userfriendly Al-enabled system is equipped with a 15W GbE PoE port for both power and video transmission. It also offers an optional waterproof IP42-rated cover kit for enhanced protection in semioutdoor environments



### AIE500-901-FL

Smart Packaging and Logistics

Smart packaging and logistics solutions enabled by an intelligent IoT system can help drive business efficiencies to optimize supply chain management. Through the combination of a 3D camera, robotic arm, and artificial intelligence (AI), Axiomtek's AIE500-901-FL accelerates the processes of carton dimension measurement, carton classification, pallet optimization, and more. This edge AI system is powered by the NVIDIA Jetson™ TX2 module, which has a powerful 256-core NVIDIA® Pascal GPU and a hex-core ARMv8 64-bit CPU complex to deliver exceptional AI computing performance. To fulfill the automation demands and withstand the rigors of day-to-day operations, it also supports an extended operating temperature range of -30°C to +60°C, and offers a choice between 12 or 24 VDC power input. This fanless Artificial Intelligence edge system is well-suited for video analysis, object classification, computer vision, quality control and more.



### AIE900-902-FL

Autonomous Self-Driving Vehicles

Driven by autonomous driving technology, next-generation vehicles are now changing the way we view vehicles and mobility. In addition to enabling smart transportation, next-generation vehicles can also enhance passenger safety, comfort, and entertainment. The advanced driver assistance system (ADAS), for example, gives drivers a second pair of eyes on the road to help them avoid danger, prevent accidents, and reduce stress. To achieve high accuracy, fast reaction, and low latency, autonomous vehicle platforms require a high-performance edge AI computing system to improve image processing, data analysis, and reaction time. The AIE900-902-FL is powered by NVIDIA Jetson AGX Xavier™ module, which has an 8-core ARM CPU and NVIDIA® Volta GPU with 512 CUDA cores. To provide sufficient capacity for processing and storing massive image data, this edge Al computing system is equipped with one M.2 Key M NVMe SSD slot, one 2.5" SATA hard drive bay, and one MicroSD slot. It also comes with one mini PCI Express slot and one M.2 Key E slot to support diverse wireless network connectivity.

### >>>> Solution Zone



## **Intelligent Medical Solutions**

Axiomtek has years of experience in developing medical computing solutions, and has the ambition to fulfill the growing demands of the global medical device market. Axiomtek's medical panel PCs are fully customizable to suit the needs of a wide range of medical industry applications, featuring high-performance CPUs, extensive storage capabilities, rich I/O options for expandability, various form factor sizes, projected-capacitive multi-touch screen displays, plus multiple safety and medical certifications. Our products and design assistance services offer many benefits to our clients, who have chosen Axiomtek as their trusted partner to provide long-term expertise and complete product portfolio to support their complex, mission critical projects.





### mHPC200

Artificial Intelligence (AI) Medical Imaging for Clinical Diagnosis

More and more medical applications are using AI technology to proceed with mass data analysis and accelerate data processing speed. It can be applied to the diagnosis, monitoring, and prediction of diseases using different imaging modalities. The mHPC200, a 2U rackmount server featuring dual Intel® Xeon® Gold 6226R processors with Intel® C621 PCH, is designed for high computing performance in medical fields. It supports 12 slots of DDR4-2933 ECC DIMM memory to provide up to 768GB capacity, and 6.4TB U.2 SSD to deliver 3G/2.9G RW performance. To accomplish multiple tasks at the same time, this highly efficient system has two PCIe x16 Gen 3.0 slots for data acceleration. The mHPC200 targets the healthcare markets such as next generation sequencing fields and AI diagnosis.





MPC103-845
Patient Information
Terminal

The ultra-light MPC103-845, a 10.1-inch EN 60601-1 certified panel PC, is designed for applications such as nursing carts, medical image processing devices, patient infotainment terminal and point-of-care terminals. Healthcare staff can use the terminal to access medical records and hospital information systems, retrieve laboratory results, monitor patients' vital signs, and document treatment observations. This medical grade computer has rich I/O interfaces to connect to other medical instruments, such as electrocardiogram, thermometers, or skin rejuvenation devices, allowing medical professionals to obtain information with high efficiency.



PICO319

Medical Spectrometer for Blood Screening

The medical spectrometer for blood screening is used to perform the preliminary virus examination with a patient's blood sample. It is required to connect to a USB camera to scan the patient's ID card. The ability to connect to RAM modules, SSD and Wi-Fi cards is also necessary. Axiomtek's PICO319 is a low-power yet powerful fanless Pico-ITX SBC powered by the onboard Intel® Atom® x5-E3940 quadcore processor. It comes with two USB 2.0 ports, two USB 3.0 (USB 3.1 Gen1) ports, one RS-232/422/485 port, one RS-232 port, one HD Codec audio, and 4-channel digital I/O. With rich I/O connectivity, the scalable PICO319 is an ideal solution for medical system integrators. Besides, with immense experience and in-depth knowledge, Axiomtek's R&D team can provide prompt assistance to solve customers' issues in the medical field.



CEM310 Medical Tablet PC

The light medical tablet PCs aim to relieve medical professionals of the burden of complicated daily operations. The CEM310 is a COM Express Type 10 Mini module supporting the Intel® Atom® x5 and x7 processors in a board size of 84mm x 55mm. This ultra-small module can be easily integrated into most medical tablet PCs. The low-power CEM310 also has a wide voltage input range of 4.75V to 20V to meet the varying voltage input requirements for diverse industrial applications. With its compact and fanless design, the Computer-on-Module Type 10 Mini module can meet the increasing demands for mobility and efficiency in the healthcare field.



### **Future of Retail**

As emerging technologies continue to drive digital disruption, customer experience has now become a key consideration for retailers. To meet customer expectations, retail businesses must be more creative in optimizing in-store experience, while at the same time being able to provide a protected and safe shopping environment. Axiomtek manufactures a wide range of products, including smart display modules, modular panel PCs, digital signage players, as well as open-frame touch monitors with an antimicrobial touchscreen that can be incorporated into brick-and-mortar retail stores. We believe our advanced solutions will play a significant role in restoring consumer confidence in retail and other public facilities during this challenging time to help people move forward into the future.





The fear of touching contaminated surfaces is rising like never before. Yet to successfully alter how people interact with stores requires some sophisticated technologies. Sensory interfaces such as voice assistants and gesture recognition promise to be more intuitive and immediate. They point to a future where the interface is embedded in our environment, enabling frictionless, anticipatory, responsive and predictive interactions. Designed for use in space constraint environments, the scalable and feature-rich SDM-300S supports the Intel® Pentium® processor N4200 or Celeron® processor N3350 with the Intel® HD Graphics 505 or 500 chipset. It has 4GB LPDDR4 memory (8GB optional) and 64GB EMMC memory onboard. More features include PCIe x8 (98-pin), USB 3.0, HDMI 1.4, DisplayPort 1.2, serial TX/RX and I2C signals for connectivity.



### ITC150WM

Retail Displays

Retail displays are often seen installed in the store because they can create immersive shopping experiences to boost business performance. Using an intelligent panel PC with excellent graphics capabilities is therefore an effective way to catch the shopper's eye. The SDM-based ITC150WM adopts a swappable signage computer module design, making it an ideal solution for easy maintenance in field replacement and upgrade. In addition to its thin IP54-rated front bezel with optional antimicrobial options, this modular touch computer features a 15.6" vivid HD LCD display with a 10-point projected capacity touchscreen and 300 nits of brightness. This reliable panel PC supports add-on modules and flexible mounting kits to simplify deployment for various usage needs.



DSP600-211

4K Video Walls

The video walls are particularly common in retail applications. Using an array of displays aligned edge-to-edge in a grid (1x2, 2x2, etc.) to combine into one larger attraction, the video wall can generate an impressive impact on a wider audience to maximize advertising results. Powered by the AMD Ryzen™ Embedded Quad-Core V1807B/V1605B, the feature-rich DSP600-211 is designed for multi-display purposes to enhance visual communication. It features high graphical capabilities by supporting up to four displays through four HDMI 2.0. It has rich I/Os including two GbE LANs, two RS2-232, two USB 3.1 and two USB 2.0, and offers flexible expandability with one M.2 Key E 2230 and two M.2 Key M 2280.



SSK315 (REGATA Kiosk) Self-Service Kiosk

Restaurants, retail stores, smart cities, hotels, and hospitals are all using self-service kiosks to offer more seamless and convenient experiences. These solutions help lead to shorter lines, boosted revenue, lower labor costs, and increased customer satisfaction. Axiomtek's SSK315 is a 15.6" self-service kiosk with an Intel® Smart Display Module (SDM) CPU card. Its modular and push-button design delivers ease of maintenance. Integrated with a 2D barcode scanner, thermal printer and NFC, this all-in-one kiosk represents a true asset for enriching the customer journey. Whether it is ticket booking, product purchase, queue control, payment processing, subscriptions, or customer loyalty management, the SSK315 is perfectly suitable for all kinds of retail business and service operations.



# >>>> Solution Zone

### **Smart Transportation Solutions**

Modern smart transportation not only means collecting data from across a smart city; it also means relaying that information to commuters. In response to the requirements for next-generation embedded hardware and software solutions today, we are ready to team with our transportation provider partners and head into the age of a dynamic smart city that survives on the arteries of a more intelligent transportation infrastructure. With the rise of intelligent transportation applications in vehicles, railways, marine and other station and facility usages, Axiomtek is committed to providing a broad portfolio of smart transportation solutions to pave the way for more intelligent and unified mobility management platforms that will drive the overall success of smart cities.



Nowadays, the high-quality video monitoring system is crucial for ensuring passenger safety in all modes of public transport. The E-Mark certified UST510-52B-FL is one of the most suitable candidates as a vehicle PC. Powered by 9th/8th gen Intel® Core $^{\rm TM}$  & Pentium® processors, the high-performance UST510-52B-FL can be deployed to perform AI operations, such as analyzing video streams and automatically alerting the driver and operation control center to potential dangers. Enhanced by its robust structure and system design, this rugged embedded system can operate under a wide temperature range from -40°C to +70°C, and can withstand vibration up to 3 Grms. It supports up to 16 M12-type PoE ports to reduce the possibility of loosening under the vibration environment.



MAN LA

GOT710-837/ GOT712-837

Train Control & Management HMI

To reduce human error and achieve high levels of efficiency, a great control interface becomes significantly important. The GOT710-837 and GOT712-837 come with 24 to 110 VDC input and S3 20ms power interruption protection, giving system integrators a safer and more convenient solution. Powered by Intel® Atom® quadcore processors, the high-performance panel PCs are the ideal solutions for fast-responding Driver Machine Interfaces. Moreover, the GOT710-837 and GOT712-837 are certified with EN 50155 and EN 45545-2 standards.



P718W

Passenger Information System

Helping passengers find the information they need with the least time and effort is among the list of priorities for public transportation companies. The P718W adopts an 18.5-inch TFT LCD display, with 500 nits of high brightness and LED backlights, and supports multiple video inputs with HDMI, DVI and VGA. Featuring an IP42 (NEMA 4)-rated front bezel, screw-type adapter plug design, and a full range DC power input from 24V to 110V DC-in, the P718W is well-suited for operation in railway environments.



tBOX510-518-FL

Train Driver Machine Interface

The tBOX510-518-FL is a modular fanless railway computer with EN 50155, EN 45545-2, EN 60950-1, CE (Class A) and FCC (Class A) certifications, and EN 50124 compliance for railway-related applications. It is suitable for rugged industrial and railway applications with varying voltage input requirements due to its overcurrent, overvoltage, under-voltage and reverse polarity protection as well as its 24V to 110V DC wide voltage input support. In addition, it has a Plug-in I/O Module (PIM) slot to meet different customization requirements. Powered by the 7th generation Intel® Core™ i7/i5/i3 or Celeron® processor 3965U, the tBOX510-518-FL is an ideal solution for performing

data processing and transmission in train control and rail signaling applications.



UST200-83H-FL

Fleet Management

Fleet management and logistics play a significant role in transportation services, responsible for coordinating and facilitating various transportation activities. The UST200-83H-FL is a palm-sized in-vehicle IoT gateway powered by the low-power consumption Intel® Atom™ x5-E3930 processor. It is certified with CE and FCC and is in compliance with ISO 7637-2. Featuring the function of the Smart Ignition power control, the rugged embedded system can be used to arrange a power on/off schedule to protect the vehicle battery from unstable voltage. By switching the power mode, the UST200-83H-FL can support typical 12 and 24 VDC automotive power input or widerange 9 to 36V DC power input. The flexible IoT gateway is designed for a broad range of in-vehicle applications, from shuttle buses, police cars, ambulances, cold chain trucks, and forklifts to heavyduty vehicles.

### >>>> Solution Zone



### **Factory Automation**

In response to today's fast-paced business demands, factories, power plants, and manufacturing centers around the world now rely on automation, machine learning, computer vision, and other fields of AI to transform the way they make, move, and market products. The use of robotics and vision-based solutions in smart warehouses and production lines has resulted in higher efficiency and quality product output, as well as less waste of raw materials. The building blocks for smart manufacturing involve feature-rich and highly reliable industrial computer hardware with purpose-built features, such as PoE ports for connection with cameras. Axiomtek offers a full range of expandable, low power consumption and high-performance embedded systems that center around the needs of the vertical markets seeking to build genuinely AI-powered smart factories.





### eBOX671-521-FI

Automatic Vision Inspection System for Food Related Product Traceability

Beverage container manufacturers require a system to identify bar codes on ink-jet-printed labels with fast run rate and approximate 99% accuracy. To greatly improve efficiency, business owners have started to implement reliable graphical user interface for workers who have less technical background. The fanless eB0X671-521-FL is a powerful GPU computing embedded system designed with high reliability. This Intel® Coffee Lake-based vision system supports optional MXM3.1 type A GTX1030/1050 graphics modules to enhance visual display performance. It also has four Gigabit 802.3at (PoE, Power-over-Ethernet) compliant Ethernet ports with a total power budget of 60W, six USB 3.1 ports and two Gigabit LANs for connection to different devices or sensors.





eBOX560-52R-FL AMR - Robotic Control

System

The best way to reduce human labor is to implement an autonomous mobile robot (AMR), which not only strengthens workplace safety but at the same time reinforces the efficiency in warehouse operations. Among the key elements of the AMR are the control system, motor, vision camera, sensors and software. The eBOX560-52R-FL is a powerful yet compact system suitable for being the control core of the AMR. It is powered by the Intel® Whisky Lake ULT processor and delivers high performance even when processing multiple data inputs and outputs. The system supports dual GbE ports and 4 USB ports to connect to various sensors and devices, along with one 2.5" hard drive bay that allows the system to store massive data to be transmitted to a control room or other edge computers via Wi-Fi. This AMR control system can be easily deployed in variety of auto robotics to help users rapidly implement smart warehousing management.



# MVS900-511-FL and Basler Camera

Al Vision in Automated Optical Inspection

As Al technology advances, manufacturers are increasingly looking to machine vision solutions to expand their inspection capabilities in order to increase yield, improve product quality, and boost operational efficiency. The MVS900-511-FL is an all-in-one fanless machine vision system with real-time vision I/O and camera interfaces. Its vision I/O includes trigger input, trigger output, LED lighting control, quadrature encoder input, and isolated DIO. This integrated real-time vision I/O allows the machine vision system to achieve seamless interoperability between cameras and vision devices. Equipped with four IEEE802.3at GbE LAN ports (PoE) for connection to popular GigE cameras, the MVS900-511-FL can support area scan and line scan for automated optical inspection (AOI). When integrated with a Basler camera, this powerful vision system can also operate under sequential control, making it faster and easier for system integrators to configure and deploy vision applications.

### >>>> Solution Zone



# **Powering Smart Energy**

Axiomtek provides various management and monitoring solutions involved in diverse energy and power fields, including solar power, oil refinery, electric vehicle charging and industrial utility. The products have been used as highly reliable and rugged edge controllers, servers and gateway devices. They are used to manage critical operational functions such as controlling, equipment operations and testing. Designed to deliver integration flexibility, customizability and high reliability in harsh operating environments, the fanless embedded systems offer extended operating temperatures, wide range power input with terminal block and over-voltage/reverse protection, and isolated COM and Ethernet ports.





ICO300-83B Solar Power Efficiency Monitoring

With the growing worldwide demand for renewable energy, more and more solar power plants are looking to expand their operation and production capacity. The main concerns from power plant owners and grid companies include data collection accuracy, status monitoring of solar photovoltaic and battery load, and management of solar energy assets. The ICO300-83B features a low-power consumption Intel® Celeron processor N3350/N4200, a DDR3L-1866 SO-DIMM slot supporting up to 8 GB of system memory, as well as an extended temperature range of -40°C to +70°C for operation in harsh environments. Additionally, the ICO300-83B is equipped with two full-size PCI Express Mini Card slots, one for an mSATA storage card and the other for 4G/GPRS/Wi-Fi connection - allowing it to be used as an energy-efficient IIoT gateway to provide flexible communication and data transfer functions.





### ICO300-83M (ATEX/C1D2)

Oil Refinery Environment Monitoring

The working environment in oil and gas industry is extremely hazardous. Therefore, it is essential to have a reliable and accurate monitoring system which can constantly monitor the facility's conditions while collecting and transmitting data to remote sites. Axiomtek's ICO300-83M is an ideal gateway solution and has been certified with ATEX and C1D2 for use in harsh environments where ignitable concentrations of flammable gases, vapors or liquids might exist. It supports the dual-core Intel® Atom™ processor E3930 along with DDR3L system memory, and has six isolated RS-232/422/485 ports, three isolated 10/100/1000Mbps Ethernet ports, and one isolated DIO (8-IN/8-OUT) port. The ICO300-83M also support 5G connectivity as a next generation wireless gateway. Moreover, we also provide secure mounting for customers to easily install the system on a DIN-rail mount or in an enclosure box.



### ICO120-83D

Electric Vehicle Charging Infrastructure Management

The rise of environmental awareness has led to the fast growing popularity of electric vehicles (EV) all over the world. The numbers of EV charging stations are steadily increasing on a daily basis. The biggest challenge in centralized management is how to control and maintain these unmanned stations remotely. The ICO120-83D is powered by the Intel® Celeron® processor N3350/N4200 and has a DDR3L-1866 SO-DIMM slot holding up to 8 GB of system memory. Additionally, it is equipped with one full-size PCI Express Mini Card slot, one half-size PCI Express Mini Card slot in support of mSATA, and one SIM socket to provide flexible extension capability for customers to achieve remote and real time control without incurring additional labor costs.



### ICO300

Industrial Utility Control Management

Having efficient utility management for factories and plants helps to increase productivity and reduce operational cost. This can be accomplished through the implementation of automated control HVAC, utility consumption monitoring, as well as lighting and access control systems. The high-performance ICO300 can be used to collect the information generated by sensors and wireless modules to prevent system failures. The ICO300 supports the low power Intel® Atom™ processor E3815 (1.46 GHz) and DDR3L system memory maximum up to 4GB. It also features four RS-232/422/485 ports, two isolated Gigabit Ethernet ports, and two high-speed USB 2.0 ports. This intelligent IoT gateway system provides a perfect solution for IoT & M2M, industrial and embedded applications.



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NEW	IMB524R	ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® H310, USB 3.1 Gen1, SATA 3.0, PCI Express Mini Card Slot, VGA, DisplayPort, DVI-D, and HDMI	78
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	IMB521R	ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® C246, USB 3.0, SATA 3.0, Dual LAN, VGA, DisplayPort, DVI-D, and HDMI	80
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		DisplayPort, DVI-D, and HDMI	
NEW	IMB700	ATX Motherboard with LGA4189 Socket Intel® Xeon Scalable Processor, Intel® C621A, 3 PCIe x16, 3 PCIe x8, VGA, NVMe	82
NEW	IMB530	ATX Motherboard with LGA1200 Socket 10th Gen Intel® Core™ i9/i7/i5/i3, Xeon® E Processor, Intel® W480E, ECC DDR4, USB 3.2 Gen2, NVMe, Dual LAN, VGA, DisplayPort++, DVI-D, and HDMI	83

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Intel® Smart Display Module Large (Intel® SDM-L) with 8th Gen

Intel® Core™ i7/i5/i3, Intel® Celeron® Processor, HDMI and LAN

Intel® Smart Display Module Small (SDM-S) with Intel® Pentium®

Processor N4200 and Celeron® Processor N3350

98

99

## PCI Express Cards

SDM500L

SDM300S

#### Machine Vision AX92320 2-port/4-port PCI Express GigE Frame Grabber Card 101 4-port/8-port USB 3.0 PCI Express Card with AX92321 102 4 Independent Host Controllers AX92322 2-port/4-port GigE PCI Express Card 103 AX92324 2-port 10GbE PoE PCI Express Card 104 AX92351 32-CH/64-CH Isolated Digital I/O PCI Express Card with Digital Filter AX92352 2-CH Encoder Card with Real-Time Trigger I/O 106 AX92353 4-CH Lighting Control Module 107

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## System on Modules

Axiomtek's SoM (System on Module) solution includes COM Express module (CEM) and Qseven module. In conjunction with a suitable baseboard, Axiomtek's SoM solution is an optimal solution for embedded applications to fulfill the various vertical applications that SBC (Single Board Computer) usually cannot satisfy. SoM is designed with all necessary components, offering the most update interface and excellent computing performance to reduce TCO (Total Cost of Ownership) and improve time to market.

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## Boards and Modules

## System on Modules

#### Selection Guide









Features Wodels		S	CEM310	CEM700	CEM130
Form I	Factor		COM Express® Type 10 Mini	COM Express® Type 7 Basic	COM Express Type 6 Compact
CPU Level			Intel® Atom® x5/x7	Intel® Xeon® D-1577 1.3/2.1GHz 24MB, 45W (16C) Intel® Xeon® D-1539 1.6/2.2GHz 12MB, 35W (8C) Intel® Xeon® D-1548 2.0/2.6GHz 12MB, 45W (8C) Intel® Xeon® D-1527 2.2/2.7GHz 6MB, 35W (4C) Intel® Pentium® D1519 1.5/2.1GHz 6MB, 25W (4C) Intel® Pentium® D1508 2.2/2.6GHz 3MB, 25W (2C)	AMD Ryzen™ Embedded V1000
CPU			Onboard	Onboard	Onboard
Core L	ogic Chip	set	SoC integrated	SoC integrated	SoC integrated
Memo	ry Type		DDR3L-1866	DDR4-2400	DDR4-2400/3200
Max. [	DRAM Cap	acity	4GB (default)/8GB (optional)	64GB	32GB (dual channel)
Cache	RAM Cap	acity	SoC integrated	SoC integrated	SoC integrated
BIOS			AMI UEFI BIOS (Legacy Free)	AMI UEFI BIOS (Legacy Free)	AMI UEFI BIOS (Legacy Free)
Watch	dog Time	r	65536 levels, 0 to 65535 sec.	65536 levels, 0 to 65535 sec.	65536 levels, 0 to 65535 sec.
Onboa	ard Storag	е	eMMC 5.0 up to 64GB (optional)	N/A	N/A
Onboa	ard GPIO		4-in/4-out	4-in/4-out	4-in/4-out
	SATA		2 x SATA-600	2 x SATA-600	2 x SATA-600
	TPM		N/A	TPM 2.0	TPM 2.0
		COM 1	TX/RX	TX/RX	TX/RX
I/O	Serial	COM 2	TX/RX	TX/RX	TX/RX
	Jenai	COM 3	N/A	N/A	N/A
		COM 4	N/A	N/A	N/A
	USB		2 x USB 3.0 8 x USB 2.0	4 x USB 3.0 4 x USB 2.0	3 x USB 3.0 8 x USB 2.0
Display			1 x DDI 1 x LVDS (eDP optional)	N/A	1 x VGA 1 x LVDS dual channel 18 /24 bit (eDP 1.3 optional) 2 x DDI (supports HDMI 1.4/DVI/DP 1.2*) *HDMI 2.0 needs Redriver chip on carrier board/ DP 1.4 needs Redriver chip on carrier board
Ethern	net		1 x 10/100/1000 Mbps Ethernet	1 x 10/100/1000 Mbps Ethernet 2 x 10GBase-KR interfaces support NCSI	1 x 10/100/1000 Mbps Ethernet
Audio			Codec on baseboard	Codec on baseboard	Codec on baseboard
Hardw	/are Monit	toring	Yes	Yes	Yes
SMBus			Yes	Yes	Yes
Expansion Interface		face	4 x PCIe x1	1 x PCIe x16 Gen3 1 x PCIe x8 Gen3 8 x PCIe x1 Gen2	7 x PCIe x1 via PCIe bridge
Power	Managen	nent	ACPI	ACPI	ACPI
Opera	ting Temp	erature	Industrial: -40°C to +85°C (-40°F to +185°F) Standard: -20°C to +70°C (-4°F to +158°F)	Industrial: -40°C to 85°C (-40°F to 185°F) Standard: 0°C to 60°C (32°F to140°F)	-20°C to +60°C (-4°F to +140°F)
Relativ	ve Humidi	ty	10% - 95%, non-condensing	10% - 95%, non-condensing	10% - 95%, non-condensing
EMI Compliance		)	CE	CE	CE













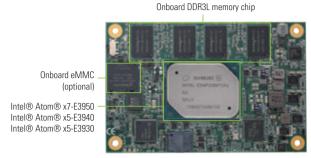
Features Wodels			CEM521	CEM520	Q7M310
Form Factor			COM Express Type 6 Compact	COM Express Type 6 Basic	Oseven
CPU Level			Intel® 8th gen Core™/ Celeron® 4305UE	Intel® Xeon® 8th gen Intel® Core™ (Coffee Lake)	Intel® Atom® x5/x7
CPU			Onboard	Onboard	Onboard
Core L	ogic Chips	et	SoC integrated	Intel® CM246/QM370/HM370	SoC integrated
Memo	гу Туре		DDR4-2400	DDR4-2666	DDR3L-1600
Max. D	RAM Capa	city	64GB	64GB	8GB
Cache	RAM Capa	city	SoC integrated	SoC integrated	SoC integrated
BIOS			AMI UEFI BIOS (Legacy Free)	AMI UEFI BIOS (Legacy Free)	AMI UEFI BIOS (Legacy Free)
Watch	dogTimer		65536 levels, 0 to 65535 sec.	65536 levels, 0 to 65535 sec.	65536 levels, 0 to 65535 sec.
Onboa	rd Storage		eMMC 5.1 up to 64GB (optional)	N/A	eMMC 5.0 up to 32GB (optional)
Onboa	rd GPIO		4-in/4-out	4-in/4-out	4-in/4-out
	SATA		3 x SATA-600	4 x SATA-600 with RAID 0/1/5/10	2 x SATA-600
	TPM		TPM 2.0	TPM 2.0	N/A
		COM 1	TX/RX	TX/RX	TX/RX
I/O	Carrial	COM 2	TX/RX	TX/RX	N/A
	Serial	COM 3	N/A	N/A	N/A
		COM 4	N/A	N/A	N/A
	USB		4 x USB 3.0 8 x USB 2.0	4 x USB 3.0 8 x USB 2.0	2 x USB 3.0 4 x USB 2.0
Display			1 x LVDS; 18/24-bit single/dual channel (eDP 1.4 optional) 1 x VGA (default) 1 x DDI	1 x LVDS; 18/24-bit single/dual channel (eDP 1.4 optional) 1 x VGA 2 x DDI	1 x DDI 1 x LVDS (eDP optional)
Ethern	et		1 x 10/100/1000 Mbps Ethernet	1 x 10/100/1000 Mbps Ethernet	1 x 10/100/1000 Mbps Ethernet
Audio			Codec on baseboard	Codec on baseboard	Codec on baseboard
Hardw	are Monito	ring	Yes	Yes	Yes
SMBus			Yes	Yes	Yes
Expansion Interface		ice	8 x PCle x1 Gen3	1 x PCle x16 Gen3 8 x PCle x1 Gen3	4 x PCle x1
Power Management		ent	ACPI	ACPI	ACPI
Operating Temperature		-20°C to +70°C (-4°F to +158°F)		-20°C to +70°C (-4°F to +158°F)	-40°C to +85°C (-40°F to +185°F)
Relative Humidity		у	10% - 95%, non-condensing	10% - 95%, non-condensing	10% - 95%, non-condensing

## **CEM310**

#### COM Express Type 10 Mini Module with Intel® Atom® x5 and x7 Processor

#### **Features**

- Intel® Atom® x5 and x7 processors (Apollo Lake)
- 4GB DDR3L memory onboard
- Max. up to 4 lanes of PCI Express
- 2 SATA-600
- 2 USB 3.0 and 8 USB 2.0



#### **Core System**

CPU	Intel® Atom® x7-E3950 (2.0 GHz) Intel® Atom® x5-E3940 (1.8 GHz) Intel® Atom® x5-E3930 (1.8 GHz)
System Memory	4GB DDR3L memory onboard
Chipset	SoC integrated
BIOS	AMI UEFI BIOS (Legacy Free)
Storage	eMMC 5.0 up to 64GB (optional)
Watchdog Timer	65536 levels, 0 to 65535 sec.
Expansion Interface	4 x PCle x1 (3 x1 while internal LAN is connected)
Battery Lithium	N/A
Power Input	ATX: +12V, +5VSB AT: +12V Wide range input: +4.75V to +20V
Dimensions	84 x 55 mm
Board Thickness	2.0 mm
Operating Temperature	Industrial: -40°C to +85°C (-40°F to +185°F) with system thermal solution Standard: -20°C to +70°C (-4°F to +158°F)
Humidity	10% - 95% relative humidity, non-condensing
Vibration Endurance	3.5 Grms

#### 1/0

SATA	2 x SATA-600
Hardware Monitoring	Yes
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i210-IT; supports Wake-on-LAN, PXE Boot ROM
Audio	HD link interface to baseboard for Codec
USB	2 x USB 3.0 8 x USB 2.0
Serial	1 x LPC 1 x SPI 2 x TX/RX
TPM	N/A
SMBus	Yes
Others	1 x I <sup>2</sup> C
GPIO	4-CH in & 4-CH out
Smart Battery	Yes

Onboard DDR3L memory chip



COM Express connector ▲ Rear view

#### **Packing List**

Chipset	Intel® Gen 9 Graphics Engine
	Supports Gfx – DX12.0, OCL2.0, OGL 4.3
Display Interface	1 x DDI (DisplayPort, HDMI, DVI)
	1 x LVDS; 18/24-bit single channel (eDP optional)

#### **Packing List**

Quick installation guide

#### **Ordering Information**

Standard	
CEM310PG-E3930+4GB (Ind) (P/N: E38D310100)	COM Express Type 10 Mini module with Intel® Atom® x5-E3930, DDI, LVDS, USB 3.0 and GbE LAN (Ind. Temp)
CEM310PG-E3940+4GB (Ind) (P/N: E38D310102)	COM Express Type 10 Mini module with Intel® Atom® x5-E3940, DDI, LVDS, USB 3.0 and GbE LAN (Ind. Temp)
CEM310PG-E3950+4GB (Ind) (P/N: E38D310103)	COM Express Type 10 Mini module with Intel® Atom® x7-E3950, DDI, LVDS, USB 3.0 and GbE LAN (Ind. temp)
CEM310PG-E3930+4GB (P/N: E38D310104)	COM Express Type 10 Mini module with Intel® Atom® x5-E3930, DDI, LVDS, USB 3.0 and GbE LAN
CEM310PG-E3940+4GB (P/N: E38D310105)	COM Express Type 10 Mini module with Intel® Atom® x5-E3940, DDI, LVDS, USB 3.0 and GbE LAN
CEM310PG-E3950+4GB (P/N: E38D310106)	COM Express Type 10 Mini module with Intel® Atom® x7-E3950, DDI, LVDS, USB 3.0 and GbE LAN

#### **Optional**

7128D310000E	CEM310 heatspreader
5078D840200E	Heatsink with fan (need to be with 7128D310000E)
CEB94017	COM Express Type 10 development baseboard
(P/N: E394017101)	

COM Express Type 7 Basic Module with Intel® Xeon® D-1500 & Pentium® Processor D1500

#### **Features**

- Intel® Xeon® D-1500 and Pentium® Processor D1500 (Broadwell-DE)
- 2 DDR4-2400 SO-DIMM for up to 64GB of memory
- 1 PCle x16 Gen3, 1 PCle x8 Gen3, 8 PCle x1 Gen2
- 2 SATA-600
- 4 USB 3.0 and 4 USB 2.0
- Two 10GBase-KR
- TPM 2.0 supported













#### **Core System**

СРИ	Intel® Xeon® D-1577 1.3/2.1GHz 24MB, 45W (16C) Intel® Xeon® D-1539 1.6/2.2GHz 12MB, 35W (8C) Intel® Xeon® D-1527 2.2/2.7GHz 6MB, 35W (4C) Intel® Pentium® D1519 1.5/2.1GHz 6MB, 25W (4C) Intel® Pentium® D1508 2.2/2.6GHz 3MB, 25W (2C)
System Memory	2 x 260-pin DDR4-2400 ECC SO-DIMM, up to 64GB
Chipset	SoC integrated
BIOS	AMI uEFI (Legacy free)
Storage	N/A
Watchdog Timer	65536 levels, 0 to 65535 sec.
Expansion Interface	1 x PCle x16 Gen3 1 x PCle x8 Gen3 8 x PCle x1 Gen2
Battery Lithium	N/A
Power Input	ATX: +12V, +5VSB AT: +12V
Dimensions	125 x 95 mm
Board Thickness	2.0 mm
Operating Temperature	Industrial: -40°C to +85°C (-40°F to +185°F) with system thermal solution Standard: 0°C to +60°C (+32°F to +140°F)
Humidity	10% - 95% relative humidity, non-condensing
Vibration Endurance	3.5 Grms

#### **I/O**

SATA	2 x SATA-600
Hardware Monitoring	Yes
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i210 2 x 10GBASE-KR with Intel® 10G external PHY
Audio	N/A
USB	4 x USB 3.0 4 x USB 2.0
Serial	2 x TX/RX
TPM	TPM 2.0
SMBus	Yes
Others	1 x l <sup>2</sup> C 1 x LPC 1 x SPI
GPIO	4-CH in & 4-CH out
Smart Battery	N/A

#### Intel® Xeon® D-1500/ Pentium® D1500 processor





▲ Rear view

COM Express connector

#### **Packing List**

Quick installation guide

#### **Ordering Information**

Standard	
CEM700-D1577 (P/N: E38D700100)	COM Express Type 7 Basic module with Intel® Xeon® D-1577, 10GBASE-KR, USB 3.0 and TPM
CEM700-D1539 (P/N: E38D700102)	COM Express Type 7 Basic module with Intel® Xeon® D-1539, 10GBASE-KR, USB 3.0, and TPM (Ind. Temp)
CEM700-D1527 (P/N: E38D700101)	COM Express Type 7 Basic module with Intel® Xeon® D-1527, 10GBASE-KR, USB 3.0 and TPM
CEM700-D1519 (P/N: E38D700103)	COM Express Type 7 Basic module with Intel® Pentium® D-1519, 10GBASE-KR, USB 3.0, and TPM (Ind. Temp)
CEM700-D1508 (P/N: E38D700104)	COM Express Type 7 Basic module with Intel® Pentium® D-1508, 10GBASE-KR, USB 3.0 and TPM

#### **Optional**

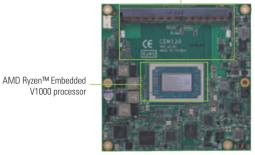
CEB94701 (P/N: E394701100)	COM Express Type 7 development board
E39J012100	CEM700 heatpipe cooler
7128D700000E	CEM700 heat spreader



#### COM Express Type 6 Compact Module with AMD Ryzen™ Embedded V1000 Processor

#### **Features**

- AMD Ryzen™ Embedded V1000 processors
- 2 DDR-2400/3200 SO-DIMM for up to 64GB of memory
- Max. up to 7 lanes of PCI Express
- 2 SATA-600
- 3 USB 3.0 and 8 USB 2.0
- TPM 2.0 supported
- Wide voltage input from +8V to +20V















#### **Core System**

CPU	AMD Ryzen™ Embedded V1000 series V1202B / 2.3 GHz (12-25W) V1605B / 2.0 GHz (12-25W) V1756B / 3.25 GHz (35-54W) V1807B / 3.35 GHz (35-54W)
System Memory	2 x DDR4-2400/3200 SO-DIMM, up to 64GB (dual channel)*, non-ECC/ECC memory *Memory speed was depend on memory rank.
Chipset	SoC integrated
BIOS	AMI uEFI (Legacy free)
Storage	N/A
Watchdog Timer	65536 levels, 0 to 65535 sec.
Expansion Interface	7 x PCle x1 via PCle bridge
Battery Lithium	N/A
Power Input	ATX: +12V, +5VSB AT: +12V Wide range input: +8V to +20V
Dimensions	95 x 95 mm
Board Thickness	2.0 mm
Operating Temperature	-20°C to +60°C (-4°F to +140°F)
Humidity	10% - 95% relative humidity, non-condensing

<sup>\*</sup>Memory speed was depend on memory rank.

#### 1/0

SATA	2 x SATA-600
Hardware Monitoring	Yes
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i210; supports Wake-on-LAN, PXE Boot ROM
Audio	HD link interface to baseboard for Codec
USB	3 x USB 3.0 8 x USB 2.0
Serial	1 x LPC 1 x SPI 2 x TX/RX
TPM	TPM 2.0
SMBus	Yes
Others	1 x I <sup>2</sup> C
GPI0	4-CH in & 4-CH out
Smart Battery	Yes



2 x DDR4 SO-DIMM

COM Express

▲ Rear view

#### **Display**

Graphic	Radeon™ RX Vega Graphics with up to 11 compute units H.265 (10-bit) decode & (8-bit) encode, VP9 decode
Display Interface	1 x VGA; 1920 x 1200 @60Hz 1 x LVDS dual-channel 18/24-bit or eDP 1.3 (optional) 2 x DDI (HDMI 1.4, DVI, DisplayPort 1.2)*
ALIDATION I II II	

<sup>\*</sup>HDMI 2.0 needs redriver chip on carrier board/DisplayPort 1.4 needs Redriver chip on carrier board

#### **Packing List**

Quick installation guide

Standard	
CEM130-V1202B	COM Express Type 6 Compact module with AMD Ryzen™
(P/N: E38D130103)	Embedded V1202B, DDI, LVDS, GbE LAN, USB 3.0 and TPM
CEM130-V1605B	COM Express Type 6 Compact module with AMD Ryzen™
(P/N: E38D130102)	Embedded V1605B, DDI, LVDS, GbE LAN, USB 3.0 and TPM
CEM130-V1756B	COM Express Type 6 Compact module with AMD Ryzen™
(P/N: E38D130101)	Embedded V1756B, DDI, LVDS, GbE LAN, USB 3.0 and TPM
CEM130-V1807B	COM Express Type 6 Compact module with AMD Ryzen™
(P/N: E38D130100)	Embedded V1807B, DDI, LVDS, GbE LAN, USB 3.0 and TPM

optiona	
CEB9401	

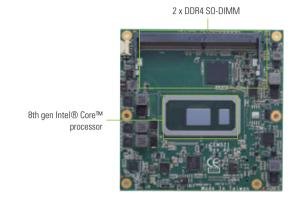
CEB94011 (P/N: E394011100)	COM Express Type 6 application board
E39J014100	CEM130 heat sink with fan
7128D130000E	CEM130 heat spreader



#### COM Express Type 6 Compact Module with 8th Gen Intel® Core™ & Celeron® Processor

#### **Features**

- 8th gen Intel® Core™ i7/i5/i3 and Celeron® processors (Whiskey Lake-U)
- 2 dual-channel DDR4-2400 SO-DIMM for up to 64GB
- Max. up to 8 lanes of PCI Express
- 3 SATA Gen3
- 4 USB 3.0 and 8 USB 2.0
- Supports eMMC for up to 64G (optional)
- TPM 2.0 supported
- AMS.AXView intelligent remote management software





















#### **Core System**

CPU	Intel® Core™ i7-8665UE/i5-8365UE/i3-8145UE processor (Whiskey Lake-U) & Intel® Celeron® processor 4305UE
System Memory	2 x Dual-channel DDR4-2400 SO-DIMM slot, up to 64GB
Chipset	SoC integrated
BIOS	AMI uEFI (Legacy free)
SSD	eMMC for up to 64G (optional)
Watchdog Timer	65536 levels, 0 to 65535 sec.
Expansion Interface	8 x PCI Express Gen3 (max. 5 PCIe Devices with LAN)
Battery Lithium	Yes
Power Input	ATX: +12V, +5VSB
	AT: +12V
Dimensions	95 x 95 mm
Board Thickness	2.0 mm
Operating Temperature	-40°C to +85°C (-40°F to +185°F) with system thermal
	solution
Humidity	10% - 95% relative humidity, non-condensing
Vibration Endurance	3.5 Grms

#### 1/0

SATA	3 x SATA Gen3
Hardware Monitoring	Yes
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM
Audio	HD link interface to baseboard for Codec
USB	4 x USB 3.0 8 x USB 2.0
Serial	1 x LPC 1 x SPI 2 x TX/RX
TPM	TPM 2.0
SMBus	Yes
Others	1 x I <sup>2</sup> C
GPI0	4-CH in & 4-CH out (SDIO optional)
Smart Battery	Yes



COM Express connector

A Rear view

#### Display

Chipset	Intel® gen 9 Graphics Engine
	Supports Gfx - DX12.0, OCL2.0, OGL4.3
Display Interface	1 x LVDS; 18/24-bit single/dual channel (optional eDP 1.4 : 4096 x 2304@60Hz)
	1 x VGA; 1920 x 1200 @60Hz (default)
	1 x DDI (DisplayPort 1.2: 4096 x 2304@60Hz/ HDMI 1.4:
	4096 x 2160@30/24Hz)

#### **Packing List**

Quick installation guide

#### **Ordering Information**

Standard	
CEM521-i7-8665UE (P/N: E38D521100)	COM Express Type 6 Compact module with Intel® Core™ i7-8665UE, DDI, VGA, LVDS, GbE LAN, USB 3.0 and TPM
CEM521-i5-8365UE (P/N: E38D521102)	COM Express Type 6 Compact module with Intel® Core™ i5-8365UE, DDI, VGA, LVDS, GbE LAN, USB 3.0 and TPM
CEM521-i3-8145UE (P/N: E38D521104)	COM Express Type 6 Compact module with Intel® Core™ i3-8145UE, DDI, VGA, LVDS, GbE LAN, USB 3.0 and TPM
CEM521-Cel-4305UE (P/N: E38D521105)	COM Express Type 6 Compact module with Intel® Celeron® 4305UE, DDI, VGA, LVDS, GbE LAN, USB 3.0 and TPM

#### Optional

CEB94011	COM Express Type 6 evaluation board
(P/N: E394011100)	
E39J016100	CEM521 heat sink with fan
7128D521000E	CEM521 heat spreader

### **CEM520**

COM Express Type 6 Basic Module with Intel® Xeon® & 8th Gen Intel® Core™ Processors and Intel® CM246/QM370/HM370

#### **Features**

- Intel® Xeon® & 8th gen Intel® Core™ i7/i5/i3 processors
- Intel® CM246/QM370/HM370 chipset
- 2 dual-channel DDR4-2400 SO-DIMM for up to 64GB of memory
- 1 PCle x16 and 8 PCle x1 Gen3
- 4 SATA Gen3 with RAID 0/1/5/10
- 4 USB 3.2 and 8 USB 2.0
- TPM 2.0 function supported
- AMS.AXView intelligent remote management software for industrial IoT applications



2 x DDR4 SO-DIMM











USB 3.2 **Core System** 

OPLI	1 - 10 / 0 0 0 1 1 - 10 0 74 77 75 70
CPU	Intel® Xeon® & 8th gen Intel® Core™ i7/i5/i3 processors
	(Coffee Lake)
System Memory	2 x DDR4-2666 SO-DIMM, up to 64GB non-ECC/ECC memory
Chipset	Intel® CM246/QM370/HM370
BIOS	AMI uEFI (Legacy Free)
Storage	N/A
Watchdog Timer	65536 levels, 0 to 65535 sec.
Expansion Interface	1 x PCle x16 Gen3
	8 x PCle x1 Gen3
Battery Lithium	N/A
Power Input	ATX: +12V, +5VSB; AT: +12V
Dimensions	125 x 95 mm
Board Thickness	2.0 mm
Operating Temperature	-40°C to +85°C (-40°F to +185°F) with system thermal solution
, , ,	(operation with heatsink and fan)
Humidity	10% - 95% relative humidity, non-condensing
Vibration	3.5 Grms

#### 1/0

SATA	4 x SATA Gen3 with RAID 0/1/5/10
Hardware Monitoring	Yes
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM
Audio	HD link interface to baseboard for Codec
USB	4 x USB 3.2 Gen 2 8 x USB 2.0
Serial	1 x LPC 1 x SPI 2 x TX/RX
TPM	TPM 2.0
SMBus	Yes
Others	1 x I <sup>2</sup> C
GPI0	4-CH in & 4-CH out (SDIO optional)
Smart Battery	Yes



COM Express interface

▲ Rear view

#### **Display**

Chipset	Intel® Gen 9 HD Graphic Gfx APIs - DX11/12, OCL2.x, OGL 4.3/4.4 3 independent displays
Display Interface	1 x LVDS; 18/24-bit single/dual channel (default), optional with eDP 1.4: 4096 x 2304 @60Hz 1 x VGA; 1920 x 1200 @60Hz (default) 2 x DDI (DisplayPort 1.2: 4096 x 2304 @60Hz/HDMI 1.4: 4096 x 2160 @30/24Hz)

#### **Packing List**

Quick installation guide

#### **Ordering Information**

CEM520-E-2176M+CM246 (P/N: E38D520100)	COM Express Type 6 basic module with Intel® Xeon® E-2176M, CM246, DDI/LVDS, GbE LAN, USB 3.0 and TPM
· · · · · · · · · · · · · · · · · · ·	COM Express Type 6 basic module with Intel® Core™ i7-8850H, QM370, DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM520-i5-8400H+QM370 (P/N: E38D520102)	COM Express Type 6 basic module with Intel® Core™ i5-8400H, QM370, DDI/LVDS, GbE LAN, USB 3.0 and TPM
CEM520-i3-8100H+HM370 (P/N: E38D520101)	COM Express Type 6 basic module with Intel® Core™ i3-8100H, HM370, DDI/LVDS, GbE LAN, USB 3.0 and TPM

#### **Optional**

CEB94011 (P/N: E394011100)	CEB94011 COM Express Type 6 evaluation board
E39J015100	CEM520 heat sink with fan
E39J006100	CEM520 heat spreader

## CEB94018

### COM Express Type 10 Mini Application Board with LVDS, VGA, Dual LAN and Audio

#### **Features**

- 84 x 55 mini size form factor
- 2 GbE LAN
- SATA and mSATA
- LVDS and VGA
- 6 USB 2.0
- 2 PCI Express Mini Card slots











#### **Core System**

CPU	On the module
System Memory	On the module
Chipset	On the module
BIOS	On the module
SSD	N/A
Watchdog Timer	On the module
Expansion Interface	2 x Half-size PCI Express Mini Card slot
	1 x SIM card slot
Battery Lithium	Lithium 3V/220 mAH
Power Input	AT/ATX: +5V DC in, +9V to +14 DC in (option)
Dimensions	84 x 55 mm
Board Thickness	1.6 mm
Operating Temperature	-40°C to +85°C (-40°F to +185°F)
Humidity	10% - 95% relative humidity, non-condensing

#### 1/0

SATA	1 x SATA-600
Hardware Monitoring	Yes
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i210-IT; supports Wake-on-LAN, PXE Boot ROM 1 x 10/100/1000 Mbps signals routed from CPU module
Audio	HD audio with Line-out & Mic-in
USB	6 x USB 2.0
Serial	2 x RS-232 TX/RX/RS-422/RS-485
TPM	N/A
SMBus	N/A
Others	1 x I₂C, FP
GPIO	3-CH in & 3-CH out
Display	1 x LVDS; 18/24-bit single channel 1 x VGA



2 x LAN Audio 4 x USB 2.0 PCI Express PCI Express Mini Card slot w/ mSATA Mini Card slot VGA 2 x USB 2.0 2 x RS-232 TX/RX, Multiple I/0 DIO/I<sup>2</sup>C/SMBus... 2 x RS-422 or 2 x RS-485 ▲ Rear view

#### **Packing List**

Quick installation guide

#### **Ordering Information**

Standard	
CEB94018VGA (P/N: E394018100)	COM Express Type 10 Mini application board with 2 PCI Express Mini Card slots, 2 GbE LAN, LVDS, VGA and multiple I/O features
TS010-CEB90418 HS (P/N: E39J010100)	CEB94018 heatsink with fan (5V)

#### Accessories include in CEB94018VGA

Power cable VGA cable USB 2.0 cable Audio cable LAN cable COM cable SATA power cable System cable

COM Express Type 10 Mini module with Intel® Atom® E3845, 4GB, DDI, LVDS, GbE LAN and USB 3.0
COM Express Type 10 Mini module with Intel® Atom® E3827, 4GB, DDI, LVDS, GbE LAN and USB 3.0
COM Express Type 10 Mini module with Intel® Atom® E3815, 2GB, DDI, LVDS, GbE LAN and USB 3.0
COM Express Type 10 Mini module with Intel® Pentium® N3710, 4GB, DP, LVDS, USB 3.0 and GbE LAN
COM Express Type 10 Mini module with Intel® Celeron® N3160, 4GB, DP, LVDS, USB 3.0 and GbE LAN
COM Express Type 10 Mini module with Intel® Celeron® N3060, 4GB, DP, LVDS, USB 3.0 and GbE LAN
COM Express Type 10 Mini module with Intel® Pentium® N4200, DDI, LVDS, USB 3.0 and GbE LAN
COM Express Type 10 Mini module with Intel® Celeron® N3350, DDI, LVDS, USB 3.0 and GbE LAN

## CEB94021

COM Express Type 6 Application Board with LVDS, VGA, DDI, Dual LANs and Audio

#### **Features**

- 125 x 95 mini size form factor
- 2 GbE LANs
- SATA-600
- LVDS, VGA and DDI
- 4 USB 2.0 and 2 USB 3.0
- 2 PCI Express Mini Card slots
- 3 RS-232/422/485 and 1 RS-232







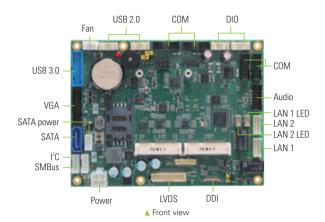


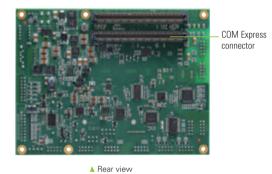
#### **Core System**

CPU	On the module		
System Memory	On the module		
Chipset	On the module		
BIOS	On the module		
SSD	N/A		
Watchdog Timer	On the module		
Expansion Interface	2 x Full-size PCI Express Mini Card slot (one slot supports mSATA) 1 x SIM card slot $$		
Battery Lithium	Lithium 3V/220 mAH		
Power Input	12V DC input via in a ATX connector		
Dimensions	125 x 95 mm		
Board Thickness	1.6 mm		
Operating Temperature	-40°C to +85°C (-40°F to +185°F)		
Humidity	10% to 95% relative humidity, non-condensing		

#### 1/0

SATA	1 x SATA-600		
Hardware Monitoring	Yes		
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i210-IT; supports Wake-on-LAN, PXE Boot ROM 1 x 10/100/1000 Mbps signals routed from CPU module		
Audio	HD audio with Line-out, MIC-in & Line-in		
USB	4 x USB 2.0 2 x USB 3.0		
Serial	1 x RS-232 3 x RS-232/422/485		
TPM	N/A		
SMBus	Yes		
others	1 x I <sup>2</sup> C		
GPI0	8-CH in & 8-CH out		
Display	1 x LVDS; 18/24-bit dual channel 1 x VGA 1 x DDI		





#### **Packing List**

Quick installation guide

Standard

CEB94021VGA (P/N: E394021100)	COM Express Type 6 application board with PCI Express Mil Card slot, 2 GbE LANs, LVDS, VGA and multiple I/O features		
Compliant Modules			
CEM500 Series	COM Express Type 6 Basic module with 6th gen Intel® Xeon® and Core™ i7/i5/i3 processor (Skylake-H)		
CEM510 Series	COM Express Type 6 Basic module with Intel® Xeon® E3 of 7th gen Intel® Core™ i7/i5/i3 processor (Kaby Lake-H)		
CEM501 Series	COM Express Type 6 Compact module with 6th gen Intel® Core™ i7/i5/i3 or Celeron® processor (Skylake-U)		
CEM511 Series	COM Express Type 6 Compact module with 7th gen Intel® Core™ i7/i5/i3 or Celeron® 3965U processor (Kaby Lake-U		
Optional			
59466993900E	AX98699 IDC 30P to 30P P=0.4mm L=150mm		
83986991010F	AX98699-HDMI Converter Board		

#### Oseven Module with Intel® Atom® x5 and x7 Processors

#### **Features**

- Intel® Atom® x5 and x7 processor (Apollo Lake)
- 8GB DDR3L memory onboard
- 4 lanes of PCI Express slot
- 2 SATA-600
- 3 USB 3.0 and 4 USB 2.0 or 2 USB 3.0 and 6 USB 2.0 (optional)

Intel® Atom® processor x5/x7 series E3930/E3940/E3950















#### **Core System**

CPU	Intel® Atom® x7-E3950 (2.0 GHz) Intel® Atom® x5-E3940 (1.8 GHz) Intel® Atom® x5-E3930 (1.8 GHz)		
System Memory	Onboard DDR3L, up to 8GB		
Chipset	SoC integrated		
BIOS AMI uEFI			
SSD	eMMC 32GB (optional)		
Watchdog Timer	65536 levels, 0 ~ 65535 sec.		
Expansion Interface	4 x PCle x1 (3 x PCle x1 if onboard LAN is supported)		
Battery Lithium	N/A		
Power Input	ATX: 5V, +5VSB AT: 5V		
Size	70 x 70 mm		
Board Thickness	1.2 mm		
Temperature	-40°C to +85°C (-40°F ~ +185°F), operation		
Operation Humidity	10% - 95% relative humidity, non-condensing		

#### I/O

SATA	2 x SATA-600		
Hardware Monitoring	Yes		
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i210-IT; supports Wake-on-LAN, PXE Boot ROM		
Audio	HD link interface to baseboard for Codec		
USB	2 x USB 3.0 4 x USB 2.0		
Serial	1 x LPC interface (optional w/GPIO) 1 x SPI interface 1 x Serial TX/RX		
TPM	N/A		
SMBus	Yes		
Others	1 x I <sup>2</sup> C		
Digital I/O	8 x GPIO		
SDIO	Yes		
Smart Battery	Yes		



DDR3L onboard memory



▲ Rear view

#### **Display**

	Intel® Gen 9 Graphics Engine Support Gfx - DX11.1, OCL1.2, OGL 4.2
Display Interface	1 x DDI (DisplayPort, HDMI, DVI) 1 x LVDS; 18/24-bit dual channel (eDP optional)

#### **Packing List**

Quick installation guide

Standard			
Q7M310PG-E3950-4G (Ind.) (P/N: E38Q310101)	Oseven module with Intel® Atom® x7-E3950, 4GB DRAM, DDI, LVDS, USB 3.0 and GbE LAN (Industrial temperature)		
Q7M310PG-E3940-4G (Ind.) (P/N: E38Q310102)	Qseven module with Intel® Atom® x5-E3940, 4GB DRAM, DDI, LVDS, USB 3.0 and GbE LAN (Industrial temperature)		
Q7M310PG-E3930-4G (Ind.) (P/N: E38Q310104)	Oseveni module with Intel® Atom® x5-E3930, 4GB DRAM, DDI, LVDS, USB 3.0 and GbE LAN (Industrial temperature)		
Q7M310-E3930+4GB (P/N: E38Q310105)	Oseven module with Intel® Atom® x7-E3950, 4GB DRAM, DDI, LVDS, USB 3.0 and GbE LAN		
Q7M310-E3940+4GB (P/N: E38Q310106)	Oseven module with Intel® Atom® x5-E3940, 4GB DRAM, DDI, LVDS, USB 3.0 and GbE LAN		
Q7M310-E3950+4GB (P/N: E38Q310107)	Oseveni module with Intel® Atom® x5-E3930, 4GB DRAM, DDI, LVDS, USB 3.0 and GbE LAN		
7128Q310000E	Q7M310 heat spreader		
7118Q310000E	Q7M310 heatsink without fan		

## Q7B301

#### Oseven Rev 2.1 Application Board with LVDS, HDMI, Dual LAN and Audio

#### **Features**

- 100 x 72 mini size form factor
- 2 GbE LAN
- SATA-600
- LVDS and HDMI
- 1 USB 2.0 and 2 USB 3.0
- 2 PCI Express Mini Card slots









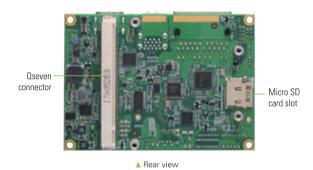


#### **Core System**

OPLI	0 :1 1.1		
CPU	On the module		
System Memory	On the module		
Chipset	On the module		
BIOS	On the module		
SSD	N/A		
Watchdog Timer	On the module		
Expansion Interface	1 x Full-size PCI Express Mini Card slot (mSATA supported) 1 x Half-size PCI Express Mini Card slot 1 x SIM card slot 1 x Micro SD card slot		
Battery Lithium	N/A		
Power Input	2-pin DC-in 12V connector		
Dimensions	100 x 72 mm		
Board Thickness	1.6 mm		
Operating Temperature	-40°C to +85°C (-40°F to +185°F)		
Humidity	10% - 95% relative humidity, non-condensing		

#### 1/0

SATA	1 x SATA-600		
Hardware Monitoring	Yes		
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i210-IT; supports Wake-on-LAN, PXE Boot ROM 1 x 10/100/1000 Mbps signals routed from CPU module		
Audio	HD audio with Line-out & MIC-in		
USB	1 x USB 2.0 2 x USB 3.0		
Serial	2 x RS-232/422/485		
TPM	N/A		
SMBus	Yes		
Others	1 x I <sup>2</sup> C		
GPIO	4-CH in & 4-CH out		
Display	1 x LVDS; 18/24-bit single channel 1 x HDMI		



#### **Packing List**

Quick installation guide

Standard					
Q7B301LVDS	Oseven Rev 2.1 application board with 2 PCI Express Mini				
(P/N: E399301100)	Card slots, 2 GbE LAN, LVDS and HDMI				

# 2

## 3.5" Embedded Boards

Axiomtek's industrial-grade 3.5-inch embedded board provides an enhanced, feature-rich and easy-to-deploy solution for varying embedded applications. It comes with a small form factor, lower power consumption CPU, high network connectivity, stunning graphical performance, and abundant I/O connectivity. It is a highly versatile platform designed for IoT and intelligent systems such as industrial automation, self-service terminals, digital signage, POS/kiosk displays, medical, and more.

	Selection Guide	2	51
NEW	CAPA55R	3.5" Embedded SBC with Intel® Core™ i7/i5/i3, Celeron® Processor, DisplayPort++, HDMI, LVDS, 1 GbE LAN and 2.5 GbE LAN	52
NEW	CAPA13R	3.5" Embedded SBC with AMD Ryzen™ Embedded V1807B/V1605B APU, DisplayPort, 2 HDMI, LVDS and 4 GbE LAN	53
NEW	CAPA520	3.5" Embedded SBC with LGA1151 Socket 9th/8th Gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® Processor, DisplayPort, HDML LVDS and 3 GbE LAN	54

## Boards and Modules

## 3.5" Embedded Boards

#### Selection Guide



Features Wodels			CAPA55R	CAPA13R	CAPA520
Form Facto	or		3.5"	3.5"	3.5"
CPU Level			11th gen Intel® Core™ i7/i5/i3 & Celeron®	AMD® RYZEN™ Embedded V1807B and V1605B APU	9th/8th gen Intel® Core™ i7/i5/i3 & Celeron®
CPU Socke	et		Onboard	Onboard	Onboard
Core Logic	Chipset		SoC integrated	SoC integrated	Intel® H310/Intel® Q370
Memory Ty	<b>/pe</b>		DDR4-3200	DDR4-3200/2400	DDR4-2666
Max. DRAI	VI Capacity		64GB	16GB	16GB
Cache RAN	/I Capacity		Integrated in CPU	Integrated in CPU	Integrated in CPU
BIOS			AMI UEFI BIOS	AMI UEFI BIOS	AMI UEFI BIOS
Watchdog	Timer		65536 Levels, 0 to 65535 sec.	256 Levels, 0 to 255 sec.	256 Levels, 0 to 255 sec.
SSD			1 x M.2 Key M 22 x 80 (NVMe)	1 x M.2 Key B 22 x 42	1 x mSATA (optional)
Digital I/O			8 channels in/out programmable	8 channels in/out programmable	8 channels in/out programmable
	SATA		1 x SATA-600	1 x SATA-600	2 x SATA-600
		COM 1	RS-232/422/485	RS-232/422/485	RS-232/422/485
	Serial	COM 2	RS-232/422/485	RS-232	N/A
I/O	Jenai	COM 3	N/A	N/A	N/A
		COM 4	N/A	N/A	N/A
	USB		4 x USB 2.0 3 x USB 3.2 Gen2	2 x USB 2.0 2 x USB 3.2 Gen2	3 x USB 2.0 3 x USB 3.0
SIM Card S	Slot		N/A	N/A	N/A
Display			1 x DisplayPort++ 1 x HDMI 1 x LVDS 1 x eDP (optional)	1 x DisplayPort 2 x HDMI 1 x LVDS	1 x DisplayPort 1 x HDMI 1 x LVDS
Ethernet			1x 10/100/1000 Mbps Ethernet 1 x 10/100/1000/2500 Mbps Ethernet	$2 \times 10/100/1000$ Mbps Ethernet $2 \times 10/100/1000$ Mbps Ethernet (optional)	2 x 10/100/1000 Mbps Ethernet 1 x 10/100/1000 Mbps Ethernet (Optional)
Audio			HD audio link	HD audio link	HD audio link
Hardware	Monitoring		Yes	Yes	Yes
SMBus			Yes	Yes	Yes
Expansion Interface			1 x M.2 Key E 22 x 30 1 x M.2 Key B 30 x 42/30 x 52	1 x M.2 Key E 22 x 30	1 x Full-size PCI Express Mini Card slot 1 x USB, 1 x PCIe x1, 1 x LPC, 1 x SMBus (through a ZIO connector)
Power Management			ACPI	ACPI	ACPI
Battery			Lithium	Lithium	Lithium
Operating '	Temperatur	е	-20°C to +60°C (-4°F to +140°F)	-20°C to +60°C (-4°F to 140°F)	-20°C to +60°C (-4°F to +140°F)
Relative Humidity			10% to 95%, non-condensing	10% to 95%, non-condensing	10% to 95%, non-condensing
EMI Compliance			CE	CE	CE

3.5" Embedded SBC with 11th Gen Intel® Core™ i7/i5/i3, Celeron® Processor, DisplayPort++, HDMI, LVDS, 1 GbE LAN and 2.5 GbE LAN

#### **Features**

- 11th gen Intel® Core™ i7/i5/i3 & Celeron® Processor
- 2 DDR4 SO-DIMM for up to 64GB of memory
- 1 GbE LAN and 1 2.5GbE LAN
- 3 M.2 expansion slot















#### **Core System**

CPU	11th gen Intel® Core™ i7/i5/i3 & Celeron® Processor (cTDP up to 28W)
System Memory	2 x 260-pin dual-channel DDR4-3200MHz SO-DIMM, up to 64GB
BIOS	AMI
SSD	1 x M.2 Key M (PCle x4 in 22 x 80)
Watchdog Timer	65536 levels, 0 to 65535 sec.
Expansion Interface	1 x M.2 Key E (PCle x1, USB 2.0 in 22 x 30) 1 x M.2 Key B (SATA, USB 3.0, USB 2.0 in 30 x 42 or 30 x 50) 1 x SIM connector via pin header
Battery Lithium	Lithium 3V/220 mAh
Power Input	2 x 2-pin connector 12 to 24VDC AT Auto Power On function supported
Dimensions	146 x 104 mm
Board Thickness	1.6 mm
Operating Temperature	-20°C to +60°C (-4°F to 140°F)
Humidity	10% to 95% relative humidity, non-condensing

#### I/O

SATA	1 x SATA-600
Hardware Monitoring	Detect CPU/system temperature, voltage and fan speed
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i210-AT; 1 x 10/100/1000/2500 Mbps Ethernet with Intel® i225LM
Audio	HD Audio link via pin header
USB	3 x USB 3.2 Gen2 4 x USB 2.0
Serial	2 x RS-232/422/485
TPM	TPM 2.0 on board
SMBus	Yes
Digital I/O	8-channel in/out programmed

#### **Display**

Standard

Chipset	Intel integrated Gfx graphic engine
Memory Size	Share System memory
Display Interface	1 x HDMI 1.4 1 x LVDS; 18/24-bit single/dual channel 1 x eDP (optional) 1 x DisplayPort ++

#### **Ordering Information**

CAPA55RHPGG	3.5" Embedded SBC with Intel® Core™ processor, DisplayPort, HDMI, 1 Gbe LAN, 2.5 GbE LAN and 3 M.2 expansion
Optional	
AX93A19 (P/N: E393A19100)	SIM card slot board
AX93A22 (P/N: E393A22100)	HD codec audio board for Mic-in/Line-in/Line-out
594E8422800E	2 USB 2.0 wafer cables w/bracket, 180 mm
59380880250E	COM port cable DB-9 x 1P, P=1.25 mm, L=250 mm
594H3186800E	Buzzer cable 9 x 5.5 mm 2-pin, L=40mm

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3.5" Embedded SBC with AMD Ryzen™ Embedded V1807B/V1605B APU, DisplayPort, 2 HDMI, LVDS and 4 GbE LAN

#### **Features**

- AMD Ryzen™ Embedded V1807B and V1605B APU
- 1 DDR4 SO-DIMM for up to 16GB of memory
- 4 GbE LAN
- Supports quad-view
- M.2 Key E
- M.2 Key B



▲ APC200, chassis for CAPA13R













#### **Core System**

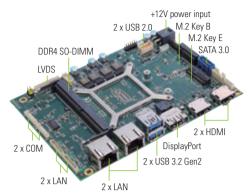
CPU	AMD Ryzen™ Embedded V1807B/V1605B APU onboard
System Memory	1 x 260-pin DDR4-2400 (V1605B), DDR4-3200 (V1807) SO-DIMM, up to 16GB
Chipset	SoC integrated
BIOS	AMI
SSD	1 x M.2 Key B (SATA, USB 2.0, PCIe x2 for optional) in 22x42 or 30x42
Watchdog Timer	255 levels, 1 to 255 sec.
Expansion Interface	1 x M.2 Key E (PClex1, USB2.0) in 22x30
Battery Lithium	Lithium 3V/220 mAh
Power Input	2 x 2 pin connector +12V DC-in only AT Auto Power On function supported
Power Requirement	AMD V1605B @2.0 GHz 16GB DDR4, min. RMS. +12V@2.5A AMD V1807B @3.35 GHz 16GB DDR4, min. RMS. +12V@4.2A
Dimensions	146 x 104 mm
Board Thickness	1.6 mm
Operating Temperature	-20°C to +60°C (-4°F to 140°F)
Humidity	10% - 95% relative humidity, non-condensing

#### I/O

SATA	1 x SATA-600
Hardware Monitoring	Detect CPU/system temperature, voltage and fan speed
Ethernet	2 x10/100/1000 Mbps Ethernet with Realtek RTL8111G; support Wake-on-LAN, PXE Boot ROM 2 x10/100/1000 Mbps Ethernet with Realtek RTL8111G; support Wake-on-LAN, PXE Boot ROM (optional)
Audio	HD audio link
USB	2 x USB 2.0 2 x USB 3.2 Gen2
Serial	1 x RS-232/422/485 1 x RS-232
TPM	ST ST33HTPH2E32AHB4 with TPM 2.0 compliant
SMBus	N/A
Digital I/O	8-channel in/out programmed

#### **Display**

Chipset	AMD Radeon™ RX Vega Graphics
Memory Size	Share System memory
Display Interface	1 x DisplayPort 2 x HDMI 1 x LVDS: 18/24-bit single/dual channel







▲ Top view ▲ Rear view



▲ Assembly View

0.000.0000.0000.0000	
CAPA13RPHGG-V1605B	3.5" Embedded SBC with AMD Ryzen™ V1605B
(P/N: E38E13R104)	(2.0 - 3.6 GHz, 2MB Cache, 15W) DisplayPort, 2 HDMI, LVDS and 2 GbE LAN, without fan
CAPA13RPHGG-V1605B	3.5" Embedded SBC with AMD Ryzen™ V1605B
w/fan	(2.0 - 3.6 GHz, 2MB Cache, 15W) DisplayPort, 2 HDMI, LVDS
(P/N: E38E13R108)	2 GbE LAN and fan
CAPA13RPHGG-V1807B	3.5" Embedded SBC with AMD Ryzen™ V1807B
(P/N: E38E13R103)	(3.35 - 3.8 GHz, 2MB Cache, 45W) DisplayPort, 2 HDMI,
, , , , , , , , , , , , , , , , , , , ,	LVDS and 2 GbE LAN, without fan
CAPA13RPHGG-V1807B	3.5" Embedded SBC with AMD Ryzen™ V1807B
w/fan	(3.35 - 3.8 GHz, 2MB Cache, 45W) DisplayPort, 2 HDMI,
(P/N: E38E13R107)	LVDS, 2 GbE LAN and fan

Optional	
CAPA13RPH4G-V1605B (P/N: E38E13R101)	3.5" Embedded SBC with AMD Ryzen™ V1605B (2.0-3.6 GHz, 2MB Cache, 15W), DisplayPort, 2 HDMI, LVDS, and 4 GbE LAN, without fan
CAPA13RPH4G-V1605B w/fan (P/N: E38E13R106)	3.5" Embedded SBC with AMD Ryzen™ V1605B (2.0-3.6 GHz, 2MB Cache, 15W), DisplayPort, 2 HDMI, LVDS, 4 GbE LAN, and fan
CAPA13RPH4G-V1807B (P/N: E38E13R100)	3.5" Embedded SBC with AMD Ryzen™ V1807B (3.35-3.8 GHz, 2MB Cache, 45W), DisplayPort, 2 HDMI, LVDS, and 4 GbE LAN, without fan
CAPA13RPH4G-V1807B w/fan (P/N: E38E13R105)	3.5" Embedded SBC with AMD Ryzen™ V1807B (3.35-3.8 GHz, 2MB Cache, 45W), DisplayPort, 2 HDMI, LVDS, 4 GbE LAN, and fan
AX93A22 (P/N: E393A22100)	HD codec audio board for Mic-in/Line-in/Line-out
594H3186800E	Buzzer cable 9 x 55 mm 2-pin, L=400 mm
59380880250E	COM port cable DB99 x 1P, P=1.25, L=250 mm
594E8422800E	2 x USB 2.0 cable with bracket, 180 mm
7128E13R000E	Heatspreader



3.5" Embedded SBC with LGA1151Socket 9th/8th Gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® Processor, DisplayPort, HDMI, LVDS and 3 GbE LAN

#### **Features**

- LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3 processor
- Intel® H310/Q370 chipset
- 1 DDR4 SO-DIMM for up to 16GB of memory
- 3 GbE LAN
- 1 PCI Express Mini Card slot
- Intel® AMT 12 supported (optional)











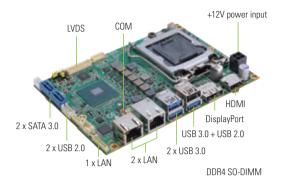


#### **Core System**

CPU	LGA1151 socket 9th/8th Gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor (TDP 35W)
System Memory	1 x 260-pin DDR4-2666 SO-DIMM, up to 16GB
Chipset	Intel® H310/Intel® Q370
BIOS	AMI
SSD	1 x mSATA (optional)
Watchdog Timer	255 levels, 1 to 255 sec.
Expansion Interface	1 x PCI Express Mini Card slot 1 x USB, 1x PCle x1, 1 x LPC, 1 x SMBus through a ZIO connector
Battery Lithium	Lithium 3V/220 mAh
Power Input	2 x 2-pin connector +12V DC-in only AT Auto Power On function supported
Dimensions	146 x 104 mm
Board Thickness	1.6 mm
Operating Temperature	-20°C to +60°C (-4°F to 140°F)
Humidity	10% to 95% relative humidity, non-condensing

#### 1/0

SATA	2 x SATA-600
Hardware Monitoring	Detect CPU/system temperature, voltage and fan speed
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM 1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM 1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM (optional)
Audio	HD Audio link
USB	3 x USB 3.0 3 x USB 2.0
Serial	1 x RS-232/422/485
TPM	N/A
SMBus	Yes
Digital I/O	8-channel in/out programmed





ZIO connector (1 x PCle x1, 1 x USB, 1 x LPC, 1 x SMBus)



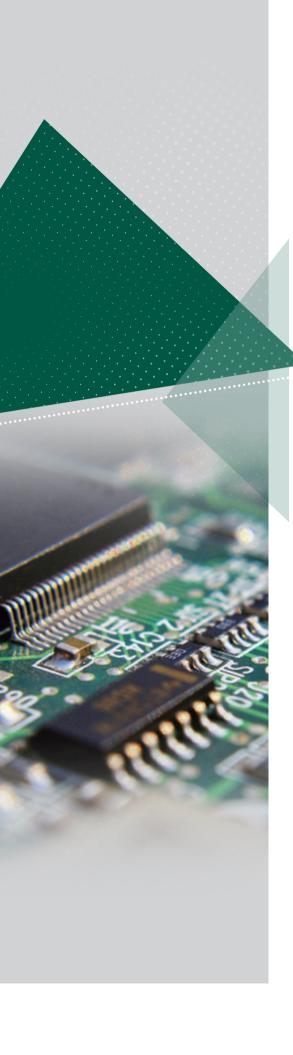
Full-size PCI Express Mini Card ▲ Top view slot with mSATA supported



#### Display

Chipset	Intel integrated Gfx graphic engine
Memory Size	Share System memory
Display Interface	1 x HDMI 1 x LVDS; 18/24-bit single/dual channel 1 x DisplayPort

Standard	
CAPA520PHGG-H310-ZIO	3.5" Embedded SBC with LGA1151, Intel® H310 chipset,
(P/N: E38E520103)	DisplayPort, HDMI, LVDS, 2 GbE LAN and ZIO
Optional	
CAPA520PHGG-Q370-ZIO	3.5" Embedded SBC with LGA1151, Intel® 0370 chipset,
(P/N: E38E520102)	DisplayPort, HDMI, LVDS, 2 GbE LAN and ZIO
CAPA520PH3G-H310-ZIO	3.5" Embedded SBC with LGA1151, Intel® H310 chipset,
(P/N: E38E520101)	DisplayPort, HDMI, LVDS, 3 GbE LAN and ZIO
CAPA520PH3G-Q370-ZIO	3.5" Embedded SBC with LGA1151, Intel® Q370 chipset,
(P/N: E38E520100)	DisplayPort, HDMI, LVDS, 3 GbE LAN and ZIO
AX93262	ZIO module for 2 RS-232/422/485, 2 RS-232,
(P/N: E393262100)	1 PCI Express Mini Card slot
AX93285	ZIO module for 2 RS-232, 32-bit programmable DIO
(P/N: E393285100)	
AX93291	ZIO module for 2 RS-232, 2 GbE LAN
(P/N: E393291100)	
AX93295	ZIO module for 2 isolated RS-232, 2 USB 3.0
(P/N: E393295100)	
AX93A20	ZIO Module for PCI Express Mini Card slot
(P/N: E393A20100)	
AX93A20	ZIO Module for M.2 Key E
(P/N: E393A20101)	
AX93A22	HD codec audio board for Mic-in/Line-in/Line-out
(P/N: E393A22100)	
594E8422800E	2 USB 2.0 wafer cables w/bracket, 180 mm
59380880250E	COM port cable DB-9 x 1P, P=1.25 mm, L=250 mm



System on Modules

3.5" Embedded Boards

Pico-ITX SBCs

**Embedded Vision Board** 

Mini-ITX Motherboards

ATX Motherboards

Slot CPU Cards

**ARM-based Embedded Boards** 

Smart Display Modules and Smart Kiosk Modules

**PCI Express Cards** 

## Boards and Modules

# 3

## Pico-ITX SBCs

The Pico-ITX SBC is the world's smallest x86 embedded board, measured at the size of 100 mm x 72 mm only. The Pico-ITX SBC provides system developers and OEMs with an ultra compact yet highly integrated platforms that deliver excellent computing performance at remarkably low power consumption. For car PCs, inflight entertainment systems, industrial automation systems and even portable devices, the Pico-ITX SBC meets customer's demands in compact-size, fanless operation, low power consumption and versatile I/O.

	Selection Guide		57
	PICO51R	Pico-ITX SBC with 7th Gen Intel® Core™ i7/i5/i3 and Celeron® Processor, DisplayPort, LVDS and 2 GbE LAN	59
NEW	PIC052R	Pico-ITX SBC with 8th Gen Intel® Core $^{TM}$ i7/i5/i3 and Celeron® Processor,	60
		DisplayPort, HDMI, LVDS and 2 GbE LAN	
	PICO317	Pico-ITX SBC with Intel® Atom® x5-E3940 Processor, HDMI, LVDS, GbE LAN and Audio	61
	PICO318	Pico-ITX SBC with Intel® Pentium® Processor N4200/Celeron® Processor N3350, DisplayPort, LVDS, 2 GbE LAN and Audio	62
	PIC0319	Pico-ITX SBC with Intel® Atom® x5-E3940 Processor, DisplayPort,	63

## Pico-ITX SBCs

#### Selection Guide







Features\	Wodels	PICO51R	PICO52R	PICO317
Form Fac	tor	Pico-ITX	Pico-ITX	Pico-ITX
CPU Leve	el	7th gen Intel® Core™ i7/i5/i3 & Celeron®	6th gen Intel® Core™ i7/i5/i3 & Celeron®	Intel® Atom® x5-E3940
CPU Soci	ket	Onboard	Onboard	Onboard
Core Log	ic Chipset	SoC integrated	SoC integrated	SoC integrated
Memory	Туре	DDR4-2133	DDR4-2400	DDR3L-1867
Max. DRA	AM Capacity	16GB	32GB	8GB
Cache RA	AM Capacity	Integrated in CPU	Integrated in CPU	Integrated in CPU
BIOS		AMI UEFI BIOS	AMI UEFI BIOS	AMI UEFI BIOS
Watchdo	g Timer	65536 levels, 0 to 65535 sec.	65536 levels, 0 to 65535 sec.	65536 levels, 0 to 65535 sec.
SSD		1 x M.2 Key B 22 x 42	N/A	N/A
Digital I/	0	4-channel in/out programmable	4-channel in/out programmable	N/A
	SATA	N/A	1 x SATA-600	1 x SATA-600
	COM 1	RS-232/422/485	RS-232/422/485	RS-232
I/O	COM 2	RS-232/422/485	RS-232/422/485	RS-232
	USB	2 x USB 3.0 2 x USB 2.0	2 x USB 3.0 2 x USB 2.0	3 x USB 3.0 2 x USB 2.0
SIM Card Slot		N/A	N/A	N/A
Display		1 x DisplayPort++ 1 x LVDS	1 x LVDS 1 x DisplayPort++ 1 x HDMI	1 x HDMI 1 x LVDS
Ethernet		2 x 10/100/1000 Mbps Ethernet	2 x 10/100/1000 Mbps Ethernet	1 x 10/100/1000 Mbps Ethernet
Audio		N/A	N/A	HD Codec
Hardware	e Monitoring	Yes	Yes	Yes
SMBus		Yes	Yes	Yes
Expansion Interface		1 x M.2 Key E 22 x 30	M.2 Key E 22 x 30	1 x Full-size PCI Express Mini Card slot with mSATA supported
Power Management		ACPI	ACPI	ACPI
Battery		Lithium	Lithium	Lithium
Operating	g Temperature	-20°C to +60°C (-4°F to +140°F)	-20°C to +60°C (-4°F to +140°F)	-40°C to +70°C (-40°F to +158°F)
Relative I	Humidity	10% - 95%, non-condensing	10% - 95%, non-condensing	10% - 95%, non-condensing
EMI Compliance		CE	CE	CE





Feature	sWodels		PICO318	PICO319	
Form Fa	ictor		Pico-ITX	Pico-ITX	
CPU Lev	vel		Intel® Pentium® N4200/ Celeron® N3350	Intel® Atom® x5-E3940	
CPU So	cket		Onboard	Onboard	
Core Lo	gic Chipse	t	SoC integrated	SoC integrated	
Memory	у Туре		DDR3L-1867	DDR3L-1867	
Max. DF	RAM Capa	city	8GB	8GB	
Cache R	RAM Capac	ity	Integrated in CPU	Integrated in CPU	
BIOS			AMI UEFI BIOS	AMI UEFI BIOS	
Watchd	og Timer		65536 levels, 0 to 65535 sec.	65536 levels, 0 to 65535 sec.	
SSD			1 x M.2 Key B 22 x 42 or 30 x 42	1 x M.2 Key B 22 x 42 or 30 x 42	
Digital I	/0		4-channel in/out programmable	4-channel in/out programmable	
	SATA		N/A	N/A	
	Serial	COM 1	RS-232/422/485	RS-232/422/485	
I/O	Serial	COM 2	RS-232	RS-232	
	USB		2 x USB 3.0 2 x USB 2.0	2 x USB 3.0 2 x USB 2.0	
SIM Card Slot			N/A	N/A	
Display			1 x DisplayPort++ 1 x LVDS	1 x DisplayPort++ 1 x LVDS	
Etherne	t		2 x 10/100/1000 Mbps Ethernet	2 x 10/100/1000 Mbps Ethernet	
Audio			HD Codec	HD Codec	
Hardwa	re Monito	ring	Yes	Yes	
SMBus			Yes	Yes	
Expansion Interface		ce	1 x Half-size PCI Express Mini Card slot with mSATA supported	1 x Half-size PCI Express Mini Card slot with mSATA supported	
Power Management		nt	ACPI	ACPI	
Battery			Lithium	Lithium	
Operating Temperature		ature	-20°C to +60°C (-4°F to +140°F)	-40°C to +70°C (-40°F to +158°F)	
Relative	Humidity		10% - 95%, non-condensing	10% - 95%, non-condensing	
EMI Compliance			CE	CE	

## PICO51R

Pico-ITX SBC with 7th Gen Intel® Core™ i7/i5/i3 and Celeron® Processor, DisplayPort, LVDS and 2 GbE LAN

#### **Features**

- 7th generation Intel® Core™ i7/i5/i3 and Celeron® processor
- 1 DDR4 SO-DIMM for up to 16GB of memory
- 2 GbE LAN
- M.2 Key E
- M.2 Key B
- Intel® AMT 11 supported















#### **Core System**

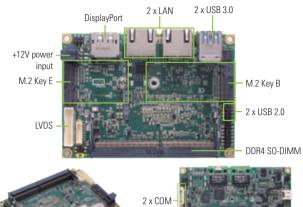
CPU	7th gen Intel® Core™ i7/i5/i3 and Celeron® processor onboard
System Memory	1 x 260-pin DDR4-2133 SO-DIMM, up to 16GB
Chipset	SoC integrated
BIOS	AMI
SSD	Refer to ordering information
Watchdog Timer	65536 levels, 0 to 65535 sec.
Expansion Interface	1 x M.2 Key E (PCle x1, USB 2.0 in 22 x 30)
Battery Lithium	Lithium 3V/220 mAh
Power Input	2 x 2-pin connector +12V DC-in only AT Auto Power On function supported
Power Requirements	Intel® Core™ i7-7600U @2.8 GHz 8GB DDR4, min. RMS. +12V@3.2A Intel® Core™ i5-7300U @2.6 GHz 8GB DDR4, min. RMS. +12V@2.6A Intel® Core™ i3-7100U @2.4 GHz 8GB DDR4, min. RMS. +12V@2.3A Intel® Celeron® 3965U @2.2 GHz 8GB DDR4 max. RMS. +12V@1.6A
Dimensions	100 x 72 mm
Board Thickness	1.6 mm
Operating Temperature	-20°C to +60°C (-4°F to 140°F)
Humidity	10% to 95% relative humidity, non-condensing

#### 1/0

SATA Refer to ordering information  Hardware Monitoring Detect CPU/system temperature, voltage and fan speed  Ethernet 1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM 1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM  Audio Refer to ordering information  USB 2 x USB 2.0 2 x USB 3.0  Serial 2 x RS-232/422/485  TPM N/A  SMBus Yes; compatible with I²C  Digital I/O 4-channel in/out programmable		
Ethernet         1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM 1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM           Audio         Refer to ordering information           USB         2 x USB 2.0 2 x USB 3.0           Serial         2 x RS-232/422/485           TPM         N/A           SMBus         Yes; compatible with I°C	SATA	Refer to ordering information
Supports Wake-on-LAN, PXE Boot ROM	Hardware Monitoring	Detect CPU/system temperature, voltage and fan speed
USB 2 x USB 2.0 2 x USB 3.0 Serial 2 x RS-232/422/485 TPM N/A SMBus Yes; compatible with I <sup>2</sup> C	Ethernet	supports Wake-on-LAN, PXE Boot ROM 1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT;
2 x USB 3.0           Serial         2 x RS-232/422/485           TPM         N/A           SMBus         Yes; compatible with I²C	Audio	Refer to ordering information
TPM N/A SMBus Yes; compatible with I <sup>2</sup> C	USB	- 11 - 11 - 11
SMBus Yes; compatible with I <sup>2</sup> C	Serial	2 x RS-232/422/485
	TPM	N/A
Digital I/O 4-channel in/out programmable	SMBus	Yes; compatible with I <sup>2</sup> C
	Digital I/O	4-channel in/out programmable

#### **Display**

Chipset	Intel® HD Graphics
Memory Size	Share system memory
Display Interface	1 x DisplayPort++ 1 x LVDS; 18/24-bit single/dual channel



▲ Side view

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VI –			
L		ü	

▲ Rear view

Packing List		
Accessories		
594H3160400E	Power cable, L=100 mm	

Standard				
Model	SSD	SATA	Audio Far	
PICO51RPGG-i7-7600U (P/N: E38H51R100)	1 x M.2 Key B (SATA, USB PCle x2 optional) in 22x42	2.0, N/A	N/A No	
PICO51RPGG-i5-7300U (P/N: E38H51R102)	1 x M.2 Key B (SATA, USB PCle x2 optional) in 22x42	2.0, N/A	N/A No	
PICO51RPGG-i3-7100U (P/N: E38H51R103)	1 x M.2 Key B (SATA, USB PCle x2 optional) in 22x42		N/A No	
PICO51RPGG-Celeron- 3965U (P/N: E38H51R101)	1 x M.2 Key B (SATA, USB PCle x2 optional) in 22x42		N/A No	
Optional				
Model	SSD	SATA	Audio	Fan
PICO51RPGG-i7-7600U w/fan (P/N: E38H51R104)	1 x M.2 Key B (SATA, USB 2.0, PCIe x2 optional) in 22x42	N/A	N/A	Yes
PICO51RPGG-i5-7300U w/fan (P/N: E38H51R106)	1 x M.2 Key B (SATA, USB 2.0, PCle x2 optional) in 22x42	N/A	N/A	Yes
PICO51RPGG-i3-7100U w/fan (P/N: E38H51R107)	1 x M.2 Key B (SATA, USB 2.0, PCle x2 optional) in 22x42	N/A	N/A	Yes
PICO51RPGG-Celeron- 3965U w/fan (P/N: E38H51R105)	1 x M.2 Key B (SATA, USB 2.0, PCle x2 optional) in 22x42	N/A	N/A	Yes
PICO51RPGGA-i7- 7600U w/fan (P/N: E38H51R108)	N/A	1 x SATA-600	Mic-in/Line-out	Yes
PICO51RPGGA-i5- 7300U w/fan (P/N: E38H51R110)	N/A	1 x SATA-600	Mic-in/Line-out	Yes
PICO51RPGGA-i3- 7100U w/fan (P/N: E38H51R111)	N/A	1 x SATA-600	Mic-in/Line-out	Yes
PICO51RPGGA-Celeron- 3965U w/fan (P/N: E38H51R109)	N/A	1 x SATA-600	Mic-in/Line-out	Yes
7128H51R000E	Heatspreader			
594H3180400E	DC power cable for adapter, L=180 mm			
50966124050E	Adapter 12V 60W FSP060-DHAN3 with screw			
59380880250E	COM port cable DB99x1P, P=125 mm, L=250 mm			
594H51R2810E	USB cable 2 x 5P-cut P9 P2	2.0/2 x USB-4P,	L=180 mm	
594H3186800E	Buzzer cable 9 x 5.5 mm 2-	pin, L=40mm		



Pico-ITX SBC with 8th Gen Intel® Core™ i7/i5/i3 & Celeron Processor, DisplayPort, HDMI, LVDS and 2 GbE LAN

#### **Features**

- 8th gen Intel® Core™ i7/i5/i3 and Celeron® processor
- 1 DDR4 SO-DIMM for up to 16GB of memory
- 2 USB 2.0 and 2 USB 3.0
- 2 GbE LAN
- M.2 Key E
- Intel® AMT 11 supported



▲ APC201, chassis for PICO52R









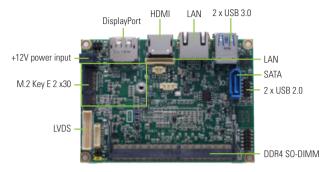


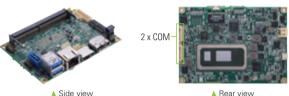
#### **Core System**

CPU	8th gen Intel® Core™ i7/i5/i3 and Celeron® processor onboard
System Memory	1 x 260-pin DDR4-2400 SO-DIMM, up to 32GB
Chipset	N/A
BIOS	AMI
SSD	64GB eMMC (optional)
Watchdog Timer	65536 levels, 0 to 65535 sec.
Expansion Interface	1 x M.2 Key E (PCle x1, USB 2.0 in 22x30)
Battery Lithium	Lithium 3V/220 mAh
Power Input	2 x 2-pin connector +12V DC-in only AT Auto Power On function supported
Power Requirements	Intel® i7-8665UE @1.7 GHz 16GB DDR4, min. RMS. +12V@2.9A Intel® i5-8365UE @1.6 GHz 16GB DDR4, min. RMS. +12V@2.7A Intel® i3-8145UE @2.2 GHz 16GB DDR4, min. RMS. +12V@2.3A Intel® Celeron® 4305UE @2.0 GHz 16GB DDR4, min. RMS. +12V@2.0A
Dimensions	100 x 72 mm
Board Thickness	1.6 mm
Operating Temperature	-20°C to +60°C (-4°F to 140°F)
Humidity	10% to 95% relative humidity, non-condensing

#### I/O

SATA	1 x SATA-3
Hardware Monitoring	Detect CPU/system temperature, voltage and fan speed
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM 1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM
Audio	N/A
USB	2 x USB 2.0 2 x USB 3.2 Gen2
Serial	2 x RS-232/422/485
TPM	N/A
SMBus	Yes; compatible with I <sup>2</sup> C
Digital I/O	4-channel in/out programmable





#### **Display**

Chipset	Intel® HD Graphics
Memory Size	Share system memory
Display Interface	1 x DisplayPort++ 1 x HDMI 1.4
	1 x LVDS; 18/24-bit single/dual channel

#### **Packing List**

Accessories		
594H3160400E	Power cable, L=100mm	
59429070600E	SATA power cable 2P, P=2.0, L=200 mm	

#### **Ordering Information**

Standard	
PICO52RHPGG-i7-8665UE (P/N: E38H52R100)	8th gen Intel® Core™ i7-8665UE Pico-ITX SBC with DisplayPort, HDMI, LVDS, and 2 GbE LAN
PICO52RHPGG-i5-8365UE (P/N: E38H52R101)	8th gen Intel® Core™ i5-8365UEU Pico-ITX SBC with DisplayPort, HDMI, LVDS, and 2 GbE LAN
PICO52RHPGG-i3-8145UE (P/N: E38H52R102)	8th gen Intel® Core™ i3-8145UE Pico-ITX SBC with DisplayPort, HDMI, LVDS, and 2 GbE LAN
PICO52RHPGG-Celeron- 4305UE (P/N: E38H52R103)	8th gen Intel® Celeron® 4305UE Pico-ITX SBC with DisplayPort, HDMI, LVDS, and 2 GbE LAN

#### **Optional**

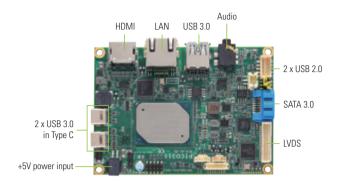
PIC052RHPGG-i7-8665UE W/FAN (P/N: E38H52R107)	8th gen Intel® Core™ i7-8665UE Pico-ITX SBC with DisplayPort, HDMI, LVDS, 2 GbE LAN and fan
PIC052RHPGG-i5-8365UE W/FAN (P/N: E38H52R108)	8th gen Intel® Core <sup>™</sup> i5-8365UE Pico-ITX SBC with DisplayPort, HDMI, LVDS, 2 GbE LAN and fan
PIC052RHPGG-i3-8145UE W/FAN (P/N: E38H52R109)	8th gen Intel® Core <sup>™</sup> i3-8145UE Pico-ITX SBC with DisplayPort, HDMI, LVDS, 2 GbE LAN and fan
PICO52RHPGG-CELERON- 4305UE W/FAN (P/N: E38H52R110)	8th gen Intel® Celeron® 4305UE Pico-ITX SBC with DisplayPort, HDMI, LVDS, 2 GbE LAN and fan
7128H51R000E	Heatspreader
594H3180400E	DC power cable for adapter, L=180 mm
50966124050E	Adapter 12V 60W FSP060-DHAN3 with screw
59380880250E	COM port cable DB99x1P, P=125 mm, L=250 mm
594H51R2810E	USB cable 2 x 5P-cut P9 P2.0/2 x USB-4P, L=180 mm
594H3186800E	Buzzer cable 9 x 5.5 mm 2-pin, L=40mm

## PICO317

Pico-ITX SBC with Intel® Atom® x5-E3940 Processor, HDMI, LVDS, GbE LAN and Audio

#### **Features**

- Dual-core Intel® Atom® x5-E3940 processor (code name: Apollo Lake)
- 1 DDR3L-1867 SO-DIMM for up to 8GB of memory
- 2 COM, 2 USB 2.0, and 3 USB 3.0
- 1 Full-size PCI Express Mini Card slot with mSATA supported
- Wide operating temperature range from -40°C to +70°C

















#### **Core System**

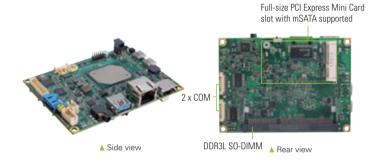
CPU	Intel® Atom® x5-E3940 processor onboard
System Memory	1 x 204-pin DDR3L-1867 SO-DIMM, up to 8GB
Chipset	SoC integrated
BIOS	AMI
SSD	N/A
Watchdog Timer	65536 levels, 0 to 65535 sec.
Expansion Interface	1 x Full-size PCI Express Mini Card slot with mSATA supported
Battery Lithium	Lithium 3V/220 mAh
Power Input	2 x 2-pin connector +5V DC-in only AT Auto Power On function supported
Power Requirements	Intel® Atom® x5-E3940 @1.6 GHz 8GB DDR3L, min. RMS: +5V @2.9A
Dimensions	100 x 72 mm
Board Thickness	1.6 mm
Operating Temperature	-40°C to +70°C (-40°F to +158°F)
Humidity	10% to 95% relative humidity, non-condensing

#### I/O

SATA	1 x SATA-600
Hardware Monitoring	Detect CPU/system temperature and voltage
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM
Audio	HD Codec audio as Line-out with Realtek ALC662
USB	2 x USB 2.0 3 x USB 3.0
Serial	2 x RS-232
TPM	N/A
SMBus	Yes; compatible with I <sup>2</sup> C
Digital I/O	N/A

#### **Display**

Chipset	Intel® integrated Gfx graphic engine
Memory Size	Share system memory
Display Interface	1 x HDMI 1 x LVDS; 18/24-bit single/dual channel



#### **Packing List**

594H3160400E Power cable, L=100 mm	Accessories
Total casio, E Too iiiii	594H3160400E

Standard	
PICO317HGA-E3940 (P/N: E38H317100)	Pico-ITX SBC with Intel® Atom® x5-E3940 processor (1.6 - 1.8 GHz, 2MB cache, 9.5W), HDMI, LVDS, GbE LAN, 3 USB 3.0, and 2 USB 2.0 (without heatsink)
Optional	
PIC0317HG∆-E3940 70°C	Pico-ITX SRC with Intel® Atom® v5-E3940 processor

PIC0317HGA-E3940 70°C (P/N: E38H317101)	Pico-ITX SBC with Intel® Atom® x5-E3940 processor (1.6 - 1.8 GHz, 2MB cache, 9.5W), HDMI, LVDS, GbE LAN, 3 USB 3.0 and 2 USB 2.0 with heatsink
59380880250E	COM port cable DB9-9 x 1P, P=1.25, L=250 mm
594H3160410E	Power cable for adapter, L=100 mm
7128H316000E	Heatspreader
5090BE26000E	5V/8A 40W adapter, 4-pin plug with lock
594E8422800E	2 USB 2.0 cables with bracket, L=180 mm

Pico-ITX SBC with Intel® Pentium® Processor N4200/Celeron® Processor N3350 and J3455, DisplayPort, LVDS, 2 GbE LAN and Audio

#### **Features**

- Intel® Pentium® processor N4200/Celeron® processor N3350 and J3455
- 1 DDR3L SO-DIMM for up to 8GB of memory
- 2 GbE LAN
- 1 PCI Express Mini Card slot with mSATA supported
- M.2 Key B



















#### **Core System**

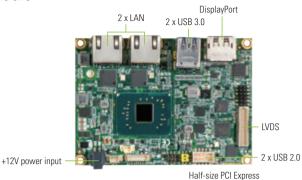
CPU	Intel® Pentium® processor N4200 & Celeron® processor N3350 and J3455 onboard
System Memory	1 x 204-pin DDR3L-1867 SO-DIMM, up to 8GB
Chipset	SoC integrated
BIOS	AMI
SSD	1 x M.2 Key B (SATA, USB 2.0, USB 3.0, PCle x2 optional) in 22 x 42 or 30 x 42
Watchdog Timer	65536 levels, 0 to 65535 sec.
Expansion Interface	1 x Half-size PCI Express Mini Card slot with mSATA supported
Battery Lithium	Lithium 3V/220 mAh
Power Input	2 x 2-pin connector +12V DC-in only AT Auto Power On function supported
Power Requirements	Intel® Pentium® N4200 @ 1.1 GHz 8GB DDR3L, min. RMS: +12V @1.3A Intel® Celeron® N3350 @ 1.1 GHz 8GB DDR3L, min. RMS: +12V @1.1A Intel® Celeron® J3455 @1.5 GHz 8GB DDR3L, min. RMS:
	+12V @1.8A
Dimensions	100 x 72 mm
Board Thickness	1.6 mm
Operating Temperature	-20°C to +60°C (-4°F to +140°F)
Humidity	10% to 95% relative humidity, non-condensing

#### I/O

SATA	N/A
Hardware Monitoring	Detect CPU/system temperature and voltage
Ethernet	2 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; support Wake-on-LAN, PXE Boot ROM
Audio	HD Codec audio as Mic-in/Line-in/Line-out with Realtek ALC662
USB	2 x USB 2.0 2 x USB 3.0
Serial	1 x RS-232/422/485 1 x RS-232
TPM	N/A
SMBus	Yes; compatible with I <sup>2</sup> C
Digital I/O	4-channel in/out programmable

#### **Display**

Chipset	Intel® integrated Gfx graphic engine
Memory Size	Share system memory
Display Interface	1 x DisplayPort++ 1 x LVDS; 18/24-bit single/dual channel



Mini Card slot with M.2 Key B





#### **Packing List**

Accessories	
594H3160400E	Power cable, L=100 mm

Standard	
PICO318PGGA-N4200 (P/N: E38H318101)	Pico-ITX SBC with Intel® Pentium® processor N4200 (1.1 - 2.5 GHz, 2MB cache, 6W), DisplayPort, LVDS, 2 GbE LAN, 2 USB 2.0, and 2 USB 3.0 (without heatsink)
PICO318PGGA-N3350 (P/N: E38H318100)	Pico-ITX SBC with Intel® Celeron® processor N3350 (1.1 - 2.4 GHz, 2MB cache, 6W), DisplayPort, LVDS, 2 GbE LAN, 2 USB 2.0, and 2 USB 3.0 (without heatsink)
PICO318PGGA-J3455 (P/N: E38H318105)	Pico-ITX SBC with Intel® Celeron® processor J3455 (1.5 - 2.3 GHz, 2MB cache, 10W), DisplayPort, LVDS, 2 GbE LAN, 2 USB 2.0 and 2 USB 3.0 (without heatsink)

0pti	onal
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optional	
PICO318PGGA-N3350 60°C	Pico-ITX SBC with Intel® Celeron® processor N3350 (1.1 - 2.4 GHz, 2MB cache, 6W), DisplayPort, LVDS, 2 GbE
(P/N: E38H318102)	LAN, 2 USB 2.0, 2 USB 3.0 and heatsink
PICO318PGGA-N4200 60°C (P/N:E38H318103)	Pico-ITX SBC with Intel® Pentium® processor N4200 (1.1 - 2.5 GHz, 2MB cache, 6W), DisplayPort, LVDS, 2 GbE LAN, 2 USB 2.0, 2 USB 3.0 and heatsink
PICO318PGGA-J3455 60°C (P/N: E38H318106)	Pico-ITX SBC with Intel® Celeron® processor J3455 (1.5 - 2.3 GHz, 2MB cache, 10W), DisplayPort, LVDS, 2 GbE LAN, 2 USB 2.0, 2 USB 3.0 and heatsink
7128H316000E	Heatspreader
594H3180400E	DC power cable for adapter, L=180 mm
50966124050E	Adapter 12V 60W FSP060-DHAN3 with screw
59312260020E	Audio cable with bracket, P=1.25 mm, L=450 mm
59380880250E	COM port cable DB9-9 x 1-pin, P=1.25 mm, L=250 mm
594E8422800E	2 x USB 2.0 cable with bracket, L=180 mm
594H3186800E	Buzzer cable 9 x 5.5 mm 2-pin, L=40mm
E393A19100	AX93A19 SIM card slot board

### PICO319

Pico-ITX SBC with Intel® Atom® x5-E3940 Processor, DisplayPort, LVDS, 2 GbE LAN and Audio

#### **Features**

- Intel® Atom® x5-E3940 processor
- 1 DDR3L SO-DIMM for up to 8GB of memory
- 2 GbE LAN
- 1 PCI Express Mini Card slot with mSATA supported
- Supports M.2 Key B



#### **Core System**

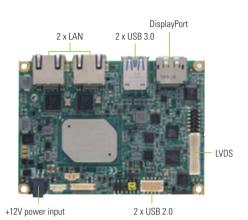
CPU	Intel® Atom® x5-E3940 processor onboard
System Memory	1 x 204-pin DDR3L-1867 SO-DIMM, up to 8GB
Chipset	SoC integrated
BIOS	AMI
SSD	1 x M.2 Key B (SATA, USB 2.0, USB 3.0, PCle x2 optional) in 22 x 42 or 30 x 42
Watchdog Timer	65536 levels, 1 to 65535 sec.
Expansion Interface	1 x Half-size PCI Express Mini Card slot with mSATA supported
Battery Lithium	Lithium 3V/220 mAh
Power Input	2 x 2-pin connector +12V DC-in only AT Auto Power On function supported
Power Requirements	Intel® Atom® x5-E3940 @1.6 GHz 8GB DDR3L, min. RMS: +12V @1.3A
Dimensions	100 x 72 mm
Board Thickness	1.6 mm
Operating Temperature	-40°C to +70°C (-40°F to 158°F)
Humidity	10% to 95% relative humidity, non-condensing

#### 1/0

N/A
Detect CPU/system temperature and voltage
2 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; support Wake-on-LAN, PXE Boot ROM
HD Codec audio as MIC-in/Line-in/Line out with Realtek ALC662
2 x USB 2.0 2 x USB 3.0
1 x RS-232/422/485 1 x RS-232
N/A
Yes; compatible with I <sup>2</sup> C
4-channel in/out programmed

#### **Display**

Chipset	Intel® integrated Gfx graphic engine
Memory Size	Share system memory
Display Interface	1 x DisplayPort++ 1 x LVDS; 18/24-bit single/dual channel







#### **Packing List**

Standard PICO319PGGA-E3940

Accessories	
594H3160400E	Power cable, L=100 mm

Pico-ITX SBC with Intel® Atom® x5-E3940 processor

(P/N: E38H319100)	(1.6 - 1.8 GHz, 2MB cache, 9.5W), DisplayPort, LVDS, 2 GbE LAN, 2 USB 2.0, and 2 USB 3.0 (without heatsink)
Optional	
PICO319PGGA-E3940 70°C	Pico-ITX SBC with Intel® Atom® x5-E3940 processor
(P/N: E38H319101)	(1.6 - 1.8 GHz, 2MB cache, 9.5W), DisplayPort, LVDS,
	2 GbE LAN, 2 USB 2.0, and 2 USB 3.0 (with heatsink)
7128H319000E	Heatspreader
594H3180400E	Power cable for adapter, L=180mm
50966124050E	Adapter 12V 60W FSP060-DHAN3 with screw
59312260020E	Audio cable with bracket, P=1.25 mm, L=450 mm
59380880250E	COM port cable DB9-9 x 1-pin, P=1.25 mm, L=250 mm
594E8422800E	2 x USB 2.0 cable with bracket, L=180 mm
594H3186800E	Buzzer cable 9 x 5.5 mm 2-pin, L=40 mm
E393A19100	AX93A19 SIM card slot board



## **Embedded Vision Board**

Axiomtek's embedded vision board series is designed to focus on vision inspection, guidance, measurement and identification applications. The scalable embedded vision boards help system integrator with easy customization and shortening the product development cycle while helping them speed up the time-to-market process to gain a competitive edge.

Selection Guide 65



Machine Vision SBC with AMD Ryzen™ Embedded V1807B and V1605B APU, DisplayPort, HDMI, 2 GbE LAN, 2 IEEE 802.3at PoE GbE LAN and Vision-specific I/O

66

## Boards and Modules

## **Embedded Vision Board**

#### Selection Guide



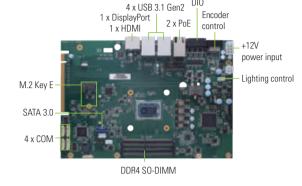
Features\Models			MIRU130
Form Factor			244 x 170 mm
CPU Level			AMD® RYZEN™ Embedded V1807B and V1605B APU
CPU Socker	t		Onboard
Core Logic	Chipset		SoC integrated
Memory Ty	ре		DDR4-3200/2400
Max. DRAN	/I Capacity		16GB
Cache RAIV	I Capacity		Integrated in CPU
BIOS			AMI UEFI BIOS
Watchdog 7	Γimer		255 levels, 1 to 255sec.
SSD			1 x M.2 Key B 22 x 42 or 22 x 80
Digital I/O			8 channels in/out programmable
	SATA		1 x SATA-600
		COM 1	RS-232/422/485
1/0	Serial	COM 2	RS-232
1/0	Seriai	COM 3	RS-232
		COM 4	RS-232
	USB		4 x USB 3.2 Gen2
SIM Card Slot			N/A
Display			1 x DisplayPort 1 x HDMI
Ethernet			2 x 10/100/1000 Mbps Ethernet 2 x PoE port 10/100/1000 Mbps
Audio			HD audio link
Hardware N	Monitoring		Yes
SMBus			Yes
Expansion Interface			1 x M.2 Key E 22 x 30 1 x PCle x16 golden finger (PCle x8 signal)
Power Management			ACPI
Battery			Lithium
Operating Temperature		е	-20°C to +60°C (-4°F to 140°F)
Relative Humidity			10% - 95%, non-condensing



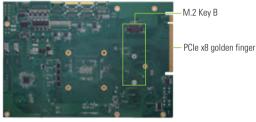
Machine Vision SBC with AMD Ryzen™ Embedded V1807B and V1605B APU, DisplayPort, HDMI, 2 GbE LAN, 2 IEEE 802.3at PoE GbE LAN and Vision-specific I/O

#### **Features**

- AMD Ryzen™ Embedded V1807B and V1605B APU
- 2 DDR4 SO-DIMM for up to 16GB of memory
- 2 GbE LAN and 2 IEEE 802.3at PoE GbE LAN
- 2-CH camera trigger outputs
- 2-CH LED lighting control
- 1-CH incremental quadrature encoder input
- 4 isolated DIO



2 x LAN













#### **Core System**

CPU	AMD Ryzen™ Embedded V1807B or V1605B APU onboard		
System Memory	2 x 240-pin DDR4-2400 SO-DIMM, up to 16GB		
Chipset	SoC integrated		
BIOS	AMI		
SSD	1 x M.2 Key B (SATA, USB 2.0, PCle x2 for optional) in 22x42 or 22x80 or 30x42		
Watchdog Timer	255 levels, 1-255 sec.		
Expansion Interface	1 x M.2 Key E (PCle x1, USB 2.0) in 22x30		
	1 x PCle x16 golden finger (PCle x8 signal)		
Battery Lithium	Lithium 3V/220mAH		
Power Input	4 x 2 pin connector		
	+12V DC-in		
	AT Auto Power On function supported		
Power Requirements	AMD V1807B@ 3.35GHz 16GB DDR4		
	Max RMS: +12V @6.4A		
	AMD V1605B@ 2.0GHz 16GB DDR4		
	Max RMS: +12V @2.8A		
Dimensions	244 x 170 mm		
Board Thickness	1.6 mm		
Operating Temperature	-20°C to +60°C (-4°F to 140°F)		
Relative Humidity	10% - 95% relative humidity, non-condensing		

#### 1/0

SATA	1 x SATA-600
Hardware Monitoring	Detect CPU/system temperature, voltage and fan speed
Ethernet	2 x 10/100/1000 Mbps with Realtek RTL8111G; support Wake-on-LAN, PXE Boot ROM 2 x PoE port 10/100/1000 Mbps with Realtek RTL8111G; support Wake-on-LAN, PXE Boot ROM and 30W (IEEE 802.3at )
Audio	N/A
USB	4 x USB 3.2 Gen2
Serial	1 x RS-232/422/485 3 x RS-232
TPM	SPI interface for TPM module
SMBus	Yes
Vision I/O	1 x Incremental quadrature encoder (A/B/Z) 2 x LED lighting control (24V/max 0.5A)
Digital I/O	2 x Trigger in (response time <1us, sink type @ 0-30V, source type) 2 x Trigger out for camera (response time <1us, @ 12V) 2 x Isolated digital in (sink type @ 0-30V, sink/source type) 2 x Isolated digital out (sink type, open collector @ 5-30V, 200mA max each)

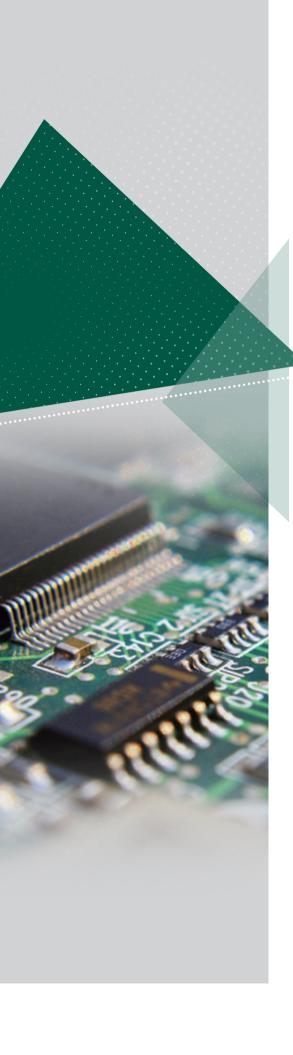
#### **Display**

Chipset	AMD Radeon™ RX Vega graphics
Memory Size	Share System memory
Display Interface	1 x DisplayPort 1 x HDMI

#### **Packing List**

Accessories	
594L1301200E	Lighting control cable
594L1303500E	DIO cable

Standard	
MIRU130PH4G-V1807B (P/N: E38L130100)	AMD Ryzen™ V1807B (3.35 - 3.8 GHz, 2MB Cache, 45W) SBC with DisplayPort, HDMI, 2 GbE LAN, 2 PoE GbE LAN and fan
MIRU130PH4G-V1605B (P/N: E38L130101)	AMD Ryzen™ V1605B (2.0 - 3.6 GHz, 2MB Cache, 15W) SBC with DisplayPort, HDMI, 2 GbE LAN, 2 PoE GbE LAN, and fan



System on Modules

3.5" Embedded Boards

Pico-ITX SBCs

**Embedded Vision Board** 

Mini-ITX Motherboards

ATX Motherboards

Slot CPU Cards

**ARM-based Embedded Boards** 

Smart Display Modules and Smart Kiosk Modules

**PCI Express Cards** 

## Boards and Modules

# 5

## Mini-ITX Motherboards

Mini-ITX motherboards are designed with rich functionality and reliable performance in a small footprint that measures just 170 x 170 mm. Mini-ITX Motherboards provide greater flexibility for applications in which compact size and power-efficiency are required, such as kiosks, POS, lottery machines, gaming systems, factory automation, DSA, and more.

	Selection Guide		69
	MAN0522	Mini-ITX SBC with LGA1151 Socket 9th/8th Gen Intel® Core™ i7/i5/i3 Processor, HDMI, VGA, LVDS, USB 3.0, mSATA, M.2 and Dual GbE LAN	70
NEW	MAN0526	Mini-ITX SBC with LGA1151 Socket 9th/8th Gen Intel® Core™ i7/i5/i3 Processor, DisplayPort++, VGA, eDP, USB 3.0, M.2 and Dual GbE LAN	71
NEW	MAN0540	Mini-ITX SBCwith LGA1200 Socket 10th Gen Intel® Core™ i9/i7/i5/i3	72

## Mini-ITX Motherboards

#### Selection Guide





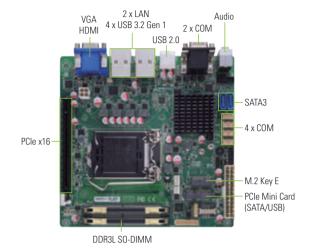


Features Wodels			MANO522	MANO526	MANO540
Form Fact	or		Mini-ITX	Mini-ITX	Mini-ITX
CPU Level			9th/8th Gen Intel® Core™ i7/i5/i3 processor	9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor	10th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor
CPU Sock	et		LGA1151	LGA1151	LGA1200
Core Logic Chipset			Intel® H310	Intel® Q370	Intel® H410
Memory Type			DDR4-2666/2400	DDR4-2400/2666	DDR4-2666
Max. DRAM Capacity			64GB	32GB	32GB
Cache RAI	VI Capacity		Integrated in CPU	Integrated in CPU	Integrated in CPU
BIOS			AMI	AMI	AMI
Watchdog	Timer		255 levels, 1 to 255 sec.	255 levels, 1 to 255sec.	255 levels, 1 to 255sec.
SSD			1 x mSATA	1 x M.2 Key M	1 x M.2 Key M
Digital I/O	1		8-in/out	8-in/out	8-in/out
	SATA		2 x SATA-600	2 x SATA-600	2 x SATA-600
		COM 1	RS-232/422/485	RS-232/422/485	RS-232/422/485
		COM 2	RS-232	RS-232	RS-232
	Coriol	COM 3	RS-232	RS-232	RS-232
I/O	Serial COM 4		RS-232	RS-232	RS-232
		COM 5	RS-232	RS-232	RS-232
		COM 6	RS-232	RS-232	RS-232
	USB		4 x USB 3.0 2 x USB 2.0	4 x USB 3.0 4 x USB 2.0	2 x USB 3.2 Gen1 5 x USB 2.0
Display			1 x VGA 1 x HDMI 1 x LVDS; 18/24-bit single/dual channel	1 x VGA 1 x DisplayPort++ 1 x eDP	1 x VGA 1 x HDMI 1 x DisplayPort++ 1 x eDP
Ethernet			2 x 10/100/1000 Mbps Ethernet	2 x 10/100/1000 Mbps Ethernet	2 x 10/100/1000 Mbps Ethernet
Audio			HD Codec	HD codec	HD codec
Hardware	Monitoring		Yes	Yes	Yes
Expansion Interface			1 x PCle x16 1 x M.2 Key E 22 x 30	1 x M.2 Key E 1 x PCle x16	1 x M.2 Key E 1 x PCI Express Mini Card 1 x PCIe x16
Power Management			ACPI	ACPI	ACPI
Battery			Lithium	Lithium	Lithium
Operating Temperature		е	0°C to +60°C (+32°F to +140°F)	0°C to +60°C (+32°F to +140°F)	0°C to +60°C (+32°F to +140°F)
Relative H	umidity		10% - 95%, non-condensing	10% - 95%, non-condensing	10% - 95%, non-condensing
EMI Compliance			CE	CE	CE

Mini-ITX SBC with LGA1151 Socket 9th/8th Gen Intel® Core™ i7/i5/i3 Processor, HDMI, VGA, LVDS, USB 3.2 Gen 1, mSATA, M.2 and Dual GbE LAN

#### **Features**

- LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3 processor
- Intel® H310 chipset
- 2 DDR4 SO-DIMM for up to 64GB of memory
- 4 USB 3.2 Gen 1 and 2 USB 2.0
- 6 COM ports
- 2 SATA-600 and 1 mSATA
- PCle x16 and M.2 Key E











#### **Core System**

CPU	LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3 processor (up to 65W)
System Memory	2 x 260-pin DDR4-2666/2400 SO-DIMM, up to 64GB
Chipset	Intel® H310
BIOS	AMI
SSD	1 x mSATA
Watchdog Timer	255 levels, 1 to 255 sec.
Expansion Interface	1 x PCle x16
	1 x M.2 Key E 22 x 30
Battery Lithium	Lithium 3V/220mAH
Power Input	24+4 pin ATX connector
	AT Mode Auto Power Function supported
Dimensions	170 x 170 mm
Board Thickness	1.6 mm
Operating Temperature	0°C to +60°C (+32°F to +140°F)
Humidity	10% to 95% relative humidity, non-condensing

#### 1/0

SATA	2 x SATA-600
Hardware Monitoring	Detect CPU/system temperature, voltage and fan speed
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM 1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM
Audio	HD Codec audio as MIC-in/Line-in/Line-out with Realtek ALC662
USB	4 x USB 3.2 Gen 1 2 x USB 2.0
Serial	1 x RS-232/422/485 (with +5V/+12V power) 5 x RS-232
PS/2 Combo Port	N/A
TPM	Firmware TPM 2.0 (fTPM 2.0)
SMBus	N/A
Digital I/O	8-channel in/out programmable



▲ Side view

#### **Display**

Chipset	Intel® integrated Gfx graphic engine
Memory Size	Share system memory
Display Interface	1 x VGA 1 x HDMI 1 x LVDS; 18/24-bit single/dual channel

#### **Packing List**

Standard			
I/O bracket			

Standard	
MAN0522VGGA-H310 (P/N:E38M522101)	Mini-ITX SBC with LGA1151 socket 9th/8th gen Intel® Core™ processor, Intel® H310, HDMI, VGA, LVDS, 2 GbE LAN, HD audio and gift box
Optional	
•	2 x COM port, P=2.0 mm, L=300 mm
<b>Optional</b> 594M5002100E 59384500100E	2 x COM port, P=2.0 mm, L=300 mm  Audio cable with bracket, P=2.0 mm, L=420 mm



Mini-ITX SBC with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® Q370, VGA, DisplayPort++, eDP, 2 GbE LAN and HD Audio

#### **Features**

- LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3 processor
- Intel® Q370 chipset
- 2 DDR4 SO-DIMM for up to 32GB of memory
- 4 USB 3.0 and 4 USB 2.0
- 6 COM ports
- 2 SATA-600 and 1 M.2 Key M
- PCle x16 and M.2 Key E









#### **Core System**

CPU	LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Intel® Pentium® processors Gold/Celeron® processors (up to 65W)
System Memory	2 x 260-pin DDR4-2666/2400 SO-DIMM up to 32GB
Chipset	Intel® Q370
BIOS	AMI
SSD	1 x M.2 Key M (2242/2260/2280); supports NVMe
Watchdog Timer	255 levels, 1 to 255 sec.
Expansion Interface	1 x PCIe x16 1 x M.2 Key E (22 x 30)
Battery Lithium	Lithium 3V/220mAH
Power Input	STD 12V ATX power 24+4 pin ATX connector AT Mode Auto Power Function supported
Dimensions	170 x 170 mm
Board Thickness	1.6 mm
Operating Temperature	0°C to +60°C (+32°F to +140°F)
Humidity	10% to 95% relative humidity, non-condensing

#### 1/0

2 x SATA-600
Detect CPU/system temperature, voltage and fan speed
1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM 1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM
HD Codec audio as MIC-in/Line-in/Line-out with Realtek ALC888S
4 x USB 3.0 4 x USB 2.0
1 x RS-232/422/485 (with +5V/+12V power) 5 x RS-232
Onboard TPM 2.0
N/A
8-channel in/out programmed

#### **Display**

Chipset	Intel® integrated Gfx graphic engine
Memory Size	Share system memory
Display Interface	1 x DisplayPort++ 1 x eDP 1 x VGA

#### **Packing List**

Standard	
I/O bracket	

Standard	
MAN0526	Mini-ITX SBC with LGA1151 socket 9th/8th gen Intel® Core™ processor, Intel® 0370, VGA, DisplayPort++, eDP, 2 GbE LAN and HD Audio
Optional	2 due Enivalia HD Addio

Optional	
594M5002100E	2 x COM port, P=2.0 mm, L=300 mm
594E8422800E	2 x USB 2.0 wafer cable with bracket, P=2.0, L=180 mm
713PL76A000E	LGA1156 1.5U, H=36.5



Mini-ITX SBCwith LGA1200 Socket 10th Gen Intel® Core™ i9/i7/i5/i3 Processor, VGA, DisplayPort, HDMI, eDP, 2 LAN and Audio

#### **Features**

- LGA1200 socket for 10th gen Intel® Core™ i9/i7/i5/i3 processor
- Intel® H410 chipset
- 2 DDR4 SO-DIMM for up to 64GB memory
- 4 USB 3.2 Gen1 and 1 USB 2.0 ports
- 6 COM ports



#### **Core System**

LGA1200 socket 10th gen Intel® Core™ i9/i7/i5/i3 processor
2 x 260-pin DDR4-2933 SO-DIMM max. up to 64GB
Intel® H410
AMI
1 x M.2 Key B (PClex2, USB2.0) in 22x42/80
255 levels, 1 to 255 sec.
1 x PClex16 1 x PCl Express Mini Card 1 x M.2 Key E (PCle x1, USB2.0) in 22x30 1 x M.2 Key B (PCle x2, USB2.0) in 30x42/52
Lithium 3V/220mAH
2 x 12 ATX connector
AT Auto Power On function supported
170 x 170 mm
1.6 mm
0°C to +60°C (32°F to 140°F), operation
10%- 95% relative humidity, non-condensing

#### I/O

MIO	1 x RS-232/422/485 with 5V/12V powered 5 x RS-232
SATA	2 x SATA-600
Hardware Monitoring	Detect CPU/system temperature, voltage and fan speed
Ethernet	1 port 10/100/1000 Mbps supports Wake-on-LAN, PXE Boot ROM with Intel i211AT 1 port 10/100/1000 Mbps supports Wake-on-LAN, PXE Boot ROM with Intel i219V
Audio	HD Codec audio as MIC-in/Line-out with Realtek ALC6887
USB	4 x USB 3.2 Gen1 1 x USB 2.0
SMBus	N/A

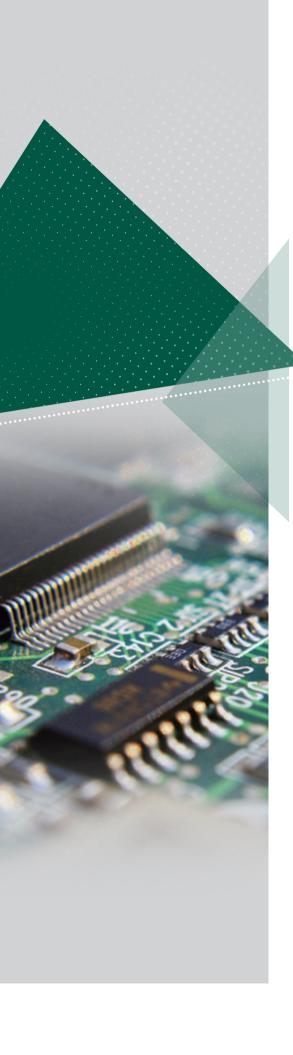
#### **Display**

Chipset Intel®	integrated Gfx graphic engine
	g gpg
Memory Size Share :	system memory
Display Interface 1 x Dis 1 x HD 1 x VG, 1 x eDI	A

#### **Packing List**

Standard	
I/O bracket	

Standard	
MAN0540PHGGA-H410	Mini-ITX SBC with LGA1200 socket 10th gen Intel® Core™ processor, Intel® H410 chipset, VGA, DisplayPort, HDMI, eDP, 2 LAN and Audio



System on Modules

3.5" Embedded Boards

Pico-ITX SBCs

**Embedded Vision Board** 

Mini-ITX Motherboards

ATX Motherboards

Slot CPU Cards

**ARM-based Embedded Boards** 

Smart Display Modules and Smart Kiosk Modules

**PCI Express Cards** 

## Boards and Modules

# 6

## **ATX Motherboards**

Axiomtek's high performance ATX motherboards (305 x 244 mm) support a wide range of computing capacities and rich I/O and expansion slots. The Micro ATX motherboards (244 x 244 mm) support a wide range of computing capacities and rich I/O and expansion slots. The industrial Micro ATX motherboard is suited for space/cost sensitive applications where less than 4 slots are required. The industrial ATX and Micro ATX motherboards are ideal platforms for applications in digital video recorder, POS system, intelligent transportation system, multi-media center and more.

	Selection Guide		75
NEW	IMB525R	ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® C246, USB 3.1 Gen, SATA 3.0, Dual LAN, VGA, DisplayPort, DVI-D, and HDMI	77
NEW	IMB524R	ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® H310, USB 3.1 Gen1, SATA 3.0, PCI Express Mini Card Slot, VGA, DisplayPort, DVI-D, and HDMI	78
NEW	IMB523R	ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® Q370, USB 3.1 Gen2, SATA 3.0, PCI Express Mini Card Slot, VGA, DisplayPort, DVI-D, and HDMI	79
	IMB521R	ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® C246, USB 3.0, SATA 3.0, Dual LAN, VGA, DisplayPort, DVI-D, and HDMI	80
	IMB520R	ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® Q370, USB 3.1 Gen2, SATA 3.0, Dual LAN, VGA,	81
		DisplayPort, DVI-D, and HDMI	
NEW	IMB700	ATX Motherboard with LGA4189 Socket Intel® Xeon Scalable Processor, Intel® C621A, 3 PCIe x16, 3 PCIe x8, VGA, NVMe	82
NEW	IMB530	ATX Motherboard with LGA1200 Socket 10th Gen Intel® Core™ i9/i7/i5/i3, Xeon® E Processor, Intel® W480E, ECC DDR4, USB 3.2 Gen2, NVMe, Dual LAN, VGA, DisplayPort++, DVI-D, and HDMI	83

## Boards and Modules

## **ATX Motherboards**

#### Selection Guide













Features W	lodels		IMB525R	IMB524R	IMB523R
Form Facto	or		ATX	ATX	ATX
CPU Level			9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E, Pentium® or Celeron®	9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron®	9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron®
CPU Socke	t		LGA1151	LGA1151	LGA1151
Core Logic	Chipset		Intel® C246	Intel® H310	Intel® Q370
Memory Ty	ре		DDR4-2666/2400	DDR4-2666/2400	DDR4-2666/2400
Max. DRAM	VI Capacity		128GB	64GB	128GB
Cache RAN	/I Capacity		Integrated in CPU	Integrated in CPU	Integrated in CPU
BIOS			AMI	AMI	AMI
Watchdog	Timer		255 levels, 1 to 255 sec.	255 levels, 1 to 255 sec.	255 levels, 1 to 255 sec.
Digital I/O			8-channel programmable	8-channel programmable	8-channel programmable
	SATA		5 x SATA-600	4 x SATA-600	5 x SATA-600
		COM 1	RS-232/422/485	RS-232/422/485	RS-232/422/485
		COM 2	RS-232/422/485	RS-232/422/485	RS-232/422/485
	Serial	COM 3	RS-232	RS-232	RS-232
I/O	Sellai	COM 4	RS-232	RS-232	RS-232
		COM 5	RS-232	RS-232	RS-232
		COM 6	RS-232	RS-232	RS-232
	USB		2 x USB 3.1 Gen2, 4 x USB 3.1 Gen1, 7 x USB 2.0	4 x USB 3.1 Gen1, 5 x USB 2.0	2 x USB 3.1 Gen2, 4 x USB 3.1 Gen1, 7 x USB 2.0
SIM Card S	Slot		Yes	Yes	Yes
Display			1 x VGA, 1 x DVI-D, 1 x HDMI, 1 x DisplayPort++	1 x VGA, 1 x DVI-D, 1 x HDMI, 1 x DisplayPort++	1 x VGA, 1 x DVI-D, 1 x HDMI, 1 x DisplayPort++
Ethernet			2 x 10/100/1000 Mbps Ethernet	2 x 10/100/1000 Mbps Ethernet	2 x 10/100/1000 Mbps Ethernet
Audio			HD Codec	HD Codec	HD Codec
Hardware I	Monitoring		Yes	Yes	Yes
SMBus			Yes	Yes	Yes
Expansion Interface			1 x PCle x16, 2 x PCle x4, 4 x PCl, 1 x PCle Mini Card	1 x PCle x16, 2 x PCle x 1 w/PCle x1 signal 4 x PCl, 1 x PCle Mini Card	1 x PCle x16, 2 x PCle x4, 4 x PCl, 1 x PCle Mini Card
Power Mar	nagement		ACPI	ACPI	ACPI
Battery			Lithium	Lithium	Lithium
Operating	Temperatur	е	0°C to +60°C (+32°F to +140°F)	0°C to +60°C (+32°F to +140°F)	0°C to +60°C (+32°F to +140°F)
Relative Hu	umidity		10% to 95%, non-condensing	10% to 95%, non-condensing	10% to 95%, non-condensing
EMI Compliance			CE	CE	CE









FeaturesW	odels		IMB521R	IMB520R	IMB700	IMB530
Form Facto	r		ATX	ATX	ATX	ATX
CPU Level			9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E, Pentium® or Celeron®	9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron®	Intel® Xeon® Scalable Ice Lake-SP platform	10th gen Intel® Core™ i7/i5/i3, Xeon® W, Pentium® or Celeron®
CPU Socke	t		LGA1151	LGA1151	LGA4189	LGA1200
Core Logic	Chipset		Intel® C246	Intel® Q370	Intel® C621A	Intel® W480E
Memory Ty	ре		DDR4-2400/2666	DDR4-2400/2666	DDR4-3200	DDR4-2933
Max. DRAN	/I Capacity		128GB	128GB	384GB	128GB
Cache RAIV	I Capacity		Integrated in CPU	Integrated in CPU	Integrated in CPU	Integrated in CPU
BIOS			AMI	AMI	AMI	AMI
Watchdog	Γimer		255 levels, 1 to 255 sec.	255 levels, 1 to 255 sec.	255 levels, 1 to 255 sec.	255 levels, 1 to 255 sec.
Digital I/O			8-channel programmable	8-channel programmable	8-channel programmable	8-channel programmable
	SATA		4 x SATA-600	4 x SATA-600	6 x SATA-600	4 x SATA-600
		COM 1	RS-232/422/485	RS-232/422/485	RS-232/422/485	RS-232/422/485
		COM 2	RS-232/422/485	RS-232/422/485	N/A	RS-232/422/485
		COM 3	RS-232	RS-232	N/A	RS-232
I/O	Serial	COM 4	RS-232	RS-232	N/A	RS-232
		COM 5	RS-232	RS-232	N/A	RS-232
		COM 6	RS-232	RS-232	N/A	RS-232
	USB		2 x USB 3.1 Gen2, 4 x USB 3.1 Gen1, 7 x USB 2.0	2 x USB 3.1 Gen2, 4 x USB 3.1 Gen1, 7 x USB 2.0	6 x USB 3.1 Gen1 7 x USB 2.0	2 x USB 3.2 Gen2, 4 x USB3.2 Gen1, 8 x USB 2.0
SIM Card S	lot		N/A	N/A	N/A	N/A
Display			1 x VGA, 1 x DVI-D, 1 x HDMI, 1 x DisplayPort++	1 x VGA, 1 x DVI-D, 1 x HDMI, 1 x DisplayPort++	1 x VGA	1 x VGA, 1 x DVI-D, 1 x HDMI, 1 x DisplayPort++
Ethernet			2 x 10/100/1000 Mbps Ethernet	2 x 10/100/1000 Mbps Ethernet	2 x 10/100/1000 Mbps Ethernet	2 x 10/100/1000 Mbps Ethernet
Audio			HD Codec	HD Codec	HD Codec	HD Codec
Hardware I	Monitoring		Yes	Yes	Yes	Yes
SMBus			Yes	Yes	Yes	Yes
Expansion Interface		1 x PCle x16, 4 x PCle x4, 1 x PCle x1, 1 x PCl	1 x PCle x16, 4 x PCle x4, 1 x PCle x1, 1 x PCl	3 x PCle x16, 3 x PCle x8	2 x PCle x16, 3 x PCle x4, 1 x PCle x4 w/PCle x1 signal, 1 x PCl	
Power Management		ACPI	ACPI	ACPI	ACPI	
Battery			Lithium	Lithium	Lithium	Lithium
Operating 7	Temperatui	е	0°C to +60°C (+32°F to +140°F)	0°C to +60°C (+32°F to +140°F)	0°C to +60°C (+32°F to +140°F)	0°C to +60°C (+32°F to +140°F)
Relative Hu	ımidity		10% to 95%, non-condensing	10% to 95%, non-condensing	10% to 95%, non-condensing	10% to 95%, non-condensing
EMI Compl	iance		CE	CE	CE	CE



ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™, Xeon® E Processor, Intel® C246, USB 3.1 Gen2, SATA 3.0, PCI Express Mini Card Slot, VGA, DisplayPort++, DVI-D, and HDMI

#### **Features**

- LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E, Pentium® or Celeron® processor (Coffee Lake Refresh)
- Four 288-pin DDR4-2666/2400 ECC DIMM for up to 128GB of memory
- DisplayPort, DVI-D, HDMI and VGA with triple-view supported
- 5 SATA-600 with RAID 0/1/5/10
- 1 PCI Express Mini Card slot
- 2 USB 3.1 Gen2 and four USB 3.1 Gen1
- TPM 2.0 supported (optional)









#### **Core System**

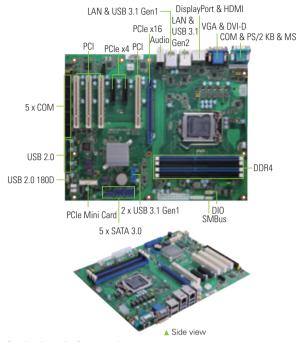
CPU	LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E, Pentium® or Celeron® processor (up to 95W)
System Memory	4 x 288-pin DDR4-2666/2400 ECC DIMM, up to 128GB (Intel® Core™ i7/i5 only support non-ECC)
Chipset	Intel® C246
BIOS	AMI BIOS
Watchdog Timer	255 levels, 1 to 255 sec.
Expansion Interface	1 x PCle x16 slot 2 x PCle x4 slot 4 x PCl slot 1 x PCle Mini Card slot with PCle x1 & USB 2.0 & SATA
Battery	Lithium 3 V/ 220 mAH
Dimensions	305 x 244 mm
Board Thickness	1.6 mm
Operating Temperature	0°C to +60°C (+32°F to +140°F)
Humidity	10% to 95% relative humidity, non-condensing

#### 1/0

SATA	5 x SATA-600 with RAID 0/1/5/10
Hardware Monitoring	Detect CPU/system temperature, voltage and supports Smart fan control
Ethernet	1x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM, iAMT 1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM
Audio	HD Codec audio as MIC-in/Line-in/Line-out with Realtek ALC662
USB	2 x USB 3.1 Gen2 (rear I/O) 4 x USB 3.1 Gen1 (rear I/O, internal box header) 7 x USB 2.0 (pin header, 180D type A)
Serial	4 x RS-232 (Internal box header) 2 x RS-232/422/485 (COM 1: rear I/O; COM 2: internal box header)
PS/2 Combo Port	1 x PS/2 keyboard and mouse
TPM	TPM 2.0 (optional)
SMBus	Yes
Digital I/O	8-channel programmable

#### **Display**

Graphic	Intel® HD Graphic
Memory Size	Share system memory
Display Interface	1 x VGA 1 x DVI-D 1 x HDMI 1 x DisplayPort++



#### **Ordering Information**

Standard	
IMB525RVDHGGA-C246 (P/N: E38F525104)	ATX motherboard with LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E, Pentium® or Celeron® processor, Intel® C246, USB 3.1 Gen2, SATA 3.0, 2 GbE LAN, VGA, DisplayPort++, DVI-D, and HDMI
Optional	
5938A808010E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=190 mm
5938A808020E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=400 mm
5948C122800E	2 x USB 3.1 Gen1 cable with bracket, L=400 mm
59380000290E	PS/2 keyboard & mouse cable with bracket
593826A0000E	SATA signal cable/red, L=500 mm
59384500100E	Audio cable with bracket, P=2.0 mm, L=450 mm
59380402010E	1 x COM port cable with bracket, P=2.54 mm, L=300 mm
59380703000E	2 x COM port cable with bracket, P=2.54 mm, L=300 mm
83935151000E	TPM 2.0 module (AX93515)
5076E510000E	CPU heatsink for 1U chassis (AX61135TM)
50761222000E	CPU cooler for 2U, 4U, and wall mount chassis

СРИ	Speed	Cache	Cores	TDP
Intel® Core™ i9-9900K Processor	3.6 GHz	16 MB	8	95 W
Intel® Core™ i7-9700TE Processor	1.8 GHz	12 MB	8	35 W
Intel® Core™ i7-8700K Processor	3.7 GHz	12 MB	6	95 W
Intel® Core™ i7-8700 Processor	3.2 GHz	12 MB	6	65 W
Intel® Core™ i7-8700T Processor	2.4 GHz	12 MB	6	65 W
Intel® Core™ i5-9500E Processor	3.0 GHz	9 MB	6	65 W
Intel® Core™ i5-9500TE Processor	2.2 GHz	9 MB	6	35 W
Intel® Core™ i5-9400 Processor	2.9 GHz	9 MB	6	65 W
Intel® Core™ i5-8400 Processor	2.8 GHz	9 MB	6	65 W
Intel® Core™ i5-8500T Processor	2.1 GHz	9 MB	6	35 W
Intel® Core™ i3-9100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-9100E Processor	3.1 GHz	6 MB	4	65 W
Intel® Core™ i3-9100TE Processor	2.2 GHz	6 MB	4	35 W
Intel® Core™ i3-8100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-8100T Processor	3.1 GHz	6 MB	4	35 W
Intel® Xeon® E-2278GE Processor	3.3 GHz	16 MB	8	80 W
Intel® Pentium® Gold G5400T Processor	3.1 GHz	4 MB	2	35 W
Intel® Celeron® G4900T Processor	2.9 GHz	2 MB	2	35 W



ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® H310, USB 3.1 Gen1, SATA 3.0, PCI Express Mini Card Slot, VGA, DisplayPort++, DVI-D, and HDMI

#### **Features**

- LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor (Coffee Lake Refresh)
- Two 288-pin DDR4-2666/2400 DIMM for up to 64GB of memory
- DisplayPort++, DVI-D, HDMI and VGA with dual-view supported
- 4 SATA-600
- 1 PCI Express Mini Card slot
- 4 USB 3.1 Gen1 and 5 USB 2.0
- TPM 2.0 supported (optional)







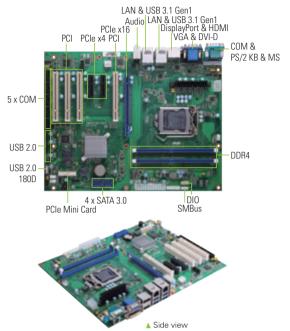
#### **Core System**

#### 1/0

SATA	4 x SATA-600
Hardware Monitoring	Detect CPU/system temperature, voltage and supports Smart fan control
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM 1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM
Audio	HD Codec audio as MIC-in/Line-in/Line-out with Realtek ALC662
USB	4 x USB 3.1 Gen1 (rear I/O) 5 x USB 2.0 (pin header, 180D type A)
Serial	4 x RS-232 (Internal box header) 2 x RS-232/422/485 (COM 1: rear I/O; COM 2: internal box header)
PS/2 Combo Port	1 x PS/2 keyboard and mouse
TPM	TPM 2.0 (optional)
SMBus	Yes
Digital I/O	8-channel programmable

#### **Display**

Graphic	Intel® HD Graphic
Memory Size	Share system memory
Display Interface	1 x VGA 1 x DVI-D 1 x HDMI 1 x DisplayPort++



#### **Ordering Information**

Standard	
IMB524RVDHGGA-H310 (P/N: E38F524103)	ATX motherboard with LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor, Intel® H310, USB 3.1 Gen1, SATA 3.0, 2 GbE LAN, VGA, DisplayPort, DVI-D and HDMI
Optional	
Optional	

Optional	
5938A808010E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=190 mm
5938A808020E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=400 mm
5948C122800E	2 x USB 3.1 Gen1 cable with bracket, L=400 mm
59380000290E	PS/2 keyboard & mouse cable with bracket
593826A0000E	SATA signal cable/red, L=500 mm
59384500100E	Audio cable with bracket, P=2.0 mm, L=450 mm
59380402010E	1 x COM port cable with bracket, P=2.54 mm, L=300 mm
59380703000E	2 x COM port cable with bracket, P=2.54 mm, L=300 mm
83935151000E	TPM 2.0 module (AX93515)
5076E510000E	CPU heatsink for 1U chassis (AX61135TM)
50761222000E	CPU cooler for 2U, 4U, and wall mount chassis

CPU	Speed	Cache	Cores	TDP
Intel® Core™ i7-9700TE Processor	1.8 GHz	12 MB	8	35 W
Intel® Core™ i7-8700K Processor	3.7 GHz	12 MB	6	95 W
Intel® Core™ i7-8700 Processor	3.2 GHz	12 MB	6	65 W
Intel® Core™ i7-8700T Processor	2.4 GHz	12 MB	6	65 W
Intel® Core™ i5-9500TE Processor	2.2 GHz	9 MB	6	35 W
Intel® Core™ i5-9500E Processor	3.0 GHz	9 MB	6	65 W
Intel® Core™ i5-9400 Processor	2.9 GHz	9 MB	6	65 W
Intel® Core™ i5-8400 Processor	2.8 GHz	9 MB	6	65 W
Intel® Core™ i3-9100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-9100E Processor	3.1 GHz	6 MB	4	65 W
Intel® Core™ i3-9100TE Processor	2.2 GHz	6 MB	4	35 W
Intel® Core™ i3-8100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-8100T Processor	3.1 GHz	6 MB	4	35 W
Intel® Pentium® Gold G5400T Processor	3.1 GHz	4 MB	2	35 W
Intel® Celeron® G4900T Processor	2.9 GHz	2 MB	2	35 W



ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® Q370, USB 3.1 Gen2, SATA 3.0, PCI Express Mini Card Slot, VGA, DisplayPort++, DVI-D, and HDMI

#### **Features**

- LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor (Coffee Lake Refresh)
- Four 288-pin DDR4-2666/2400 DIMM for up to 128GB of memory
- DisplayPort, DVI-D, HDMI and VGA with triple-view supported
- 5 SATA-600 with RAID 0/1/5/10
- 1 PCI Express Mini Card slot
- Two USB 3.1 Gen2 and four USB 3.1 Gen1
- TPM 2.0 supported (optional)







#### **Core System**

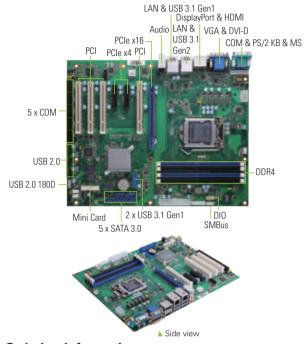
CPU	LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor (up to 95W)
System Memory	4 x 288-pin DDR4-2666/2400 DIMM, up to 128GB
Chipset	Intel® Q370
BIOS	AMI BIOS
Watchdog Timer	255 levels, 1 to 255 sec.
Expansion Interface	1 x PCle x16 slot 2 x PCle x4 slot 4 x PCl slot 1 x PCle Mini Card slot with PCle x1 & USB 2.0 & SATA
Battery	Lithium 3 V/ 220 mAH
Dimensions	305 x 244 mm
Board Thickness	1.6 mm
Operating Temperature	0°C to +60°C (+32°F to +140°F)
Humidity	10% to 95% relative humidity, non-condensing

#### 1/0

SATA	5 x SATA-600 with RAID 0/1/5/10
Hardware Monitoring	Detect CPU/system temperature, voltage and supports Smart fan control
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM, iAMT 1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM
Audio	HD Codec audio as MIC-in/Line-in/Line-out with Realtek ALC662
USB	2 x USB 3.1 Gen2 (rear IO) 4 x USB 3.1 Gen1 (rear IO, internal box header) 7 x USB 2.0 (pin header, 180D type A)
Serial	4 x RS-232 (Internal box header) 2 x RS-232/422/485 (COM 1: rear I/O; COM 2: internal box header)
PS/2 Combo Port	1 x PS/2 keyboard and mouse
TPM	TPM 2.0 (optional)
SMBus	Yes
Digital I/O	8-channel programmable

#### **Display**

Graphic	Intel® HD Graphic
Memory Size	Share system memory
Display Interface	1 x VGA 1 x DVI-D 1 x HDMI 1 x DisplayPort++



#### **Ordering Information**

Standard

(P/N: E38F523103)

	Intel® Q370, USB 3.1 Gen2, SATA 3.0, 2 GbE LANs, VGA, DisplayPort++, DVI-D and HDMI		
Optional			
5938A808010E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=190 mm		
5938A808020E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=400 mm		
5948C122800E	2 x USB 3.1 Gen1 cable with bracket, L=400 mm		
59380000290E	PS/2 keyboard & mouse cable with bracket		
593826A0000E	SATA signal cable/red, L=500 mm		
59384500100E	Audio cable with bracket, P=2.0 mm, L=450 mm		
59380402010E	1 x COM port cable with bracket, P=2.54 mm, L=300 mm		
59380703000E	2 x COM port cable with bracket, P=2.54 mm, L=300 mm		
83935151000E	TPM 2.0 module (AX93515)		
5076E510000E	CPU heatsink for 1U chassis (AX61135TM)		
50761222000E	CPU cooler for 2U, 4U, and wall mount chassis		

IMB523RVDHGGA-Q370 ATX motherboard with LGA1151 socket 9th/8th gen Intel®

Core™ i7/i5/i3, Pentium® & Celeron® processor,

СРИ	Speed	Cache	Cores	TDP
Intel® Core™ i9-9900K Processor	3.6 GHz	16 MB	8	95 W
Intel® Core™ i7-9700TE Processor	1.8 GHz	12 MB	8	35 W
Intel® Core™ i7-8700K Processor	3.7 GHz	12 MB	6	95 W
Intel® Core™ i7-8700 Processor	3.2 GHz	12 MB	6	65 W
Intel® Core™ i7-8700T Processor	2.4 GHz	12 MB	6	65 W
Intel® Core™ i5-9500E Processor	3.0 GHz	9 MB	6	65 W
Intel® Core™ i5-9500TE Processor	2.2 GHz	9 MB	6	35 W
Intel® Core™ i5-9400 Processor	2.9 GHz	9 MB	6	65 W
Intel® Core™ i5-8400 Processor	2.8 GHz	9 MB	6	65 W
Intel® Core™ i5-8500T Processor	2.1 GHz	9 MB	6	35 W
Intel® Core™ i3-9100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-9100E Processor	3.1 GHz	6 MB	4	65 W
Intel® Core™ i3-9100TE Processor	2.2 GHz	6 MB	4	35 W
Intel® Core™ i3-8100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-8100T Processor	3.1 GHz	6 MB	4	35 W
Intel® Pentium® Gold G5400T Processor	3.1 GHz	4 MB	2	35 W
Intel® Celeron® G4900T Processor	2.9 GHz	2 MB	2	35 W

ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ i7/i5/i3, Xeon® E Processor, Intel® C246, ECC DDR4, USB 3.1 Gen2, SATA 3.0, Dual LAN, VGA, DisplayPort++, DVI-D, and HDMI LAN & USB 3.1 Gen1

#### **Features**

- LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E, Pentium® or Celeron® processor (Coffee Lake Refresh)
- Four 288-pin DDR4-2666/2400 ECC DIMM for up to 128GB of memory
- DisplayPort++, VGA, DVI-D and HDMI with triple-view supported
- 4 SATA-600 with RAID 0/1/5/10
- 2 USB 3.1 Gen2 and four USB 3.1 Gen1
- TPM 2.0 supported (optional)







#### **Core System**

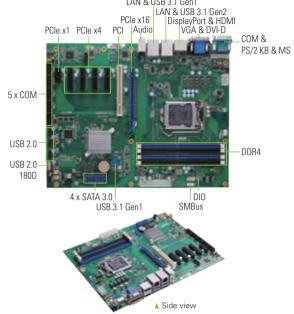
CPU	LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E, Pentium® or Celeron® processor (up to 95W)		
System Memory	4 x 288-pin DDR4-2666/2400 ECC DIMM, up to 128GB (Intel® Core™ i7/i5 only support non-ECC)		
Chipset	Intel® C246		
BIOS	AMI BIOS		
Watchdog Timer	255 levels, 1 to 255 sec.		
Expansion Interface	1 x PCle x16 slot 4 x PCle x4 slot 1 x PCle x1 slot 1 x PCl		
Battery	Lithium 3 V/ 220 mAH		
Dimensions	305 x 244 mm		
Board Thickness	1.6 mm		
Operating Temperature	0°C to +60°C (+32°F to +140°F)		
Humidity	10% to 95% relative humidity, non-condensing		

#### 1/0

SATA	4 x SATA-600 with RAID 0/1/5/10		
Hardware Monitoring	Detect CPU/system temperature, voltage and supports Smart fan control		
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM, iAMT 1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM		
Audio	HD Codec audio as MIC-in/Line-in/Line-out with Realtek ALC662		
USB	2 x USB 3.1 Gen2 (rear I/O) 4 x USB 3.1 Gen1 (rear I/O, internal box header) 7 x USB 2.0 (pin header, 180D type A)		
Serial	4 x RS-232 (Internal box header) 2 x RS-232/422/485 (COM 1: rear, COM 2: internal box header)		
PS/2 Combo Port	1 x PS/2 keyboard and mouse		
TPM	TPM 2.0 (optional)		
SMBus	Yes		
Digital I/O	8-channel programmable		

#### **Display**

Graphic	Intel® HD Graphic
Memory Size	Share system memory
Display Interface	1 x VGA 1 x DVI-D 1 x HDMI 1 x DisplayPort++



#### **Ordering Information**

Standard	
IMB521R (P/N: E38F521103)	ATX motherboard with LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E, Pentium® or Celeron® processor, Intel® C246, USB 3.1 Gen2, SATA 3.0, 2 GbE LAN, VGA, DisplayPort++, DVI-D, and HDMI

Optional	
5938A808010E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=190 mm
5938A808020E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=400 mm
5948C122800E	2 x USB 3.1 Gen1 cable with bracket, L=400 mm
59380000290E	PS/2 keyboard & mouse cable with bracket
593826A0000E	SATA signal cable/red, L=500 mm
59384500100E	Audio cable with bracket, P=2.0 mm, L=450 mm
59380402010E	1 x COM port cable with bracket, P=2.54 mm, L=300 mm
59380703000E	2 x COM port cable with bracket, P=2.54 mm, L=300 mm
83935151000E	TPM 2.0 module (AX93515)
5076E510000E	CPU heatsink for 1U chassis (AX61135TM)
50761222000E	CPU cooler for 2U, 4U, and wall mount chassis

СРИ	Speed	Cache	Cores	TDP
Intel® Core™ i9-9900K Processor	3.6 GHz	16 MB	8	95 W
Intel® Core™ i7-9700TE Processor	1.8 GHz	12 MB	8	35 W
Intel® Core™ i7-8700K Processor	3.7 GHz	12 MB	6	95 W
Intel® Core™ i7-8700 Processor	3.2 GHz	12 MB	6	65 W
Intel® Core™ i7-8700T Processor	2.4 GHz	12 MB	6	65 W
Intel® Core™ i5-9500E Processor	3.0 GHz	9 MB	6	65 W
Intel® Core™ i5-9400 Processor	2.9 GHz	9 MB	6	65 W
Intel® Core™ i5-9500TE Processor	2.2 GHz	9 MB	6	35 W
Intel® Core™ i5-8400 Processor	2.8 GHz	9 MB	6	65 W
Intel® Core™ i5-8400T Processor	2.1 GHz	9 MB	6	35 W
Intel® Core™ i3-9100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-9100E Processor	3.1 GHz	6 MB	4	65 W
Intel® Core™ i3-9100TE Processor	2.2 GHz	6 MB	4	35 W
Intel® Core™ i3-8100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-8100T Processor	3.1 GHz	6 MB	4	35 W
Intel® Xeon® E-2176G Processor	3.7 GHz	12 MB	6	80 W
Intel® Xeon® E-2278GE Processor	3.3 GHz	16 MB	8	80 W
Intel® Pentium® Gold G5400T Processor	3.1 GHz	4 MB	2	35 W
Intel® Celeron® G4900T Processor	2.9 GHz	2 MB	2	35 W

### IMB520R

ATX Motherboard with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® Q370, USB 3.1 Gen2, SATA 3.0, Dual LAN, VGA, DisplayPort++, DVI-D, and HDMI

#### **Features**

- LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor (Coffee Lake Refresh)
- Four 288-pin DDR4-2666/2400 DIMM for up to 128GB of memory
- VGA, DisplayPort++, DVI-D and HDMI with triple-view supported
- 4 SATA-600 with RAID 0/1/5/10
- Two USB 3.1 Gen2 and four USB 3.1 Gen1
- TPM 2.0 supported (optional)







#### **Core System**

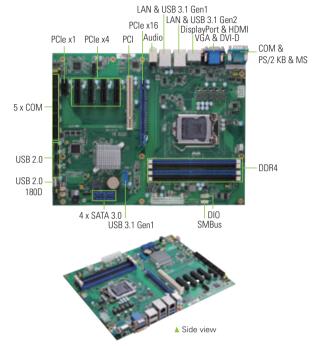
CPU	LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor (up to 95W)	
System Memory	4 x 288-pin DDR4-2666/2400 DIMM, up to 128GB	
Chipset	Intel® Q370	
BIOS	AMI BIOS	
Watchdog Timer	255 levels, 1 to 255 sec.	
Expansion Interface	1 x PCIe x16 slot 4 x PCIe x4 slot 1 x PCIe x1 slot 1 x PCI	
Battery	Lithium 3 V/ 220 mAH	
Dimensions	305 x 244 mm	
Board Thickness	1.6 mm	
Operating Temperature	0°C to +60°C (+32°F to +140°F)	
Humidity	10% to 95% relative humidity, non-condensing	

#### 1/0

SATA	4 x SATA-600 with RAID 0/1/5/10
Hardware Monitoring	Detect CPU/system temperature, voltage and supports Smart fan control
Ethernet	1x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM, iAMT 1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM
Audio	HD Codec audio as MIC-in/Line-in/Line-out with Realtek ALC662
USB	2 x USB 3.1 Gen2 (rear I/O) 4 x USB 3.1 Gen1 (rear I/O, internal box header) 7 x USB 2.0 (pin header, 180D type A)
Serial	4 x RS-232 (Internal box header) 2 x RS-232/422/485 (COM 1: rear, COM 2: internal box header)
PS/2 Combo Port	1 x PS/2 keyboard and mouse
TPM	TPM 2.0 (optional)
SMBus	Yes
Digital I/O	8-channel programmable

#### **Display**

Graphic	Intel® HD Graphic
Memory Size	Share system memory
Display Interface	1 x VGA 1 x DVI-D 1 x HDMI
	1 x DisplayPort++



#### **Ordering Information**

Standard

IMB520R (P/N: E38F520103)	ATX motherboard with LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor, Intel® Q370, USB 3.1 Gen2, SATA 3.0, 2 GbE LAN, VGA, DisplayPort++, DVI-D, and HDMI	
Optional		
5938A808010E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=190 mm	
5938A808020E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=400 mm	
5948C122800E	2 x USB 3.1 Gen1 cable with bracket, L=400 mm	
59380000290E	PS/2 keyboard & mouse cable with bracket	
593826A0000E	SATA signal cable/red, L=500 mm	
59384500100E	Audio cable with bracket, P=2.0 mm, L=450 mm	
59380402010F	1 x COM port cable with bracket, P=2.54 mm, I=300 mm	

TPM 2.0 module (AX93515)

CPU heatsink for 1U chassis (AX61135TM)

CPU cooler for 2U, 4U, and wall mount chassis

2 x COM port cable with bracket, P=2.54 mm, L=300 mm

#### **Processor List**

59380703000E

83935151000E

5076E510000E 50761222000E

CPU	Speed	Cache	Cores	TDP
Intel® Core™ i9-9900K Processor	3.6 GHz	16 MB	8	95 W
Intel® Core™ i7-9700TE Processor	1.8 GHz	12 MB	8	35 W
Intel® Core™ i7-8700K Processor	3.7 GHz	12 MB	6	95 W
Intel® Core™ i7-8700 Processor	3.2 GHz	12 MB	6	65 W
Intel® Core™ i7-8700T Processor	2.4 GHz	12 MB	6	65 W
Intel® Core™ i5-9500E Processor	3.0 GHz	9 MB	6	65 W
Intel® Core™ i5-9500TE Processor	2.2 GHz	9 MB	6	35 W
Intel® Core™ i5-9400 Processor	2.9 GHz	9 MB	6	65 W
Intel® Core™ i5-8400 Processor	2.8 GHz	9 MB	6	65 W
Intel® Core™ i5-8500T Processor	2.1 GHz	9 MB	6	35 W
Intel® Core™ i3-9100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-9100E Processor	3.1 GHz	6 MB	4	65 W
Intel® Core™ i3-9100TE Processor	2.2 GHz	6 MB	4	35 W
Intel® Core™ i3-8100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-8100T Processor	3.1 GHz	6 MB	4	35 W
Intel® Pentium® Gold G5400T Processor	3.1 GHz	4 MB	2	35 W
Intel® Celeron® G4900T Processor	2.9 GHz	2 MB	2	35 W



ATX Motherboard with LGA4189 Socket Intel® Xeon® Scalable Processor, Intel® C621A, 3 PCle x16, 3 PCle x8, VGA, NVMe

#### **Features**

- Intel® Xeon® Scalable processor (Ice Lake-SP)
- Six 288-pin DDR4-3200 RDIMM/LRDIMM for up to 384GB of memory
- 3 PCle x16, 3 PCle x8
- Supports M.2 Key M
- TPM 2.0 supported (optional)
- Supports multiple graphic cards
- Supports internal USB dongle

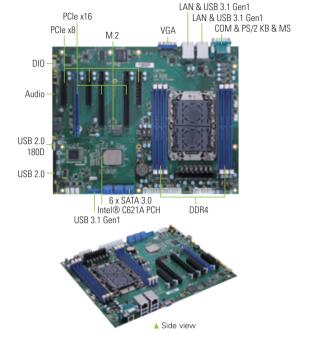


#### **Core System**

CPU	Intel® Xeon® Scalable processor (TDP up tp 270W)		
System Memory	6 x 288-pin DDR4-3200 RDIMM, up to 384GB 6 x 288-pin DDR4-3200 LRDIMM, up to 384GB		
Chipset	Intel® C621A		
BIOS	AMI		
SSD	M.2 key M 2280 with PCle x4 signal		
Watchdog Timer	255 levels, 1 to 255 sec.		
Expansion Interface	2 x PCle x16 slot (signal Gen 4) 1 x PCle x16 slot (signal: x16 or x8) 1 x PCle x8 slot (signal: x0 or x8) 2 x PCle x8 slot		
Dimensions	305 x 244 mm		
Board Thickness	1.6 mm		
Operating Temperature	0°C to +60°C (+32°F to +140°F)		
Humidity	10% to 95% relative humidity, non-condensing		

#### 1/0

SATA	6 x SATA-600 with RAID 0/1/5/10	
Hardware Monitoring	Detect CPU/system temperature, voltage and supports Smart fan control	
Ethernet	2 x 10/100/1000 Mbps Ethernet (Intel® i210-AT)	
Audio	HD Codec audio as MIC-in/Line-in/Line-out with audio kit AX93242 (optional)	
USB	4 x USB 3.1 Gen1 (rear I/O) 2 x USB 3.1 Gen1 (internal box header) 6 x USB 2.0 (internal box header) 1 x USB 2.0 (180D TypeA)	
Serial	1 x RS-232/422/485 (rear I/O)	
PS/2 Combo Port	1 x PS/2 keyboard and mouse	
TPM	TPM 2.0 module (optional)	
SMBus	Yes	
Digital I/O	8-channel programmable	



#### **Display**

Standard IMB700

Graphic	AST2510
Memory Size	N/A
Display Interface	1 x VGA

#### **Ordering Information**

	Scalable processor, Intel® C621A, 3 PCle x16, 3 PCle x8, VGA, and NVMe
Optional	
5938A808010E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=190 mm
5938A808020E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=400 mm
59380402010E	1 x COM port cable with bracket, P=2.54 mm, L=300 mm
83935151000E	TPM 2.0 module (AX93515)
E393242100	AX93242-RC HD audio converter kit

ATX motherboard with LGA4189 socket Intel® Xeon®



ATX Motherboard with LGA1200 Socket 10th Gen Intel® Core™ i9/i7/i5/i3, Xeon® E Processor, Intel® W480E, ECC DDR4, USB 3.2 Gen2, NVMe, Dual LAN, VGA, DisplayPort++, DVI-D, and HDMI

#### **Features**

- LGA1200 socket 10th gen Intel® Core™ i9/i7/i5/i3, Xeon® E, Pentium® or Celeron® processor (Comet Lake)
- Four 288-pin DDR4-2933 ECC/non-ECC un-buffered Long-DIMM, up to 128GB
- DisplayPort++, VGA, DVI-D and HDMI with triple-view supported
- Supports M.2 Key M 2280
- 2 USB 3.2 Gen2 and 4 USB 3.2 Gen1
- TPM 2.0 supported (optional)









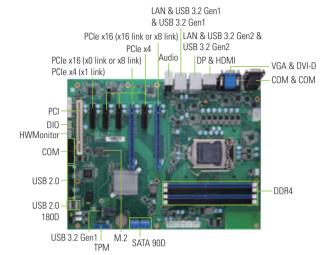


#### **Core System**

Pentium® or Celeron® processor (up to 125W)		
up to 129GB (ECC memory is available for Intel® Xeon® and Core™ i3 processors)  Chipset Intel® W480E  BIOS AMI BIOS  SSD M.2 Key M 2280 (signal: PCle x4/SATA)  Watchdog Timer 255 levels, 1 to 255 sec.  Expansion Interface 1 x PCle x16 slot (signal: x16 or x8) 1 x PCle x16 slot (signal: x0 or x8) 3 x PCle x4 slot open ended 1 x PCle x16 slot open ended 1 x PCle x4 slot open ended (signal: x1) 1 x PCl  Battery Lithium 3 V/ 220 mAH  Dimensions 305 x 244 mm  Board Thickness 1.6 mm  Operating Temperature 0°C to +60°C (+32°F to +140°F)	CPU	LGA1200 socket 10th gen Intel® Core™ i9/i7/i5/i3, Xeon® E, Pentium® or Celeron® processor (up to 125W)
BIOS	System Memory	· · · · · · · · · · · · · · · · · · ·
SSD         M.2 Key M 2280 (signal: PCle x4/SATA)           Watchdog Timer         255 levels, 1 to 255 sec.           Expansion Interface         1 x PCle x16 slot (signal: x16 or x8)             1 x PCle x16 slot (signal: x0 or x8)             3 x PCle x4 slot open ended             1 x PCle x4 slot open ended (signal: x1)             1 x PCl           Battery         Lithium 3 V/ 220 mAH           Dimensions         305 x 244 mm           Board Thickness         1.6 mm           Operating Temperature         0°C to +60°C (+32°F to +140°F)	Chipset	Intel® W480E
Watchdog Timer         255 levels, 1 to 255 sec.           Expansion Interface         1 x PCle x16 slot (signal: x16 or x8) 1 x PCle x16 slot (signal: x0 or x8) 3 x PCle x4 slot open ended 1 x PCle x4 slot open ended (signal: x1) 1 x PCl           Battery         Lithium 3 V/ 220 mAH           Dimensions         305 x 244 mm           Board Thickness         1.6 mm           Operating Temperature         0°C to +60°C (+32°F to +140°F)	BIOS	AMI BIOS
1 x PCle x16 slot (signal: x16 or x8)   1 x PCle x16 slot (signal: x0 or x8)   1 x PCle x16 slot (signal: x0 or x8)   3 x PCle x4 slot open ended   1 x PCle x4 slot open ended (signal: x1)   1 x PCl	SSD	M.2 Key M 2280 (signal: PCle x4/SATA)
1 x PCle x16 slot (signal: x0 or x8) 3 x PCle x4 slot open ended 1 x PCle x4 slot open ended (signal: x1) 1 x PCl  Battery Lithium 3 V/ 220 mAH  Dimensions 305 x 244 mm  Board Thickness 1.6 mm  Operating Temperature 0°C to +60°C (+32°F to +140°F)	Watchdog Timer	255 levels, 1 to 255 sec.
Dimensions         305 x 244 mm           Board Thickness         1.6 mm           Operating Temperature         0°C to +60°C (+32°F to +140°F)	Expansion Interface	1 x PCle x16 slot (signal: x0 or x8) 3 x PCle x4 slot open ended 1 x PCle x4 slot open ended (signal: x1)
Board Thickness 1.6 mm  Operating Temperature 0°C to +60°C (+32°F to +140°F)	Battery	Lithium 3 V/ 220 mAH
Operating Temperature 0°C to +60°C (+32°F to +140°F)	Dimensions	305 x 244 mm
	Board Thickness	1.6 mm
Humidity 10% to 95% relative humidity, non-condensing	Operating Temperature	0°C to +60°C (+32°F to +140°F)
	Humidity	10% to 95% relative humidity, non-condensing

#### 1/0

SATA	4 x SATA-600 with RAID 0/1/5/10
Hardware Monitoring	Detect CPU/system temperature, voltage and supports smart fan control
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, PXE Boot ROM, iAMT 1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM
Audio	HD Codec audio as MIC-in/Line-in/Line-out
USB	2 x USB 3.2 Gen2 (rear I/O) 4 x USB 3.2 Gen1 (rear I/O, internal box header) 8 x USB 2.0 (pin header, 2 x 180D type A)
Serial	4 x RS-232 (Internal box header) 2 x RS-232/422/485 (rear I/O)
PS/2 Combo Port	1 x PS/2 keyboard (internal box header)
TPM	TPM 2.0 (optional)
SMBus	Yes
Digital I/O	8-channel programmable





#### **Display**

Graphic	Intel® HD Graphic
Memory Size	Share system memory
Display Interface	1 x VGA 1 x DVI-D 1 x HDMI 1 x DisplayPort++

IMB530	ATX motherboard with LGA1200 socket 10th gen Intel®
(P/N: E38F530101)	Core™ i9/i7/i5/i3, Xeon® E, Pentium® or Celeron® processor, Intel® W480E, USB 3.2 Gen2, SATA 3.0, 2 GbE
	LAN, VGA, DisplayPort++, DVI-D, and HDMI
Optional	
5938A808010E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=190 mm
5938A808020E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=400 mm
5948C122800E	2 x USB 3.2 Gen1 cable with bracket, L=400 mm
59380000290E PS/2 keyboard & mouse cable with bracket	
593826A0000E	SATA signal cable/red, L=500 mm
59384500100E	Audio cable with bracket, P=2.0 mm, L=450 mm
59380402010E	1 x COM port cable with bracket, P=2.54 mm, L=300 mm
59380703000E	2 x COM port cable with bracket, P=2.54 mm, L=300 mm
83935151000E	TPM 2.0 module (AX93515)
5076E510000E	CPU heatsink for 1U chassis (AX61135TM)
50761222000E	CPU cooler for 2U, 4U, and wall mount chassis

# 7

## Slot CPU Cards

The Slot CPU card family is featured by Intel® Core™ processors. The PICMG 1.3 full-size CPU card is ideal for performance-demanding and bandwidth-concerned applications.

	Selection Guide	е	85
	SHB140	PICMG 1.3 Full-size CPU Card with LGA1151 Socket 7th/6th Gen Intel® Core™ Processor, Intel® Q170/H110, SATA3, USB 3.0, Dual LAN	86
		and DVI-I	
NEW	SHB150R	PICMG 1.3 Full-size CPU Card with LGA1151 Socket 9th/8th Gen Intel® Core™ Processor, Intel® C246/Q370/H310, SATA3,	87
		USB 3.1 Gen1/Gen2, Dual LAN and DVI-I	
NEW	SHB250R	PICMG 1.3 Half-size CPU Card with LGA1151 Socket 9th/8th Gen Intel® Core™ i7/i5/i3, Xeon® E, Pentium® or Celeron® Processor, Intel® C2/6/0370/H310 SATA 3.0 USB 3.1 Gen1 LAN and DVI-I	88

## Boards and Modules

## PICMG 1.3 Full-size/Half-size CPU Cards

Selection Guide

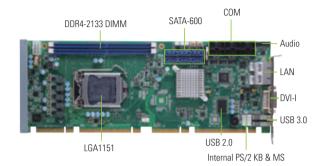


Features	Models		SHB140	SHB150R	SHB250R
Form Factor			PICMG 1.3	PICMG1.3	PICMG 1.3
CPU Level			7th/6th gen Intel® Core™ i7/i5/i3, Pentium® or Celeron®	9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E, Pentium® or Celeron®	9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E, Pentium® or Celeron®
CPU Soc	ket		LGA1151	LGA1151	LGA1151
Core Log	gic Chipse	t	Intel® Q170/H110	Intel® C246/Q370/H310	Intel® C246/Q370/H310
Memory	Туре		DDR4-2400/2133	DDR4-2666/2400	DDR4-2666/2400
Max. DR	AM Capa	city	32GB	64GB	64GB
Cache R	AM Capad	ity	Integrated in CPU	Integrated in CPU	Integrated in CPU
BIOS			AMI	AMI	AMI
Watchdo	g Timer		255 levels, 1 to 255 sec.	255 levels, 1 to 255 sec.	255 levels, 1 to 255 sec.
SSD			N/A	M.2 Key M 2280 w/PCle x4 signal (C246,Q370)	M.2 Key M 2242
Digital I/	0		N/A	N/A	N/A
	IDE		N/A	N/A	N/A
	SATA		Q170: 6 x SATA-600, support RAID 0/1/5/10 H110: 4 x SATA-600	C246/Q370: 6 x SATA-600, support RAID 0/1/5/10 H310: 2 x SATA-600	C246/Q370: 2 x SATA-600, support RAID 0/1 H310: 2 x SATA-600
	FDD		N/A	N/A	N/A
	LPT		1 x LPT	1 x LPT	N/A
		COM 1	RS-232/422/485	RS-232/422/485	RS-232/422/485
		COM 2	RS-232/422/485	RS-232/422/485	RS-232/422/485
/0	Control	COM 3	RS-232	RS-232	N/A
	Serial	COM 4	RS-232	RS-232	N/A
		COM 5	N/A	N/A	N/A
		COM 6	N/A	N/A	N/A
	USB		0170: 2 x USB 3.0 & 10 x USB 2.0 H110: 2 x USB 3.0 & 8 x USB 2.0	C246/0370: 2 x USB 3.1 Gen2, 4 x USB 3.1 Gen1 & 6 x USB 2.0, H310: 4 x USB 3.1 Gen1 & 6 x USB 2.0	4 x USB 3.1 Gen1, 4 x USB 2.0
	IrDA		N/A	N/A	N/A
EEE 139	)4a		N/A	N/A	N/A
Display			1 x DVI-I	1 x DVI-I, 1 x DisplayPort++	1 x DVI-I, 1 x DisplayPort++
Ethernet	t		2 x 10/100/1000 Mbps Ethernet	2 x 10/100/1000 Mbps Ethernet	2 x 10/100/1000 Mbps Ethernet
Audio			HD Codec	HD Codec	HD Codec
lardwar	re Monito	ring	Yes	Yes	Yes
SMBus			Yes	Yes	Yes
Expansion Interface		ce	1 x PCle x16, 1 x PCle x4 or 4 x PCle x1, 4 x PCl	1 x PCle x16, 1 x PCle x4 or 4 x PCle x1, 4 x PCl	1 x PCle x16, 1 x PCle x4 or 4 x PCle x1, 4 x PCl
Power M	lanageme	ent	ACPI	ACPI	ACPI
Battery	Battery		Lithium	Lithium	Lithium
Operating Temperature			200 - 2000 / 2005 - 440051	0°C to +60°C (+32°F to +140°F)	0°C to +60°C (+32°F to +140°F)
Relative Humidity		ature	0°C to +60°C (+32°F to +140°F)	0 6 10 +00 6 (+32 7 10 +140 7)	0 6 10 400 6 (432 1 10 4140 1)
Relative	<u> </u>		10% to 95%, non-condensing	10% to 95%, non-condensing	10% to 95%, non-condensing

PICMG 1.3 Full-size CPU Card with LGA1151 Socket 7th/6th Gen Intel® Core™ Processor, Intel® Q170/H110, SATA3, USB 3.0, Dual LANs and DVI-I

#### **Features**

- LGA1151 Socket 7th/6th gen Intel® Core™ processor
- Intel® Q170/H110 chipset
- 2 DDR4-2400 un-buffered DIMM for up to 32GB of memory
- Intel® AMT 11 (Q170)
- Optional TPM supported
- PCle Gen3 at 8GT/s supported
- Intel® vPro supported
- 6 SATA-600 with RAID 0/1/5/10 (Q170)













#### **Core System**

CPU	LGA1151 socket 7th/6th gen Intel® Core™ processor, TDP up to 65W, Intel® vPro supported
System Memory	2 x 288-pin DDR4-2133/2400 un-buffered DIMM, up to 32GB
Chipset	Intel® Q170/H110
BIOS	AMI BIOS
SSD	N/A
Watchdog Timer	225 levels, 1 to 255 sec.
Expansion Interface	1 x PCle x16 Gen3 1 x PCle x4 or 4 x PCle x1 Gen2 4 x 32-bit PCl bus masters
Battery	Lithium 3V/220 mAH
Power Requirements	Intel® Core™ i7-6700, 8GB DDR4-2133/2400 x 2 +5V @ 1.38A, +12V @ 2.13A, +5VSB @ 0.72A, +3.3V @ 0.54A
Dimensions	338 x 126 mm
Board Thickness	1.6 mm
Operating Temperature	0°C to +60°C (+32°F to +140°F)
Humidity	10% to 95% relative humidity, non-condensing

#### 1/0

SATA	Q170: 6 x SATA-600, support RAID 0/1/5/10 H110: 4 x SATA-600
Hardware Monitoring	Detect CPU/system temperature, voltage and fan speed
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, RPL/PXE Boot ROM, AMT 11 1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, RPL/PXE Boot ROM
Audio	HD Codec audio as MIC-in/Line-in/Line-out/Speaker-out with audio kit AX93242 (optional)
USB	Q170: 2 x USB 3.0 & 10 x USB 2.0 (6 ports onboard, 4 ports on SHB connector-C golden fingers) H110: 2 x USB 3.0 & 8 x USB 2.0 (4 ports onboard, 4 ports on SHB connector-C golden fingers)
Serial	5 x RS-232 1 x RS-232/422/485, mode selection by SW
PS/2 Combo Port	1 x PS/2 keyboard internal connector 1 x PS/2 mouse internal connector
TPM	Infineon SLB9635 for trusted platform (optional)
SMBus	N/A
Others	2 x Smart fan for system Fan1/Fan2

#### **Display**

Graphic	Intel® HD Graphic
Memory Size	Share system memory
Display Interface	1 x DVI-I

#### Packing List

Гс	racking List		
Sta	andard		
Qui	ick installation guide, user's manual/utility CD, cable		

#### Cable

Part Number	Description	Qty
593826A0000E	SATA signal cable, 500 mm	1
59380402010E	1 x COM port cable with bracket, P=2.54 mm, L=300 mm	1

#### **Ordering Information**

Standard	
SHB140DGGA (P/N: E38C140101)	PICMG 1.3 full-size CPU card with LGA1151 socket, Intel® Q170, DVI-I, 2 GbE LANs, audio and PCIe x1
SHB140DGGA (P/N: E38C140102)	PICMG 1.3 full-size CPU card with LGA1151 socket, Intel® Q170, DVI-I, 2 GbE LANs, audio and PCle x4
SHB140DGGA (P/N: E38C140107)	PICMG 1.3 full-size CPU card with LGA1151 socket, Intel® Q170, DVI-I, 2 GbE LANs, audio and PCIe x4, TPM (limted to MoQ)
SHB140DGGA (P/N: E38C140100)	PICMG 1.3 full-size CPU card with LGA1151 socket, Intel® H110, DVI-I, 2 GbE LANs, audio and PCle x1
SHB140DGGA (P/N: E38C140104)	PICMG 1.3 full-size CPU card with LGA1151 socket, Intel® H110, DVI-I, 2 GbE LANs, audio and PCle x4
SHB140DGGA (P/N: E38C140105)	PICMG 1.3 full-size CPU card with LGA1151 socket, Intel® H110, DVI-1, 2 GbE LANs, audio and PCle x4, TPM (limted to MoQ)

Optional	
5938A808010E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=190 mm
5948C122800E	2 x USB 3.1(Gen1) cable with bracket, L=400 mm
59380000290E	PS/2 keyboard & mouse cable with bracket
593826A0000E	SATA signal cable/red, L=500mm
E393242100	AX93242-RC HD audio converter kit
59380402010E	1 x COM port cable with bracket, P=2.54 mm, L=300 mm
59380703000E	2 x COM port cable with bracket, P=2.54 mm, L=300 mm
594826A0010E	DVI-I to DVI-D+VGA Y cable

Ontional



PICMG 1.3 Full-size CPU Card with LGA1151 Socket 9th/8th Gen Intel® Core™ i7/i5/i3, Xeon® E, Pentium® or Celeron® Processor, Intel® C246/Q370/H310, SATA 3.0, USB 3.1 Gen1/Gen2, Dual LAN and DVI-I

#### **Features**

- LGA1151 Socket 9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E (C246), Pentium® or Celeron® processor (up to 95W)
- Intel® C246/Q370/H310 chipset
- 2 DDR4-2666/2400 Long-DIMM for up to 64GB of memory
- Supports Intel® AMT and vPro (C246/Q370)
- TPM 2.0 supported (optional)
- Supports M.2 Key M (C246/Q370)













#### **Core System**

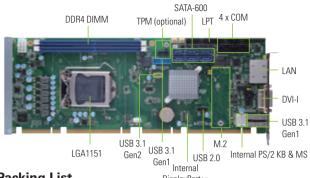
CPU	LGA1151 9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E (C246), Pentium® or Celeron® processor (up to 95W)
System Memory	C246: 2 x 288-pin 2666/2400 with ECC un-buffered Long-DIMM (Intel® Core™ i7/i5 only support non-ECC), up to 64GB Q370/H310: 2 x 288-pin 2666/2400 un-buffered Long-DIMM, up to 64GB
Chipset	Intel® C246/Q370 (Intel® vPro supported) Intel® H310
BIOS	AMI UEFI BIOS
SSD	M.2 Key M 2280, PCle x4 signal (C246, Q370)
Watchdog Timer	225 levels, 1 to 255 sec.
Expansion Interface	1 x PCle x16 Gen3 1 x PCle x4 or 4 x PCle x1 Gen3 4 x 32-bit PCl bus masters
Battery	Lithium 3V/220 mAH
Power Requirements	Intel® Core™ i7-9700TE with 32GB DDR4-2666 x 2 +12V @ 2.8A, +5V @ 2.4A, +3.3V @ 1.3A
Dimensions	338 x 126 mm
Board Thickness	1.6 mm
Operating Temperature	0°C to +60°C (+32°F to +140°F)
Humidity	10% to 95% relative humidity, non-condensing

#### 1/0

SATA	C246/Q370: 6 x SATA-600, support RAID 0/1/5/10 H310: 4 x SATA-600	
Hardware Monitoring	Detect CPU/system temperature, voltage and fan speed	
Ethernet 1 x 10/100/1000 Mbps Ethernet with Intel® i219 supports Wake-on-LAN, RPL/PXE Boot ROM, AM 1 x 10/100/1000 Mbps Ethernet with Intel® i211 supports Wake-on-LAN, RPL/PXE Boot ROM		
Audio	HD Codec audio as MIC-in/Line-in/Line-out/Speaker-out with audio kit AX93242 (optional)	
USB	C246/Q370: 2 x USB 3.1 Gen2, 4 x USB 3.1 Gen1 & 6 x USB 2.0 (2 ports onboard, 4 ports on SHB connector-C golden fingers) H310: 4 x USB 3.1 Gen1 & & 6 x USB 2.0 (2 ports onboard, 4 ports on SHB connector-C golden fingers)	
Serial	2 x RS-232 2 x RS-232/422/485, mode selection by SW	
PS/2 Combo Port	1 x PS/2 keyboard internal connector 1 x PS/2 mouse internal connector	
TPM	TPM 2.0 module (optional)	
Others	1 x LPT 1 x Smart CPU fan 1 x Smart system fan	

#### **Display**

Graphic	Intel® HD Graphic
Memory Size	Share system memory
Display Interface	1 x DVI-I 1 x DisplayPort++ (internal header)



#### Packing List

U	' '	
Standard		
CPU card		
59380402010E	COM cable with bracket	1
59415318000E	SATA signal cable, 460 mm	1

DisplayPort++

#### **Ordering Information**

Standard	
SHB150RDGG-Q370 (P/N: E38C150106)	PICMG 1.3 full-size CPU card with LGA1151 socket, Intel® 0370, DVI-I, 2 GbE LAN, and PCIe x4 BIOS
SHB150RDGG-Q370 (P/N: E38C150107)	PICMG 1.3 full-size CPU card with LGA1151 socket, Intel® 0370, DVI-I, 2 GbE LAN, and PCIe x1 BIOS
SHB150RDGG-H310 (P/N: E38C150108)	PICMG 1.3 full-size CPU card with LGA1151 socket, Intel® H310, DVI-I, 2 GbE LAN, and PCIe x4 BIOS
SHB150RDGG-H310 (P/N: E38C150109)	PICMG 1.3 full-size CPU card with LGA1151 socket, Intel® H310, DVI-I, 2 GbE LAN, and PCIe x1 BIOS
SHB150RDGG-C246 (P/N: E38C150110)	PICMG 1.3 full-size CPU card with LGA1151 socket, Intel® C246, DVI-I, 2 GbE LAN, and PCIe x4 BIOS
SHB150RDGG-C246 (P/N: E38C150111)	PICMG 1.3 full-size CPU card with LGA1151 socket, Intel® C246, DVI-I, 2 GbE LAN, and PCIe x1 BIOS
Optional	
5938A808010E	2 x USB 2.0 cable with bracket, P=2.54 mm, L=190 mm
5948C122800E	2 x USB 3.1 (Gen1) cable with bracket, L=400 mm
59401502800E	2 x USB 3.1 (Gen2) cable with bracket, L=400 mm
59380000290E	PS/2 keyboard & mouse cable with bracket
593826A0000E	SATA signal cable/red, L=500mm
E393242100	AX93242-RC HD audio converter kit
59380402010E	1 x COM port cable with bracket, P=2.54 mm, L=300 mm
59380703000E	2 x COM port cable with bracket, P=2.54 mm, L=300 mm
594826A0010E	DVI-I to DVI-D+VGA Y cable
83935151000E	TPM 2.0 module (AX93515)
83987091000E	DisplayPort++ kit with bracket

CPU	Speed	Cache	Cores	TDP
Intel® Core™ i9-9900K Processor	3.6 GHz	16 MB	8	95 W
Intel® Core™ i7-9700TE Processor	1.8 GHz	12 MB	8	35 W
Intel® Core™ i7-8700K Processor	3.7 GHz	12 MB	6	95 W
Intel® Core™ i7-8700 Processor	3.2 GHz	12 MB	6	65 W
Intel® Core™ i7-8700T Processor	2.4 GHz	12 MB	6	65 W
Intel® Core™ i5-9500E Processor	3.0 GHz	9 MB	6	65 W
Intel® Core™ i5-9500TE Processor	2.2 GHz	9 MB	6	35 W
Intel® Core™ i5-9400 Processor	2.9 GHz	9 MB	6	65 W
Intel® Core™ i5-8400 Processor	2.8 GHz	9 MB	6	65 W
Intel® Core™ i5-8500T Processor	2.1 GHz	9 MB	6	35 W
Intel® Core™ i3-9100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-9100E Processor	3.1 GHz	6 MB	4	65 W
Intel® Core™ i3-9100TE Processor	2.2 GHz	6 MB	4	35 W
Intel® Core™ i3-8100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-8100T Processor	3.1 GHz	6 MB	4	35 W
Intel® Xeon® E-2176G Processor*	3.7 GHz	12 MB	6	80 W
Intel® Xeon® E-2278GE Processor*	3.3 GHz	16 MB	8	80 W
Intel® Pentium® Gold G5400T Processor	3.1 GHz	4 MB	2	35 W
Intel® Celeron® G4900T Processor	2.9 GHz	2 MB	2	35 W
* C246 use only				

C246 use only

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PICMG 1.3 Half-size CPU Card with LGA1151 socket 9th/8th Gen Intel® Core™ i7/i5/i3, Xeon® E, Pentium® or Celeron® Processor, Intel® C246/Q370/H310, SATA 3.0, USB 3.1 Gen1, LAN and DVI-I

#### **Features**

- LGA1151 socket 9th/8th gen Intel® Core™ i7/i5/i3, Xeon® E (C246), Pentium® or Celeron® processor
- Intel® C246/Q370/H310 chipset
- 2 DDR4-2666/2400 SO-DIMM for up to 64GB of memory
- Supports M.2 slot
- Supports Intel® AMT and vPro (C246/Q370)
- TPM 2.0 supported













#### **Core System**

-			
CPU	LGA1151 9 <sup>th</sup> /8 <sup>th</sup> gen Intel® Core™ i7/i5/i3, Xeon® E (C246), Pentium® or Celeron® processor (8th up to 95W, 9th up to 35W)		
System Memory	C246: 2 x 260-pin 2666/2400 with ECC un-buffered SO-DIMM, up to 64GB (Intel® Core™ i7/i5 only support non-ECC) Q370/H310: 2 x 260-pin 2666/2400 un-buffered SO-DIMM, up to 64GB		
Chipset	Intel® C246/Q370 (Intel® vPro supported) Intel® H310		
BIOS	AMI UEFI BIOS		
Storage	M.2 Key M 2242 (0370/C246 support PCle 3.0 x4 or SATA-3, H310 supports SATA-3)		
Watchdog Timer	225 levels, 1 to 255 sec.		
Expansion Interface	1 x PCle x16 Gen3 1 x PCle x4 or 4 x PCle x1 Gen3		
Battery	Lithium 3V/220 mAH		
Power Requirements	Intel® Core™ i7-9700TE, 32GB DDR4-2666 x 2 +5V @ 0.2A, +12V @ 3.8A, +3.3V @ 0.8A		
Dimensions	185 x 126 mm		
Board Thickness	1.6 mm		
Operating Temperature	0°C to 60°C (32°F to 140°F) depending on CPU speed and system thermal solution		
Humidity	10% to 95% relative humidity, non-condensing		

#### 1/0

SATA	C246/Q370: 2 x SATA-600, support RAID 0/1 H310: 2 x SATA-600
Hardware Monitoring	Detect CPU/system temperature, voltage and fan speed
Ethernet	1 x 10/100/1000 Mbps Ethernet with Intel® i219-LM; supports Wake-on-LAN, RPL/PXE Boot ROM, AMT 1 x 10/100/1000 Mbps Ethernet with Intel® i211-AT; supports Wake-on-LAN, RPL/PXE Boot ROM
Audio	HD Codec audio as MIC-in/Line-in/Line-out/Speaker-out with Realtek ALC662
USB	4x USB 3.1 Gen1 (2 ports in I/O, 2 ports in interanal box header $4x$ USB 2.0
Serial	2 x RS-232/422/485, mode selection by SW
PS/2 Combo Port	1 x PS/2 keyboard & mouse internal connector
TPM	TPM 2.0
DIO	8 channel programmable
Others	1 x Smart CPU fan 1 x Smart system fan

#### **Display**

Graphic	Intel® HD Graphic
Memory Size	Share system memory
Display Interface	1 x DVI-I 1 x DisplayPort++ (internal header)

#### **Packing List**

Standard	
CPU card	

2 x COM

USB 2.0

DisplayPort++ kit PS/2 KB & MS

DIO

SATA-600

Audio

USB 3.1

DVI-I

USB 3.1 Gen1

#### **Ordering Information**

DDR4 SO-DIMM

LGA1151

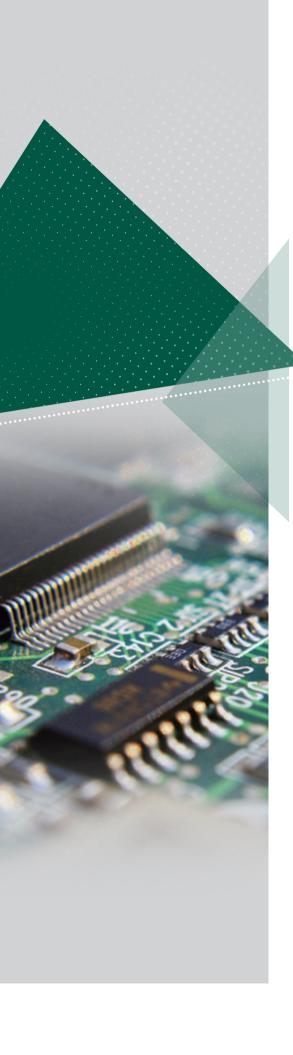
Standard	
SHB250RDGG-Q370	PICMG 1.3 half-size CPU card with LGA1151 socket, Intel®
(P/N: E38C250100) SHB250RDGG-H310	Q370, DVI-I, 2 GbE LAN, audio and PCle x4  PICMG 1.3 half-size CPU card with LGA1151 socket. Intel®
(P/N: E38C250102)	H310, DVI-I, 2GbE LAN, audio and PCIe x4
SHB250RDGG-C246 (P/N: E38C250101)	PICMG 1.3 half-size CPU card with LGA1151 socket, Intel® C246, DVI-I, 2GbE LAN, audio and PCIe x4

#### Ontional

-	
59380000300E	2 x COM port, with bracket, P=1.27 X 2.54, L=300 mm
59401502800E	1 x USB 3.1 Gen2 cable with bracket 20P, L=400 mm
59382631000E	2 x USB 2.0 cable with bracket 180 mm
594C2302500E	PS/2 keyboard & mouse cable
593826A0000E	SATA signal cable/red, L=500mm
594826A0010E	DVI-I to DVI-D+VGA Y cable
83987091000E	DisplayPort++ kit

CPU	Speed	Cache	Cores	TDP
Intel® Core™ i7-9700TF Processor	1.8 GHz	12 MB	8	35 W
Intel® Core™ i7-8700K Processor	3.7 GHz	12 MB	6	95 W
Intel® Core™ i7-8700 Processor	3.2 GHz	12 MB	6	65 W
Intel® Core™ i7-8700T Processor	2.4 GHz	12 MB	6	65 W
Intel® Core™ i5-9500TE Processor	2.2 GHz	9 MB	6	35 W
Intel® Core™ i5-8400 Processor	2.8 GHz	9 MB	6	65 W
Intel® Core™ i5-8500T Processor	2.1 GHz	9 MB	6	35 W
Intel® Core™ i3-9100TE Processor	2.2 GHz	6 MB	4	35 W
Intel® Core™ i3-8100 Processor	3.6 GHz	6 MB	4	65 W
Intel® Core™ i3-8100T Processor	3.1 GHz	6 MB	4	35 W
Intel® Xeon® E-2176G Processor*	3.7 GHz	12 MB	6	80 W
Intel® Xeon® E-2278GE Processor*	3.3 GHz	16 MB	8	80 W
Intel® Pentium® Gold G5400T Processor	3.1 GHz	4 MB	2	35 W
Intel® Celeron® G4900T Processor	2.9 GHz	2 MB	2	35 W

<sup>\*</sup> C246 use only



System on Modules

3.5" Embedded Boards

Pico-ITX SBCs

**Embedded Vision Board** 

Mini-ITX Motherboards

ATX Motherboards

Slot CPU Cards

**ARM-based Embedded Boards** 

Smart Display Modules and Smart Kiosk Modules

**PCI Express Cards** 

## Boards and Modules

# 8

## ARM-based Embedded Boards

Axiomtek provides ARM-based computer-on-modules and single board computers for smart energy, intelligent automatic factory, and smart transportation applications. These highly reliable and stable motherboards support package services for Android/Linux operating systems, providing a turnkey solution for customers to build up their ARM-based system solutions easily and efficiently. With professional NXP platform expertise and extensive board design experience, Axiomtek provides the highest quality and flexibility in board ODM selection.

	Selection Guide		91
NEW	SCM180	SMARC v2.0 SoM with i.MX8M Quad/Dual 1.5 GHz/1.3 GHz (Industrial) SoC, 4GB RAM, 64GB eMMC, CAN, MIPI CSI/DSI and HDMI 2.0	92
	Q7M120	Qseven v2.0 SoM with iMX6 Quad/DualLite 800 MHz (Industrial) SoC, 1GB RAM, 4GB eMMC, GbE LAN, Audio and CAN	93
	SCM120	SMARC v1.0 SoM with iMX6 Quad/DualLite 800 MHz (Industrial) SoC,	94

## **ARM-based Embedded Boards**

#### Selection Guide







Features Wodels	SCM180	Q7M120	SCM120
Form Factor	SMARC v2.0	Oseven v2.0	SMARC v1.0
CPU Level	ARM Cortex™-A53	ARM Cortex™-A9 CPU 800 MHz/ 1 GHz	ARM Cortex™-A9 CPU 800 MHz/ 1 GHz
CPU Socket	Onboard	Onboard	Onboard
Core Logic Chipset	SoC integrated	SoC integrated	SoC integrated
Memory Type	LPDDR4-1866 on board	DDR3-1600 onboard	DDR3-800/1066 onboard
Max. DRAM Capacity	4GB	1GB	1GB
RTC	Battery on the baseboard is required	Battery on the baseboard is required	Battery on the baseboard is required
Watchdog Timer	255 levels, 1 to 255 sec./min.	255 levels, 1 to 255 sec./min.	255 levels, 1 to 255 sec./min.
Storage	eMMC flash 8GB	eMMC flash 4GB	eMMC flash 4GB
Digital I/O	12 x GPIO	8 x GPIO	8 x GPIO
ТРМ	N/A	N/A	N/A
I/O Interface	2 x PCle 1 x USB 2.0, 1 x OTG Client 2 x USB 3.0 1 x   <sup>2</sup> S 2 x CANBus 3 x   <sup>2</sup> C 2 x COM (TX/RX/RTS/CTS) 1 x COM (TX/RX) 1 x COM (TX/RX for console debug) 1 x HDMl 2 x MIPI CSI2 v1.1 (2 and 4 lane) 1 x QSPI with 2 chip select 1 x SPI with 2 chip select 1 x MIPI DSI 4 lanes or Dual Channel LVDS	1 x PCle 1 x USB 2.0 1 x OTG Client 1 x I <sup>2</sup> S 2 x CANBus 3 x I <sup>2</sup> C 4 x COM (TX/RX/RTS/CTS) 1 x Console 1 x HDMI 1 x 24-bit TTL Signal 1 x SPI 2 x Signal channel 24-bit LVDS	1 x PCle 1x USB 2.0, 1 x OTG Client 1 x I²S 2 x CANBus 4 x I²C 3 x COM(TX/RX/RTS/CTS) 1 x Console 1 x MIPI v1.0 (2 lanes) 1 x PCAM 8-bit 1 x HDMI 1 x 24-bit TTL Signal 2 x Signal channel 24-bit LVDS 1 x SPI
Ethernet	1 x 10/100/1000 Mbps Ethernet	1 x 10/100/1000 Mbps Ethernet	1 x 10/100/1000 Mbps Ethernet
Power Input	+3V to +5.25V DC-in	+5V ± 5% DC-in	+5V ± 5% DC-in
os	Linux Kernel	Linux Kernel 3.0.35	Linux Kernel 3.0.35
Operating Temperature	Commercial: 0°C to +70°C (-32°F to +158°F) Industrial: -40°C to +80°C (-40°F to +176°F)	-40°C to +85°C (-40°F to 185°F)	-40°C to +85°C (-40°F to 185°F)
Relative Humidity	10% - 85%, non-condensing	10% - 95%, non-condensing	10% - 95%, non-condensing

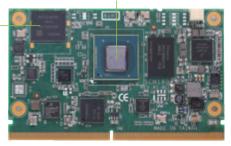


SMARC v2.0 SoM with i.MX8M Quad/Dual 1.5 GHz/1.3 GHz (Industrial) SoC, 4GB RAM, 64GB eMMC, CAN, MIPI CSI/DSI and HDMI 2.0

#### **Features**

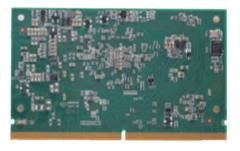
- SMARC 2.0 (82 x 50 mm)
- Ultra-Low Power i.MX8M Dual/Quad A53 Core
- Single M4 Core
- HDMI 2.0a up to 4K
- MIPI DSI or dual-channel LVDS
- MIPI CSI
- 10/100/1000 Mbps Ethernet
- USB 3.0, USB OTG
- PCle 2.0
- CAN 2.0B
- Audio





Freescale i.MX8M CPU

▲ Top view



▲ Rear view

#### **Core System**

Processor	Freescale i.MX8M series SoC with Quad/Dual A53
System Memory	Onboard LPDDR4 1GB 3200Mbps, up to 4GB
Operating System	Linux Kernel, Android
Storage	Onboard eMMC 8GB, up to 64GB; or SD Card
Power Requirement	+3V to +5.25V
Dimensions	82 x 50 mm
Board Thickness	1.2 mm ± 0.1 mm
Operating Temperature	Commercial: 0°C to +70°C (-32°F to +158°F) Industrial: -40°C to +80°C (-40°F to +176°F)

#### I/O

Graphics	1 x MIPI DSI 4 Lane; or Dual Channel LVDS
	1 x HDMI 2.0; or DP 1.3
Camera	2 x MIPI CSI2 v1.1 (2 and 4 lane)
Ethernet	1 x 10/100/1000 Mbps Ethernet
USB	1 x USB 2.0
	1 x OTG client
	2 x USB 3.0
COM	2 x COM with TX/RX/RTS/CTS
	2 x RX/TX (1x Debug Console)
$I^2C$	3 x I <sup>2</sup> C interface
QSPI/SPI	1 x QSPI with 2 chip select
	1 x SPI with 2 chip select
Audio	1 x l²S
CAN	2 x CAN 2.0B
GPIO	12 x GPIO

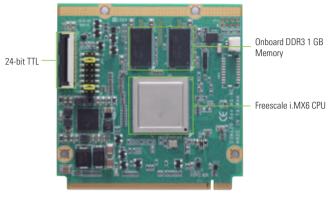
Standard	
SCM180-Dual-2G-I	Industrial SMARC v2.0 module Freescale i.MX8M SoC Dual A53, 1.3GHz, 2GB RAM, 8GB eMMC, CAN, and HDMI 2.0
SCM180-Dual-2G-C	Commercial SMARC v2.0 module Freescale i.MX8M SoC Dual A53, 1.5GHz, 2GB RAM, 8GB eMMC, CAN, and HDMI 2.0
SCM180-Quad-2G-I	Industrial SMARC v2.0 module Freescale i.MX8M SoC Quad A53, 1.3GHz, 2GB RAM, 8GB eMMC, CAN, and HDMI 2.0
SCM180-Quad-4G-I	Industrial SMARC v2.0 module Freescale i.MX8M SoC Quad A53, 1.3GHz, 4GB RAM, 8GB eMMC, CAN, and HDMI 2.0
SCM180-Quad-4G-C	Commercial SMARC v2.0 module Freescale i.MX8M SoC Quad A53, 1.5GHz, 4GB RAM, 8GB eMMC, CAN, and HDMI 2.0
7118S180000E	SCM180 heatsink
7128S180000E	SCM180 heatspreader

## Q7M120

Oseven v2.0 SoM with iMX6 Quad/DualLite 800 MHz (Industrial) SoC, 1GB RAM, 4GB eMMC, GbE LAN, Audio and CAN

#### **Features**

- Qseven v2.0 (70 x 70 mm)
- Ultra low power consumption Cortex<sup>™</sup>-A9
- 2 CAN
- 24-bit TTL signal
- LVDS/HDMI 1080P
- 10/100/1000 Mbps Ethernet
- Linux 3.0.35/Android 4.3
- Audio



▲ Top view

#### **Core System**

Processor	Freescale i.MX6 Series SoC with Quad/DualLite/Solo ARM Cortex™-A9 CPU 800 MHz/1 GHz (only Solo)
System Memory	Onboard DDR3-1600, up to 1GB
OS	Linux kernel 3.0.35, Android 4.3
Storage	eMMC flash 4GB, SDIO interface SATA interface (Quad cores CPU)
RTC	Battery on the Baseboard is required
Power Requirement	+5V, 1A
Dimensions	70 x 70 mm
Board Thickness	1.2 mm ± 0.1mm
Operating Temperature	-40°C to +85°C (-40°F to +185°F)
Operation Humidity	10% - 95%, non-condensing

#### 1/0

Graphics	1 x 24-bit TTL signal 2 x Signal channel 24-bit LVDS 1 x HDMI 1080P
Ethernet	1 x 10/100/1000 Mbps Ethernet
Audio	Mic-in/Headphone
COM	4 x COM with TX/RX/RTS/CTS
	(one with 3.3V TTL level)
	1 x Console port
USB	1 x USB 2.0
	1 x OTG client
I <sup>2</sup> C	3 x I <sup>2</sup> C Interface
SPI	1 x SPI
CAN	2 ports as 2.0B protocol-compatible Controller
	Area Network (CAN) interfaces
GPIO	8 button-detect
PCIe	1 x PCle x1



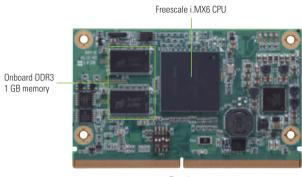
▲ Rear view

Standard	
Q7M120- DualLite-I (P/N:E38Q120100)	Oseven v2.0 module with Freescale iMX6 DualLite 800 MHz (industrial) SoC, 1GB RAM, 4GB eMMC, 1 GbE LAN, audio, and CAN
Q7M120- Quad-l (P/N:E38Q120102)	Qseven v2.0 module with Freescale iMX6 Quad 800 MHz (industrial) SoC, 1GB RAM, 4GB eMMC, 1 GbE LAN, audio, and CAN
Optional	
Q7M120-Quad-T	Oseven v2.0 module with Freescale iMX6 Quad 1 GHz
	(automotive) SoC, 1GB RAM, 4GB eMMC, 1 GbE LAN, audio, and CAN
Q7M120-120-EVK DualLite-I	
	and CAN
DualLite-I	and CAN Evaluation kit board

SMARC v1.0 SoM with iMX6 Quad/DualLite 800 MHz (Industrial) SoC, 1GB RAM, 4GB eMMC, GbE LAN, Audio, CAN, MIPI and PCAM

### **Features**

- SMARC 1.0 (82 x 50 mm)
- Ultra low power consumption Cortex<sup>™</sup>-A9
- 2 CAN 2.0B
- 24-bit TTL signal
- LVDS/HDMI 1080P
- 10/100/1000 Mbps Ethernet
- Linux3.0.35/Android 4.3
- Audio

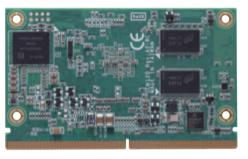


#### **Core System**

Processor	Freescale i.MX6 series SoC with Quad/DualLite ARM Cortex™-A9 CPU 800 MHz
System Memory	Onboard DDR3-1600, up to 1GB
OS	Linux kernel 3.0.35, Android 4.3
Storage	eMMC flash 4GB, SDIO interface, SATA interface (only quad support)
RTC	Battery on the Baseboard is required
Power Requirement	+3V to +5.25V
Dimensions	82 x 50 mm
Board Thickness	1.2 mm ± 0.1 mm
Operating Temperature	-40°C to +85°C (-40°F to +185°F)
Operation Humidity	10% - 95%, non-condensing

#### 1/0

Graphics	1 x 24-bit TTL signal
	1 x Dual channel 24-bit LVDS
	1 x HDMI 1080P
Fthernet	1 x 10/100/1000 Mbps Ethernet
Audio	Mic-in/Headphone
COM	3 x COM with TX/RX/RTS/CTS
	1 x Console port
USB	1 x USB 2.0
	1 x OTG client
I <sup>2</sup> C	4 x I <sup>2</sup> C interface
SPI	1 x SPI
CAN	2 x CAN
GPI0	8 x GPIO
PCle	1 x PCle
Camera	1 x MIPI v1.0, 2 x Lane
	1 x PCAM 8-bit



▲ Rear view

#### **Ordering Information**

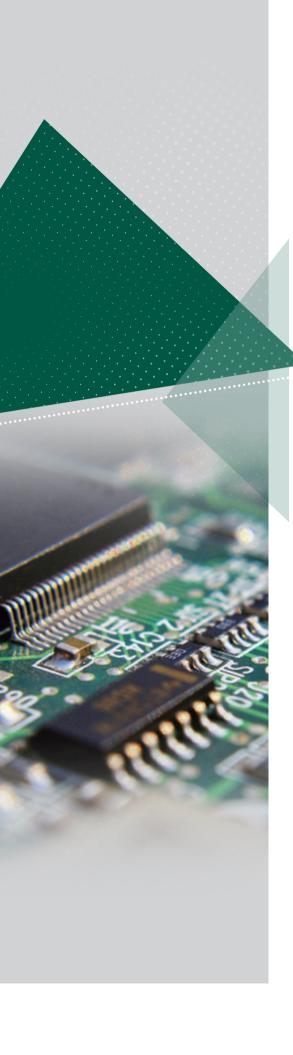
SCM120-120-EVK Quad-I Evaluation kit board

Standard		
SCM120-DualLite-I	SMARC v1.0 module with Freescale iMX6 DualLite 800 MHz (industrial) SoC, 1GB Memory, 4GB eMMC, 1 GbE LAN, audio, and CAN	
SCM120-Quad-I	SMARC v1.0 module with Freescale iMX6 Quad 800 MHz (industrial) SoC, 1GB Memory, 4GB eMMC, 1 GbE LAN, audio, CAN and SATA	
Optional		
SCM120-120-EVK DualLite-I	Evaluation kit board	

SCM120 heatspread (-40°C to +70°C)

Heatsink (-40°C to +75°C)

5078S120100E 5078Q120200E



System on Modules

3.5" Embedded Boards

Pico-ITX SBCs

**Embedded Vision Board** 

Mini-ITX Motherboards

ATX Motherboards

Slot CPU Cards

**ARM-based Embedded Boards** 

Smart Display Modules and Smart Kiosk Modules

**PCI Express Cards** 

## Boards and Modules

9

## **Smart Display Modules**

Axiomtek's advanced smart display module and smart kiosk module have been chosen by many industry- leading retail stores and grocery chains, to enhance customer shopping experience and improve store operations. The excellent performance of Module-series which can be integrated into the sleekest all-in-one designs offers customers speed, convenience and privacy through self-checkout terminals in delivering a comfortable shopping environment.

Selection Guide	<u> </u>	97
SDM500L	Intel® Smart Display Module Large (Intel® SDM-L) with 8th Gen Intel® Core™ i7/i5/i3. Intel® Celeron® Processor. HDMI and LAN	98
SDM300S	Intel® Smart Display Module Small (SDM-S) with Intel® Pentium®	99

## **Smart Display Modules**

#### Selection Guide



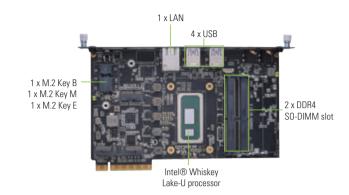


Features\Models	SDM500L	SDM300S
Form Factor	Intel® SDM Large	Intel® SDM Small
CPU Level	8th gen Intel® Core™ i7/i5/i3 processor, 15W	Intel® Pentium® N4200 & Celeron® N3350
CPU Socket	Onboard	Onboard
Core Logic Chipset	SoC integrated	SoC integrated
Memory Type	Dual-channel DDR4-2400 SO-DIMM	LPDDR4
Max. DRAM Capacity	32GB	4GB/8GB (optional)
Cache RAM Capacity	SoC integrated	SoC integrated
BIOS	AMI UEFI BIOS	AMI UEFI BIOS
Watchdog Timer	255 levels, 1 to 255 sec./min.	255 levels, 1 to 255 sec./min.
SSD	1 x M.2 Key M slot for storage 1 x M.2 Key B slot for storage	32GB (optional)/64GB eMMC onboard
Golden Finger	PCIe x8 (98-pin) 1 x USB 3.0 1 x HDMI 2.0 1 x DisplayPort 1.2 1 x Serial TX/RX 2 x I°C	PCle x8 (98-pin) 1 x USB 3.0 1 x HDMI 1.4 1 x DisplayPort 1.2 1 x Serial TX/RX 2 x I°C
I/O Ethernet	1 x 10/100/1000 Mbps with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM	1 x 10/100/1000 Mbps with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM
Others	4 x USB 3.0 1 x USB type C(Option) 1 x Mic-in 1 x Line-out 1 x HDMI 1.4 ( Option )	2 x USB 3.0
SMBus	Yes	Yes
Expansion Interface	1 x M.2 E key for Wi-Fi/BlueTeeth 1 x M.2 Key M slot for storage 1 x M.2 Key B slot for storage	1 x M.2 Key E 1 x PCle x1 thru SDM edge connector
Power Input	Through SDM edge connector +12V & +3.3VBS	Through SDM edge connector +12V & +3.3VBS
Battery	Lithium 3 V/220 mAH	Lithium 3 V/220 mAH
Operating Temperature	0°C to 60°C (+32°F to +140°F) -20 to 70 °C (-20°F to +158°F) (optional)	0°C to +55°C (+32°F to +131°F)
Relative Humidity	10% to 95%, non-condensing	10% to 95%, non-condensing
EMI Compliance	CE	CE

Intel® Smart Display Module Large (Intel® SDM-L) with 8th Gen Intel® Core™ i7/i5/i3, Intel® Celeron® Processor, HDMI and LAN

#### **Features**

- Intel® Smart Display Module (Intel® SDM) specification
- 8th gen Intel® Core™ i7/i5/i3 or Intel® Celeron® processor (Whiskey Lake-U)
- 2 DDR4-2400 SO-DIMM for up to 32G of memory
- M.2 Key E slot
- M.2 Key M slot
- M.2 Key B slot
- One HDMI, four USB 3.0, and LAN
- Supports Intel® AMT 12







▲ Side View

▲ Rear View











#### **Core System**

CPU	Oth can latel@ CaraTM i7 /iE /i2 as latel@ Calaran@ assesses
GPU	8th gen Intel® Core™ i7/i5/i3 or Intel® Celeron® processor (Whiskey Lake-U)
System Memory	2 x 260-pin DDR4-2400 SO-DIMM, up to 32G
Chipset	SoC integrated
BIOS	AMI
SSD	1 x M.2 Key B 2242 slot
	1 x M.2 Key M 2280 slot
WatchDog Timer	255 levels, 1 to 255 sec.
Expansion Interface	1 x M.2 Key E 2230 slot for Wi-Fi/BT
Battery Lithium	Lithium 3V/220 mAH
Power Input	Through SDM golden finger
	+12V & +3.3VBS
Dimensions	175 x 100 mm
Weight (net/gross)	252g/340g
Board Thickness	1.6 mm
Operating Temperature	0°C to 60°C (+32°F to +140°F)
	-20 to 70 °C (-20°F to +158°F) (optional)
Humidity	10% - 95% relative humidity, non-condensing

#### 1/0

SDM Golden Finger	1 x USB 3.0 1 x HDMI 2.0 1 x DisplayPort 1.2 1 x Serial TX/RX 2 x I <sup>2</sup> C
Ethernet	1 x 10/100/1000 Mbps with Intel® i219; supports Wake-on- LAN (Core™ i5 and i7 support vPro function)
Audio	HD codec audio as Mic-in/Line-out with Realtek ALC662
USB	1 x USB type C (optional)
Display	1 x HDMI 1.4 (optional)

#### **Display**

Chipset	Intel® gen 9 HD graphics
Display Interface	1 x HDMI 1.4 (4096 x 2160 @ 30p) (rear I/O, optional) 1 x DisplayPort 1.2 (4096 x 2304 @ 60p) (golden finger) 1 x HDMI 2.0 (4096 x 2160 @ 60p) (golden finger)

#### **Packing List**

1 x Quick installation guide

#### Ordering Information

Standard	
SDM500L-8145U w/o HDMI (P/N: E38X500108)	SDM-L module with Intel® Core™ i3-8145U processor with 2 S0-DIMM, 2 M.2 SSD, 1 LAN, 4 USB 3.0, 1 Mic-in, 1 Line-Out
SDM500L-8145U (P/N: E38X500109)	SDM-L module with Intel® Core™ i3-8145U processor with 2 SO-DIMM, 2 M.2 SSD, 1 LAN, 4 USB 3.0, 1 Mic-in, 1 Line-Out, 1 HDMI, 1 USB Type-C
SDM500L-8265U w/o HDMI (P/N: E38X500109)	SDM-L module with Intel® Core™ i5-8265U processor with 2 S0-DIMM, 2 M.2 SSD, 1 LAN, 4 USB 3.0, 1 Mic-in , 1 Line-Out
SDM500L-8265U (P/N: E38X500110)	SDM-L module with Intel® Core™ i5-8265U processor with 2 SO-DIMM, 2 M.2 SSD, 1 LAN, 4 USB 3.0, 1 Mic-in , 1 Line-Out, 1 HDMI, 1 USB Type-C
SDM500L-4305UE w/o HDMI (P/N: E38X500107)	SDM-L module with Intel® Celeron-4305UE processor with 2 S0-DIMM, 2 M.2 SSD, 1 LAN, 4 USB 3.0, 1 Mic-in , 1 Line-Out
Optional	
8812T1500A0E	Wi-Fi Kit
M.2 SSD	M.2 2280-B-M 64 to 256GB

4GB to 32GB

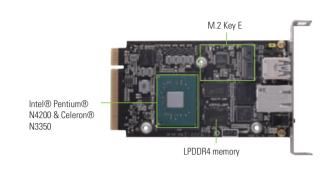
DDR4 SO-DIMM

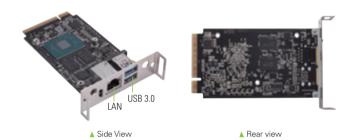
### **SDM300S**

Intel® Smart Display Module Small (Intel® SDM-S) with Intel® Pentium® Processor N4200 and Celeron® Processor N3350

#### **Features**

- Intel® Smart Display Module (Intel® SDM) specification
- Intel® Pentium® processor N4200 & Celeron® processor N3350 (Apollo Lake)
- 4GB LPDDR4 memory onboard (8GB optional)
- 64GB eMMC onboard (32G optional)
- One M.2 Key E 2230 slot
- Two USB 3.0 and one GbE LAN
- Small design for easy integration into slim displays
- Optimized for digital signage, public kiosks, professional monitors, point-of-sale
- Projections for magic mirrors, beside terminals, hospitality, and more















#### **Core System**

CPU	Intel® Pentium® processor N4200, Celeron® processor N3350 onboard
System Memory	LPDDR4 4GB memory onboard (8GB optional)
Chipset	SoC integrated
SSD	64GB eMMC onboard (32G optional)
WatchDog Timer	255 levels, 1 to 255 sec./min.
Expansion Interface	1 x M.2 Key E 2230 slot
Battery Lithium	Lithium 3 V/220 mAH
Power Input	Through SDM edge connector +12V & +3.3VBS
Dimensions	100 x 60 mm
Weight (net/gross)	146g/226g
Board Thickness	1.6 mm
Operating Temperature	0°C to +55°C (+32°F to +131°F)
Humidity	10% to 95% relative humidity, non-condensing

#### 1/0

SDM Golden Finger	Standard PCle x8 (98-pin) 1 x USB 3.0 1 x HDMI 1.4 1 x DisplayPort 1.2 1 x Serial TX/RX 2 x I <sup>2</sup> C
Ethernet	1 x 10/100/1000 Mbps with Intel® i211-AT; supports Wake-on-LAN, PXE Boot ROM
USB	2 x USB 3.0

#### **Display**

Chipset	Intel® HD Graphics 505/500 Supports Gfx - DX12.0, OCL 2.0, OGL 4.3
Display Interface	1 x DisplayPort 1.2 (4096 x 2304 @ 60p)
(via SDM edge connector)	1 x HDMI 1.4 (3840 x 2160 @ 30p)

#### **Packing List**

1 x Quick installation guide

#### **Ordering Information**

SDM300S-N4200-4GB (P/N: E38X300102)	SDM-S module with Intel® Pentium® processor N4200, onboard DDR4 4GB. EMMC 64GB. 1 LAN . 2 USB 3.0
SDM300S-N3350-4GB (P/N: E38X300100)	SDM-S module with Intel® Celeron® processor N3350, onboard DDR4 4GB, EMMC 64GB, 1 LAN, 2 USB 3.0

#### **Optional**

8812T1500A0E Wi-Fi Kit

# 1 O PCI Express Cards

Axiomtek develops a full spectrum of add-on cards for machine vision and data acquisition applications to help customers accelerating their design and reducing development costs.

#### Machine Vision

	AX92320	2-port/4-port PCI Express GigE Frame Grabber Card	101
	AX92321	4-port/8-port USB 3.0 PCI Express Card with	102
		4 Independent Host Controllers	
	AX92322	2-port/4-port GigE PCI Express Card	103
NEW	AX92324	2-port 10GbE PoE PCI Express Card	104
	AX92351	32-CH/64-CH Isolated Digital I/O PCI Express Card with Digital Filter	105
NEW	AX92352	2-CH Encoder Card with Real-Time Trigger I/O	106
NEW	AX92353	4-CH Lighting Control Module	107

## Boards and Modules

### AX92320

#### 2-port/4-port PCI Express GigE Frame Grabber Card

#### **Features**

- PCI Express x4 compliant
- 2 or 4 independent Gigabit PoE ports
- Supports 9.5KB Jumbo Frame and IEEE 1588
- Compliant with IEEE802.3at to deliver 30W at 54 VDC
- Up to 20/120W PoE power from PCle 6-pin ATX power connector
- 0°C to +60°C operating temperature range
- PoE power management software
- Supports LAN port smart on/off





#### Introduction

The AX92320 PoE (Power over Ethernet) card supports 2 or 4 independent Gigabit PoE ports, providing up to 30W at 54 VDC of power per port. The AX92320 can fit in the PCI Express slot of any multi-channel vision control systems. It is designed to help customers develop and deploy machine vision and surveillance applications. Applications will greatly benefit through reduce cost, simpler installation and lower maintenance. Moreover, the AX92320 has a wide operating temperature of 0°C to 60°C (32°F to 140°F), making it suitable to be used in most severe environments.

#### **Specifications**

Ethernet Communications	
Ethernet Port	2 or 4 GbE LANs by Intel® i210-AT controller, support 9.5KB jumbo frame and IEEE 1588
PoE Capability	IEEE 802.3at compliant, each port delivers up to 30W at 54 VDC
Speed	10/100/1000 Mbps
Port Connector	8-pin RJ-45
<b>Power Requirements</b>	
Input Voltage	12 VDC or 24 VDC
Overload Protection	Yes
Connection	6-pin ATX power connector
Output PoE Power	Max. 20W w/ PCIe slot Max. 120W w/ 6-pin ATX power connector
Power Requirements	Power from PCle slot (max. 20W PoE power output) 2.1A @ +12V 1.2A @ +3.3V Power from ATX power connector (max. 120W PoE power output) 12A @ +12V or 6A @ +24V 1.2A @ +3.3V (from PCle slot)
<b>General Specifications</b>	3
Bus Type	PCI Express x4
Operating Temperature	0°C to +60°C (+32°F to +140°F) (with air flow)
Storage Temperature	-20°C to +80°C (-4°F to +176°F)
Humidity	10% to 95%, non-condensing
Dimensions (W x D)	168 x 111 mm
EOS Support	Windows® 7/10 (32/64-bit)

#### **Ordering Information**

AX92320-2GbE (P/N: E392320103)	2-port PCI Express GigE frame grabber card
AX92320-4GbE (P/N: E392320100)	4-port PCI Express GigE frame grabber card
PoE Power Cable (P/N: 59492320700E)	4P 3.0/6P 4.2, L=10 cm (only be used with IPC962, IPC964 $\&$ IPC974)
Power Cable (P/N: 59492320730E)	6-pin ATX to Molex 4-pin power cable, L=150 mm (used for ATX power)

#### **Packing list**

Standard	
User's manual, utility and I/O bracket	

#### 4-port/8-port USB 3.0 PCI Express Card with 4 Independent Host Controllers

#### **Features**

- Four or eight USB 3.0 ports
- Four independent USB 3.0 host controllers
- 900 mA/1500 mA max. per port configurable via jumper
- Compliant with USB 3.0 Rev.1.0 and Intel® xHCl Rev.1.0
- PCI Express x4 interface
- Operating temperature from 0°C to 70°C
- Supports Windows® 7/10
- Supports each port's power on/off via software settings



#### Introduction

The AX92321 has two versions - 4-port or 8-port - for users to choose from for various applications. The 4-port AX92321 has four independent Renesas µPD720202 USB 3.0 host controllers to offer up to 5 Gbps bandwidth per port, even when four ports are used simultaneously. The AX92321 can be configured to support maximum 900mA or 1500mA current output to supply stable power for various external USB devices. The AX92321 also support power on/off control for each port via software settings. This USB 3.0 PCI Express card is able to operate under a wide operating temperature range of 0°C to 70°C, allowing it to be used in harsh environments for vision and factory automation applications.



USB	
Channels	4 x USB 3.0 type A connector (AX92321-4U) 8 x USB 3.0 type A connector (AX92321-8U)
Controller	4 x Renesas μPD720202 host controllers Compliant with USB 3.0 specification and Intel® xHCl specification, revision 1.0
Max. Current	900/1500 mA maximum per port configurable via jumper settings
Data Transfer Rate	Super speed (5.0 Gbps)/high speed (480.0 Mbps)/full speed (12.0 Mbps)/low speed (1.5 Mbps)

#### General

Bus Type	PCI Express x4 Gen2
Power Requirements	Power from PCle slot (total power max. 20W USB power output) 2.1A@ +12V 0.8A @ +3.3V Power from ATX power connector 5A @ +12V or 2.5A @ +24V 0.8A @ +3.3V (from PCle slot) Power from 4P Molex power connector 5A @ +12V 0.8A @ +3.3V (from PCle slot)
Dimensions	168 mm (6.6") x 107 mm (4.2")
Power Connector	4-pin Molex connector 6-pin ATX power connector
Operating Temperature	0°C to +70°C (+32°F to +158°F)
Storage Temperature	-20°C to +80°C (-4°F to +176°F)
Operating Humidity	10 - 95% RH, non-condensing
Certifications	CE compliance
OS	Windows® 7/10 (32/64-bit)
Software	Each port's power on/off is controlled by software



AX92321-4U (P/N: E392321101)	4-port USB 3.0 PCI Express card with 4 independent USB 3.0 host controllers
AX92321-8U (P/N: E392321100)	8-port USB 3.0 PCI Express card with 4 independent USB 3.0 host controllers
For IPC962/964 Riser Card Power Connector (P/N: 59492320700E)	Power cable 4P3.0/6P4.2, L=100 mm

## AX92322

#### 2-port/4-port GigE PCI Express Card

### Features

- 2 or 4 independent Intel® Ethernet Controller i210-AT
- Supports 9.5KB Jumbo Frame and IEEE 1588
- Supports two or four GbE LAN ports
- PCI Express x4 interface
- Operating temperature from 0°C to 70°C



#### **Specifications**

GigE	
Host Bus	4-lane Gen2 PCle interface, compliant with PCl Express base specification, revision 2.0
Channels	2/4 ports
Ethernet Chip	2 or 4 x Intel® Ethernet Controller i210-AT Supports 9.5KB Jumbo Frame and IEEE 1588
Data Transfer Rate	10/100/1000 Mbps

#### **General Specifications**

donoral opoomoditions	•
Bus Type	PCI Express x4
Power Consumption	Power from PCIe slot 1.73A@+3.3V max.
Dimensions	125 x 111 mm
I/O Connector	RJ-45
Operating temperature	0°C to +70°C (+32°F to +158°F)
Storage temperature	-20°C to +80°C (-4°F to +176°F)
Operating Humidity	10 - 95% RH, non-condensing
OS	Windows® 7/10 (32/64-bit), Linux
Certification	CE

AX92322-2GbE (P/N: E392322101)	2-port GigE PCI Express card
AX92322-4GbE (P/N: E392322100)	4-port GigE PCI Express card



#### 2-port 10GbE PoE PCI Express Card

#### **Features**

- Intel® Ethernet Controller X550-AT2, up to 10 Gbps data rate
- Supports 15.5KB Jumbo Frame and IEEE 1588
- Compliant with IEEE802.3at to deliver 25.5W per port
- PCI Express x4 compliant
- PoE power on/off via Power Manager software and API
- Operating temperature range from 0°C to 55°C





#### Introduction

The AX92324 is a dual-port 10GbE PEI Express card based on the Intel® Ethernet Controller X550-AT2. To meet the demands of the next-generation 10GbE cameras with high resolution and high-speed transmission over one single Ethernet cable, the AX92324 features the combination of 10GbE and IEEE802.3at compliant PoE capabilities. It also supports PoE power on/off and power budget settings via management software or API. The AX92324 is suitable for high bandwidth, high-speed transmission and low latency requirements for machine vision, intelligent surveillance and network applications.

#### **Specifications**

<u> </u>	
Ethernet Communication	ons
Ethernet Port	2 GbE LANs with Intel® X550-AT2 controller; supports 15.5KB jumbo frame and IEEE 1588
PoE Capability	IEEE 802.3at compliant; each port delivers up to 30W at 54 VDC
Data Rate	10Gbps/*5Gbps/*2.5Gbps/1Gbps/100Mbps (*Linux only)
Port Connector	8-pin RJ-45
Power Requirements	
Input Voltage	12 VDC or 24 VDC* (*24VDC ATX power connector is used for Axiomtek's system only)
Overload Protection	Yes
Connection	6-pin ATX power connector
Output PoE Power	Max. 20W w/ PCIe slot Max. 60W w/ 6-pin ATX power connector
Power Requirements	Power from PCle slot (max. 20W PoE power output) 2.1A @ +12V 1.2A @ +3.3V Power from ATX power connector (max. 60W PoE power output) 6A @ +12V or 3A @ +24V 1.2A @ +3.3V (from PCle slot)
General Specifications	<u> </u>
Bus Type	PCI Express x4
Operating Temperature	0°C to +55°C (+32°F to +131°F) (with air flow)
Storage Temperature	-20°C to +80°C (-4°F to +176°F)
Humidity	10% to 95%, non-condensing
Dimensions (W x D)	168 x 111 mm
OS Support	Windows® 7/10, Linux

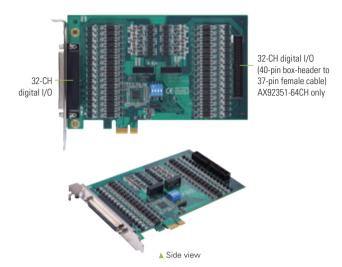
AX92324-PoE (P/N: E392324100)	2-port 10GbE PCle card with PoE
AX92324-w/o PoE (P/N: E392324101)	2-port 10GbE PCle card
PoE Power Cable (P/N: 59492320700E)	4P 3.0/6P 4.2, L=10 cm (only used with IPC962/IPC964/ IPC974)

### AX92351

#### 32-CH/64-CH Isolated Digital I/O PCI Express Card with Digital Filter

#### **Features**

- 16-CH or 32-CH isolated digital input (compatibility: sink and source)
- 16-CH or 32-CH isolated digital output (with output status read back)
- Interrupt capability (smart interrupt)
- Digital filter function
- Supports board ID



#### Introduction

The AX92351 is a 32-CH isolated DI and 32-CH isolated DO card. It comes with DI channels that support both sink and source input types for maximum application flexibility. The AX92351 also integrates digital filter and I/O interrupt (smart interrupt) functions, making it specifically suitable for factory automation, industrial on/off control and switch status sensing

#### **Specifications**

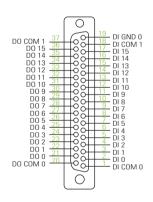
Isolated Digital Input	
Isolation Voltage	2kV
Channels	16 (AX92351-32CH) 32 (AX92351-64CH)
Compatibility	Sink or source, dry or wet contact
Input Voltage	Input high voltage: 10 to 30V Input low voltage: 0 to 3V
Input Impendence	7.5ΚΩ
Interrupt Sources	Interrupt 0 (DI: CH 0-4) and 1 (DI: CH 8-12)
Response Speed	4KHz
Digital Filter	Yes
Isolated Digital Output	
Isolation Voltage	2kV
Channels	16 (AX92351-32CH) 32 (AX92351-64CH)
Compatibility	Sink or Source, Open collector
Output Current	100 mA/+30 VDC for all channels @ 100% duty
Supply Voltage	Max. 30 VDC
Max. Voltage Drop	3.5 VDC @ 100mA
Response Speed	4KHz
Over Current Protection	Yes
<b>General Specifications</b>	
Bus Type	PCI Express x1
Power Requirements	625mA @ +3.3V (Max.) 66mA @ +12V (Max.)
Dimensions	168 x 107 mm
Board ID	Yes, 4-bit
I/O Connector	Female DB37 x1 40-pin box header x1 (AX92351-64CH only)
Operating Temperature	0°C to +60°C (+32°F to +140°F)
Storage Temperature	-20°C to +80°C (-4°F to +176°F)
Humidity	10 to 95% RH, non-condensing
Software Support	
EOS Support	Windows® 7/10 (32/64-bit)
Software compatibility	C#, C/C++, LabVIEW

#### **Digital Filter Table for DI Channels**

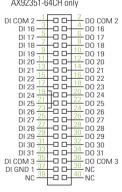
16 stages per DI channel; each channel can be set independently

	etting Digital Setting Digital Data Filter Data Filter Time Time
0 function 4 700us disable	8 3ms 12 7ms
1 100us 5 900us	9 4ms 13 8ms
2 300us 6 1ms	10 5ms 14 9ms
3 500us 7 2ms	11 6ms 15 10ms

37-pin Female Connector (CN1)



40-pin Box-Header (CN2) AX92351-64CH only



#### **Ordering Information**

AX92351-32CH (P/N: E392351102)	32-CH isolated digital I/O with digital filter
AX92351-64CH (P/N: E392351100)	64-CH isolated digital I/O with digital filter (includes one 40-pin box-header to 37-pin female cable)
Accessories	
	37-pin DIN-rail terminal board DM37-AP02
<b>Accessories</b> 5A237AP0200E 594DM373500E	37-pin DIN-rail terminal board DM37-AP02 37-pin D-Sub cable, L=1m WHDM37/1.0

<sup>\*</sup> AX92351-64CH must be used in conjunction with two terminal boards and two D-Sub cables (all boards and cables are optional accessories available for purchase).

37-pin D-Sub cable, L=3m WHDM37/3.0

#### **Packing list**

594DM373520E

Standard	
I/O bracket, 40-pin to DB37 cable (AX92351-64CH only)	



#### 2-CH Encoder Card with Real-Time trigger I/O

#### **Features**

- Synchronizes devices via real-time I/O
- Applied to area scan and line scan applications
- Integrates multiple I/O
  - 2-CH 32-bit incremental quadrature encoder input
  - 4-CH trigger input
  - 4-CH trigger output
  - 8-CH isolated DI, 8-CH isolated DO
- Programmable interrupt functions
- PCI Express x1 compliant





#### Introduction

The AX92352 integrates advanced vision I/O capabilities for machine vision applications, such as synchronizing multiple frame grabbers in line scan and multiple cameras in area scan. It provides 2-CH encoder input with the FIFO function to achieve the tasks of position comparison and linear trigger. Furthermore, it also has trigger I/O with a microsecond-scale real-time control camera to capture images, as well as isolated DIO that can be used with other devices for your vision cases. The AX92352 vision I/O card can fit in the PCI Express slot of any vision control system to simplify the deployment of your machine vision platform.

#### **Specifications**

Isolated Encoder Input	
Channels	2-CH 32-bit incremental quadrature encoder input (A/B/Z)
Туре	Differential or single-ended 5V, 12V open collector
Counter Mode	x1/4, x1/3, x1/2, x1, x2, x4
Input Filter	Programmable de-bounce filter
Frequency Input	Max. 1MHz
Operating Mode	Linear function, FIFO, Position latch
Isolated Trigger Input	
Channels	4-CH
Туре	Sink
Input range	On (Logic 1): 3.3 to 30 VDC Off (Logic 0): 0 to 2 VDC
Response Time	1us (from trigger input to trigger output)
Input Filter	Programmable de-bounce filter
Isolated Trigger Output	
Channels	4-CH
Output Voltage	0 to 30 VDC, sink, open collector
Output Current	Current: max. 100mA per channel
Response Time	1us (from trigger input to trigger output)
Configuration	Derived from 4CH trigger input or encoder input. The user can set the pulse delay time and duration time
Trigger Sources	4CH trigger input/encoder: 4 x Linear function, 2 x FIFO (each channel supports two sources)
Isolated Digital Input	
Channels	8-CH
Туре	Sink/Source
Input Voltage	On (Logic 1): 10 to 30 VDC or dry contact Off (Logic 0): 0 to 3 VDC
Impedance	7.5ΚΩ
Isolated Digital Output	
Channels	8-CH
Output type	Sink, open collector
	onk, open conceter
Supply voltage	5 to 30 VDC

Interrupt	
Sources	Two interrupt sources from DI, Trigger/Latch input, Encode Z phase, FIFO empty, encoder overflow and encoder linear function
General Specifications	•
Bus Type	PCI Express x1
I/O Connector	D-sub 44-pin female connector
Isolation Voltage	2 kVDC
Power Requirements	180mA @ +3.3V (Max.) 120mA @ +12V (Max.)
Dimensions	168 x 100 mm
Board ID	Yes, 4-bit
Operating Temperature	0°C to +70°C (32°F to +158°F)
Storage Temperature	-20°C to +80°C (-4°F to +176°F)
Humidity	10 to 95% RH, non-condensing
Software Support	
EOS Support	Windows® 7/Windows® 10 (32/64bit)
Software Compatibility	C#, C/C++

AX92352 (P/N: E392352100)	2-CH encoder card with real-time trigger I/O
AX92353 (P/N: E392353100)	4-CH lighting control module (this optional module cannot be operating independently, please apply with AX92352)
Accessories	
Accessories 5A244AP1200E	44-pin DIN-rail terminal board DM44-AP12
	44-pin DIN-rail terminal board DM44-AP12 44-pin D-SUB cable, L=1m WHDM44/1.0-6954
5A244AP1200E	•
5A244AP1200E 594DM443500E	44-pin D-SUB cable, L=1m WHDM44/1.0-6954



#### **Features**

- 4-CH independent constant current LED drivers (up to 1 A)
- Supports strobe and trigger mode
- Intensity control by software
- Supports duration and delay time for LED output





▲ Side View

#### **Specifications**

Channels	4-CH
Drive Methods	Current-controlled
Operating Mode	Strobe, Trigger
Output Current	Trigger mode 0.5A per CH Strobe mode 1A per CH
Output Voltage	24 VDC
Duration time	Trigger mode 10ms to 65s Strobe mode 10us to 10ms
Output current step size	50mA by software
I/O Connector	8 pin terminal connector (black)
Power Connector	6-pin ATX power connector
Power Requirements	Trigger mode 60W @12 VDC Strobe mode 120W @12 VDC
Dimensions	151 x 80 mm

#### **Ordering Information**

AX92353	4-CH lighting control module (this optional module cannot be
(P/N: E392353100)	operating independently, please apply with AX92352.)

#### **Packing List**

CN-terminal block 4 x 2, cable (communication with AX92352)

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(REGATA Kiosk) CPU Card, Direct Bonding PCAP, 2D Barcode Scanner,

Thermal Printer and NFC



**Fanless Touch Panel Computers** 

Heavy-duty Fanless Touch Panel Computers

**Stainless Touch Panel Computers** 

**Transportation Touch Panel Computers and Monitors** 

**Industrial Touch Panel Computers** 

**Industrial Touch Monitors** 

**Medical Panel Computers** 

Modular Panel PCs

Self-service Kiosk

# **Industrial Panel PCs**



# Fanless Touch Panel Computers

The GOT100/GOT5000 series features fanless operation, ultra slim and modern ID design. Incorporating the low power consumption Intel® Celeron®/Pentium® processors and an ultra slim housing makes this product line a perfect choice for various applications across many industries.

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GOT110-3	316	10.4" XGA TFT Fanless Touch Panel Computer with Intel® Celeron® Processor N3350	305
GOT115-	319	15" XGA TFT Fanless Touch Panel Computer with Intel® Celeron® Processor N3350 or Intel® Pentium® Processor N4200	307
GOT5103	W-845	10.1" WXGA TFT Fanless Touch Panel Computer with Intel® Celeron® Processor N3060	309
GOT5153	W-845	15.6" WXGA TFT Fanless Touch Panel Computer with Intel® Celeron® Processor N3060	311

# Fanless Touch Panel Computers

Selection Guide







Features Wodels	GOT107W-319	GOT110-316-PoE-PD	GOT110-316
CPU Level Intel® Celeron® N3350, up to 2.4 GHz Intel® Pentium® N4200, up to 2.5 GHz		Intel® Celeron® N3350, up to 2.4 GHz	Intel® Celeron® N3350, up to 2.4 GHz Intel® Pentium® N4200, up to 2.5 GHz
Chipset	SoC integrated	SoC integrated	SoC integrated
System Memory	1 x 204-pin DDR3L SO-DIMM, up to 8GB	1 x 204-pin DDR3L SO-DIMM, up to 8GB	1 x 204-pin DDR3L S0-DIMM, up to 8GB
Display	7" WSVGA TFT LCD, 320 nits	10.4" XGA TFT LCD, 350 nits	10.4" XGA TFT LCD, 350 nits
I/O	1 x RS-232/422/485 1 x RS-232 2 x 10/100/1000 Mbps Ethernet 2 x USB 3.0 1 x Screw type connector for power 1 x ATX/AT selectable switch 1 x Power button	1 x RS-232/472/485 1 x RS-232 2 x 10/100/1000 Mbps Ethernet (one for PoE PD) 4 x USB 3.0 1 x Audio (Line-out) 1 x HDMI 1 x Power button (ATX) 1 x Remote power switch 1 x ATX/AT selectable switch	1 x RS-232/472/485 1 x RS-232 2 x 10/100/1000 Mbps Ethernet 4 x USB 3.0 1 x Audio (Line-out) 1 x HDMI 1 x Screw type connector for power 1 x Power button (ATX) 1 x Remote power switch 1 x ATX/AT selectable switch
Storage	1 x mSATA 1 x MicroSD Card	1 x 2.5" SATA HDD 1 x mSATA	1 x 2.5" SATA HDD 1 x mSATA
Expansion Interface	1 x PCI Express Mini Card slot 1 x M.2 Key E	2 x PCI Express Mini Card slot	1 x PCI Express Mini Card slot 1 x M.2 Key E
Touchscreen	Projected capacitive multi-touch	5-wire resistive touch or projected capacitive multi-touch	5-wire resistive touch or projected capacitive multi-touch
Operating System	Windows® 10 (64-bit)	Windows® 10 (64-bit)	Windows® 10 (64-bit)
Power Supply	100 to 240 VAC, 60W power adapter or DC cable for 24 VDC	Power Device (PD): follows IEEE 802.3at (25.5 W)	100 to 240 VAC, 60W power adapter or adapter cable for 24 VDC
Power Consumption	20.4W	24W	24W
Watchdog Timer	255 levels, 0 to 255 sec.	255 levels, 0 to 255 sec.	255 levels, 0 to 255 sec.
Dimensions (W x D x H)	192 x 37.4 x 145 mm (7.56" x 1.47" x 5.7")	259.43 x 43.5 x 232.73 mm (10.21" x 1.71" x 9.16")	259.43 x 43.5 x 232.73 mm (10.21" x 1.71" x 9.16")
Weight (net/gross)	0.75 kg (1.65 lb)/2.0 kg (4.41 lb)	1.8 kg (3.96 lb)/3 kg (6.61 lb)	1.8 kg (3.96 lb)/3 kg (6.61 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F)	0°C to +50°C (+32°F to +122°F)	0°C to +50°C (+32°F to +122°F)
Certifications	CE, FCC	CE, FCC	CE, FCC







Features Wodels	GOT115-319	GOT5103W-845	GOT5153W-845
CPU Level	Intel® Celeron® N3350, up to 2.4 GHz Intel® Pentium® N4200, up to 2.5 GHz	Intel® Celeron® N3060, up to 2.48 GHz Intel® Pentium® N3710, up to 2.56 GHz	Intel® Celeron® N3060, up to 2.48 GHz
Chipset	SoC integrated	SoC integrated	SoC integrated
System Memory	1 x 204-pin DDR3L SO-DIMM, up to 8GB	1 x 204-pin DDR3L-1600 SO-DIMM, up to 8GB	1 x 204-pin DDR3L-1600 SO-DIMM, up to 8GB
Display	15" XGA TFT LCD, 300 nits	10.1" WXGA TFT LCD, 350 nits	15.6" WXGA TFT LCD, 300 nits
1/0	1 x RS-232/422/485 1 x RS-232 2 x 10/100/1000 Mbps Ethernet 2 x USB 3.0 2 x USB 2.0 1 x Audio (Line-out) 1 x Screw type connector for power 1 x Power button (ATX) 1 x Remote power switch 1 x ATX/AT selectable switch	1 x RS-232/422/485 1 x RS-232 2 x 10/100/1000 Mbps Ethernet 2 x USB 2.0 2 x USB 3.0 1 x Audio (Line-out) 1 x HDMI 1 x Switch for power on/off 1 x AT/ATX mode selection switch	1 x RS-232/422/485 1 x RS-232 2 x 10/100/1000 Mbps Ethernet 2 x USB 2.0 2 x USB 3.0 1 x Audio (Line-out) 1 x HDMI 1 x Switch for power on/off 1 x AT/ATX mode selection switch
Storage	1 x 2.5" SATA HDD 1 x mSATA 1 x MicroSD card	1 x Half-slim SATA SSD (optional) 1 x mSATA	1 x mSATA 1 x 2.5" SATA HDD (AC version only)
Expansion Interface	1 x PCI Express Mini Card slot 1 x M.2 Key E	2 x PCI Express Mini Card slot	2 x PCI Express Mini Card slot
Touchscreen	5-wire resistive touch or projected capacitive multi-touch	Projected capacitive multi-touch	5-wire resistive touch or projected capacitive multi-touch
Operating System	Windows® 10 (64-bit)	Windows® 10, Windows® 8.1, WE8S, Windows® 7, WES 7	Windows® 10, Windows® 8.1, WE8S, Windows® 7, WES 7
Power Supply	100 to 240 VAC, 60W power adapter or DC cable for 24 VDC	24 VDC 100 to 240 VAC, 60W power adapter	DC version: 9 to 36 VDC with over-current protection fuse AC version: 100 to 240 VAC-DC, 60W power adapter
Power Consumption	28.8W	40.32W	30W
Watchdog Timer	255 levels, 0 to 255 sec.	255 levels, 0 to 255 sec.	255 levels, 0 to 255 sec.
Dimensions (W x D x H)	329.7 x 50 x 306 mm (13" x 2" x 12")	260.8 x 38 x 194.1 mm (10.27" x 1.50" x 7.65")	394.2 x 57 x 257.2 mm (15.53" x 2.25" x 10.13")
Weight (net/gross)	3.2 kg (7.1 lb)/4.8 kg (10.6 lb)	1.08 kg (2.38 lb)/2.18 kg (4.8 lb)	3.0 kg (6.61 lb)/4.5 kg (9.92 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F)	0°C to +50°C (+32°F to +122°F)	0°C to +50°C (+32°F to +122°F)
Certifications	CE, FCC	CE, FCC	CE, FCC

## GOT107W-319

7" WSVGATFT Fanless Touch Panel Computer with Intel® Celeron® Processor N3350 or Intel® Pentium® Processor N4200

## **Features**

- 7" WSVGA TFT LCD display with LED backlight
- Fanless design with Intel® Celeron® processor N3350 or Intel® Pentium® Processor N4200
- 2 GbE LAN, 2 USB and 2 COM ports
- Plastic and IP65-rated front bezel
- External AT/ATX mode selection switch
- Easy access storage & RAM design
- Supports panel mount, wall mount, VESA arm and desktop stand
- RS-232/422/485 with RI/5V/12V selectable by BIOS
- Programmable OSD function key

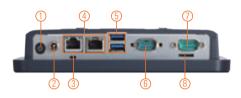








- 1. Power LED 2. HDD LFD
- 3. Brightness adjust +/-
- 4. Display on/off
- 5. Volume adjust +/-



- 1. Power button
- 2. Screw connector for adapter
- 3. AT/ATX switch
- 4. 2 x LAN
- 5. 2 x USB 3.0
- 6. 1 x RS-232/422/485
- 7. 1 x RS-232
- 8. Micro SD card slot
- 9. Speaker











#### Introduction

The GOT107W-319 is a 7" fanless touch panel computer. In response to market demand, this panel computer is a cost effective solution. It adopts a modern, super sleek and fanless design and is equipped with the Intel® Celeron® processor N3350 or Pentium® processor N4200. For wireless network connection, the GOT107W-319 offers one PCI Express Mini Card slot and one M.2 Key E for wireless module. By just plugging in the WLAN card, customers can have instant access to wireless LAN/GPRS/GSM/4G environments

#### Super Slim Design

The GOT107W-319 is a super slim touch panel computer for space-limited applications.

#### **Support Front Membrane Keys**

The GOT107W-319 has 5 membrane keys on the front panel which allows users to adjust the LCD on/off, LCD brightness and volume setting easily.

#### **Aluminum Back Chassis with Excellent Thermal Solution**

With Axiomtek's patent for plastic plus aluminum mechanism design, the GOT107W-319 can dissipate the heat easily and keep the system operation stable.

Front Bezel	IP65, NEMA 4 rugged protection, plastic front bezel		
LCD Panel	Display Type	7" WSVGA TFT LCD with LED	
		backlight	
	Brightness (cd/m²)	320 nits	
	Resolution	1024 x 600	
	Viewing Angel (H/V)	145°/150°	
Main System	CPU	Intel® Celeron® processor N3350	
		2 cores (up to 2.40 GHz)	
		Intel® Pentium® Processor N4200	
		4 cores (up to 2.5 GHz)	
	System Memory	1 x 204-pin DDR3L-1600 SO-DIMM,	
		up to 8GB	
	BIOS	AMI UEFI BIOS	
	Storage	1 x mSATA (default storage)	
		1 x MicroSD card	
	Watchdog Timer	255 levels, 0 to 255 sec.	
	Onboard Graphics	Integrated in Intel® GFX	

-	
I/O Connector	1 x RS-232/422/485
	1 x RS-232
	2 x 10/100/1000 Mbps Ethernet
	2 x USB 3.0
	1 x Screw type connector for power
	1 x Power button
	1 x AT/ATX switch
Expansion Interface	1 x M.2 Key E for wireless module
	1 x Full-size PCI Express Mini Card slot
Touchscreen	Projected capacitive multi-touch
Power Supply	DC version: 9 to 24 VDC with adapter cable
Power Consumption	20.4W
Dimensions	192 mm (7.56") (W) x 37.4 mm (1.47") (D) x 145 mm (5.7") (H)
Packing Dimensions	380 mm (15") (W) x 100 mm (4") (D) x 280 mm (11") (H)
Weight (net/gross)	0.75 kg (1.65 lb)/2.0 kg (4.41 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F)
Relative Humidity	20% to 90% @ +40°C; non-condensing
Operation Vibration	2G, 5 to 500Hz, random for SSD
Certifications	CE, FCC class B

#### **Packing List**

- 1 x G0T107W-319 1 x DC cable (G0T107W-319-DC)
- 1 x M3 screw for M.2 card slot
- 1 x M2 screw for mSATA card slot
- 1 x Thermal pad for RAM 1 x Thermal pad for mSATA

#### **Ordering Information**

Standard	
GOT107W-319 PCT-DC (P/N: E22B107101)	7" WSVGA fanless touch panel computer with Intel® Celeron® N3350 processor onboard, projected capacitive multi-touch screen, EMI Class B with screw type connector, DC cable, and logo
GOT107W-319 N4200- PCT-DC (P/N: E22B107105)	7" WSVGA fanless touch panel computer with Intel® Pentium® N4200 processor onboard, projected capacitive multi-touch screen, EMI Class B with screw type connector, DC cable, and logo

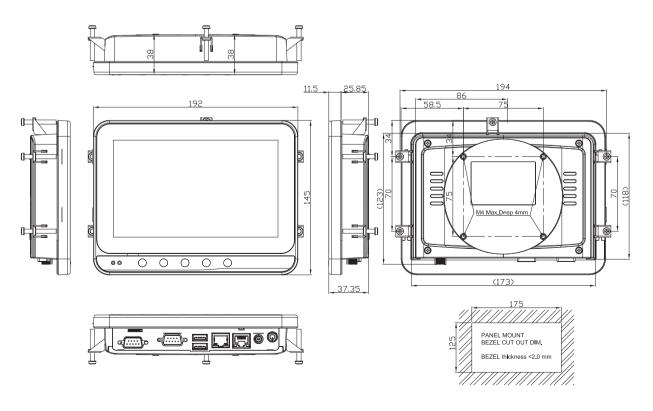
<sup>\*</sup> Other configuration by request

#### **Optional Accessories**

Wi-Fi + Bluetooth kit	
8812B1071A0E	Panel mount kit
8812B1070A0E	Wall mount kit
E226171119	Stand kit
50956A24030E	Adapter 12V/36W

#### **Optional OS Installation**

Windows® 10



<sup>\*</sup> Specification and certifications may vary based on different requirements

# GOT110-316-PoE-PD

10.4" XGA TFT Fanless Touch Panel Computer with Intel® Celeron® Processor N3350

## **Features**

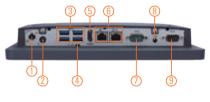
- 10.4" XGA TFT LCD display with LED backlight
- Fanless design with Intel® Celeron® processor N3350
- 1 GbE LAN, 1 PoE PD, 4 USB and 2 COM
- IP65-rated front bezel and IPX1 rated back cover
- External AT/ATX mode selection switch
- Easy maintenance design for storage and memory
- Supports panel mount, wall mount, VESA arm and desktop stand
- Adjustable RS-232/422/485 setting via BIOS
- Aluminum cover for the better thermal dissipation and reliability



- 1. Power LED
- 2. HDD LED
- 3. Brightness adjust +/-
- 4. Display on/off
- 5. Volume on/off







- 1. Remote power switch
- 2. Power button
- 3. 4 x USB 3.0
- 4. AT/ATX switch
- 5. 1 x HDMI
- 6. 1 x LAN
- 1 x PoE PD
- 7. 1 x RS-232/422/485
- 8. 1 x Line-out
- 9. 1 x RS-232 10. Speaker
- 11. Optional cable cover















#### Introduction

The GOT110-316 is a 10.4" XGA fanless touch panel computer. In response to market demand, this panel computer is a cost effective solution. It adopts a modern, super sleek and fanless design and is equipped with the Intel® Celeron® processor N3350 dual core up to 2.40 GHz. For wireless network connection, the GOT110-316 offers two PCI Express Mini Card slots. By just plugging in the WLAN card, customers can have instant access to wireless LAN.

#### Super Slim Design

With a thickness of 43.5 mm, the GOT110-316 is a super slim touch panel computer for space-limited environment.

#### **PoE Solution**

GOT110-316 provides PoE solution which provides data and power to the system. This infrastructure allows to centralized power management, therefore, it is a cost-effective solution for access control, home and industrial automation.

#### **Aluminum Back Chassis with Excellent Thermal Solution**

With Axiomtek's patent for plastic plus aluminum mechanism design, the GOT110-316 can dissipate the heat easily and keep the system operation stable.

Front Bezel	IP65, NEMA 4 rugged	IP65, NEMA 4 rugged protection, plastic front bezel	
LCD Panel	Display Type	10.4" XGA TFT LCD with LED backlight	
	Brightness (cd/m²)	350 nits (XGA)	
	Resolution	1024 x 768	
	Viewing Angel (H/V)	160°/160°	
Main System	CPU	Intel® Celeron® processor N3350 2 cores (turbo boost disable)	
	System Memory	1 x 204-pin DDR3L-1600 SO-DIMM, up to 8GB	
	BIOS	AMI UEFI BIOS	
	Storage	1 x 2.5" SATA HDD (9.5 mm height) or 1 x mSATA	
	Watchdog Timer	255 levels, 0 to 255 sec.	
	Onboard Graphics	Integrated in Intel® GFX	

I/O Connector	1 x RS-232/422/485 (default RS-232)
	1 x RS-232
	1 x 10/100/1000 Mbps Ethernet 1 x PoF PD
	4 x USB 3 0
	1 x Power button (ATX)
	1 x Remote power switch
	1 x Audio (Line-out)
	1 x ATX/AT selectable switch
	1 x HDMI
Expansion Interface	1 x Full-size PCI Express Mini Card slot with mSATA
	1 x Full-size PCI Express Mini Card slot with SIM
Touchscreen	Projected capacitive multi-touch
	5-wire flat resistive touch
Power Supply	Power Device (PD): follows IEEE 802.3at (25.5W)
Power Consumption	25.5W
Dimensions	259.43 mm (10.21") (W) x 43.5 mm (1.71") (D)
	x 232.73 mm (9.16") (H)
Packing Dimensions	415 mm (16.34") (W) x 100 mm (3.94") (D)
	x 315 mm (12.4") (H)
Weight (net/gross)	1.8 kg (3.96 lb)/3 kg (6.61 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F)
Relative Humidity	20% to 90% @ +40°C; non-condensing
Operation Vibration	2G, 5 - 500Hz, random for SSD
Certifications	CE, FCC

#### **Ordering Information**

Standard	
GOT110-316-R-PoE-PD (P/N: E22B110109)	10.4" XGA TFT cost-effective fanless touch panel computer with Intel® N3350 processor onboard, resistive touch and PoE PD power input
GOT110-316-PCT-PoE-PD (P/N: E22B110108)	10.4" XGA TFT cost-effective fanless touch panel computer with Intel® N3350 processor onboard, projected capacitive multi-touch screen and PoE PD power input

<sup>\*</sup> Other configuration by request

#### **Optional Accessories**

External Wi-Fi + Bluetooth kit**		
RFID kit		
8812B1101A0E	Panel mount kit	
8812B1100A0E	Wall mount kit	
E226171119	Stand kit	

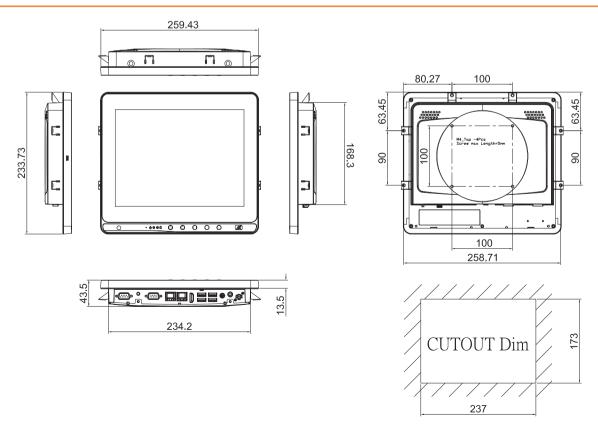
<sup>\*\*</sup> Standard Wi-Fi kit does not support panel mount.

#### **Optional OS Installation**

Windows® 10

#### **Packing List**

1 x GOT110-316 PoE-PD



<sup>304</sup> 

<sup>\*</sup> Specification and certifications may vary based on different requirements

## GOT110-316

10.4" XGA TFT Fanless Touch Panel Computer with Intel® Celeron® Processor N3350 or Intel® Pentium® Processor N4200

## **Features**

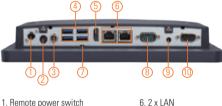
- 10.4" XGA TFT LCD display with LED backlight
- Fanless design with Intel® Celeron® processor N3350 or Intel® Pentium® processor N4200
- 2 GbE LAN, 4 USB and 2 COM
- IP65-rated front bezel and IPX1 rated back cover
- Peripheral support including MSR, RFID, Wi-Fi, and barcode scanner
- External AT/ATX mode selection switch
- Easy maintenance design for storage and memory
- Supports panel mount, wall mount, VESA arm and desktop stand
- Adjustable RS-232/422/485 setting via BIOS
- Aluminum cover for the better thermal dissipation and reliability



- 1. Power LED
- 2. HDD LED
- 3. Brightness adjust +/-
- 4. Display on/off
- 5. Volume on/off







- 1. Remote power switch
- 2. Power button
- 3. Screw connector for adapter
- 4. 4 x USB 3.0
- 5. 1 x HDMI
- 6. 2 x LAN
- 7. AT/ATX switch
- 8. 1 x RS-232/422/485
- 9. 1 x Line-out
- 10. 1 x RS-232
- 11. Cable cover (optional)
- 12. Speaker















#### Introduction

The GOT110-316 is a 10.4" XGA fanless touch panel computer. It adopts a modern, super sleek and fanless design and is equipped with the Intel® Celeron® processor N3350 dual core up to 2.40 GHz. For wireless network connection, the GOT110-316 offers two PCI Express Mini Card slots. By just plugging in the WLAN card, customers can have instant access to wireless LAN. Besides, it can be integrated with peripheral devices including barcode scanner, RFID, MSR, Wi-Fi, and Bluetooth.

#### Super Slim Design

With a thickness of 43.5 mm, the GOT110-316 is a super slim touch panel computer for space-limited environment.

#### **Support Front Membrane Keys**

The GOT110-316 provides 5 Membrane keys in front of system, people can adjust the system display, volume and brightness.

#### **Aluminum Back Chassis with Excellent Thermal Solution**

With Axiomtek's patent for plastic plus aluminum mechanism design, the GOT110-316 can dissipate the heat easily and keep the system operation stable.

Front Bezel	IP65, NEMA 4 rugged protection, plastic front bezel	
LCD Panel	Display Type	10.4" XGA TFT LCD with LED backlight
	Brightness (cd/m²)	350 nits (XGA)
	Resolution	1024 x 768
	Viewing Angel (H/V)	160°/160°
Main System	CPU	Intel® Celeron® processor N3350 2 cores (up to 2.4GHz) Intel® Pentium® processor N4200 4 cores (up to 2.5GHz)
	System Memory	1 x 204-pin DDR3L-1600 SO-DIMM, up to 8GB
	BIOS	AMI UEFI BIOS
	Storage	1 x 2.5" SATA HDD (9.5 mm height) 1 x mSATA
	Watchdog Timer	255 levels, 0 to 255 sec.
	Onboard Graphics	Integrated in Intel® GFX

I/O Connector	1 x RS-232/422/485 (default RS-232)
,	1 x RS-232
	2 x 10/100/1000 Mbps Ethernet
	4 x USB 3.0
	1 x Screw type connector for power
	1 x Power button (ATX)
	1 x Remote power switch
	1 x Audio (Line-out)
	1 x ATX/AT selectable switch
	1 x HDMI
Expansion Interface	1 x Full-size PCI Express Mini Card slot with mSATA
	1 x Full-size PCI Express Mini Card slot with SIM
Touchscreen	Projected capacitive multi-touch
	5-wire flat resistive touch
Power Supply	DC version: 12/19 to 24 VDC adapter cable
	AC version: 100 to 240 VAC-DC, 60W power adapter
Power Consumption	24W
Dimensions	259.43 mm (10.21") (W) x 43.5 mm (1.71") (D)
	x 232.73 mm (9.16") (H)
Packing Dimensions	415 mm (16.34") (W) x 100 mm (3.94") (D)
	x 315 mm (12.4") (H)
Weight (net/gross)	1.8 kg (3.96 lb)/3 kg (6.61 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F)
Relative Humidity	20% to 90% @ +40°C; non-condensing
Operation Vibration	2G, 5 - 500Hz, random for SSD
Certifications	CE, FCC

#### **Packing List**

- 1 x GOT110-316
- 1 x Adapter (GOT110-316-J)
- 1 x DC cable (GOT110-316-DC)



Standard	
GOT110-316-PCT-J (P/N: E22B110106)	10.4" XGA fanless touch panel computer with Intel® Celeron® processor N3350 w/projected capacitive multi- touch screen, AC-DC 60W power adapter and EMI Class A
GOT110-316-N4200-PCT-J (P/N: E22B110107)	10.4" XGA fanless touch panel computer with Intel® Celeron® processor N4200 w/projected capacitive multitouch screen, AC-DC 60W power adapter and EMI Class A
GOT110-316-R-J (P/N: E22B110101)	10.4" XGA fanless touch panel computer with Intel® Celeron® processor N3350, 5-wire flat resistive touch, AC-DC 60W power adapter (screw type connector) and EMI Class A
GOT110-316-R-DC (P/N: E22B110103)	10.4" XGA fanless touch panel computer with Intel® Celeron® processor N3350, 5-wire flat resistive touch, screw type power input with DC cable and logo
GOT110-316-R-J N4200 (P/N: E22B110104)	10.4" XGA fanless touch panel computer with Intel® Pentium® processor N4200 , 5-wire flat resistive touch, AC-DC 60W power adapter (screw type connector), EMI Class A, and logo
GOT110-316-R-DC N4200 (P/N: E22B110105)	10.4" XGA fanless touch panel computer with Intel® Pentium® processor N4200, resistive touch, screw type power input with DC cable and logo

#### **Optional Accessories**

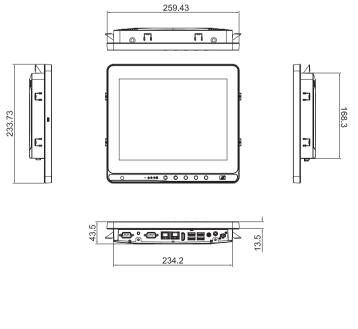
**Ordering Information** 

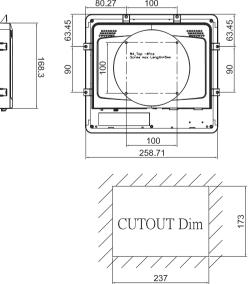
External Wi-Fi + Bluetooth	kit*	
RFID kit		
8812B1101A0E	Panel mount kit	
8812B1100A0E	Wall mount kit	
E226171119	Stand kit	
Barcode scanner kit		

<sup>\*</sup> Standard Wi-Fi kit does not support panel mount.

#### **Optional OS Installation**

Windows® 10





<sup>\*</sup> Other configuration by request \* Specification and certifications may vary based on different requirements

<sup>306</sup> 

# GOT115-319

15" XGA TFT Fanless Touch Panel Computer with Intel® Celeron® Processor N3350 or Intel® Pentium® Processor N4200

## **Features**

- 15" XGA TFT LCD display with LED backlight
- Fanless design with Intel® Celeron® processor N3350 or Intel® Pentium® processor N4200
- 2 GbE LAN, 4 USB and 2 COM
- IP65-rated plastic front bezel
- Supports RFID and wireless module (optional)
- External AT/ATX mode selection switch
- Easy access storage & RAM design
- Supports panel mount, wall mount, VESA arm and desktop stand
- RS-232/422/485 with RI/5V/12V selectable by BIOS
- Programmable OSD function kev













#### Introduction

The GOT115-319 is a 15" XGA fanless touch panel computer. It adapts a modern, super sleek and fanless design and is equipped with Intel® Celeron® processor N3350 or Intel® Pentium® processor N4200. For wireless network connection, the GOT115-319 offers one PCI Express Mini Card slot and one M.2 Key E for wireless module. By just plugging in the WLAN card, customers can have instant access to wireless environment.

#### Super Slim Design

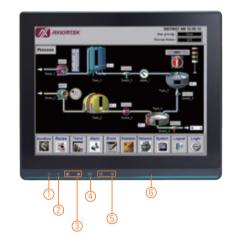
With a thickness of 50 mm, the GOT115-319 is a super slim touch panel computer for space-limited environment.

#### **Support Front Membrane Keys**

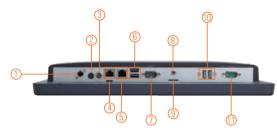
The GOT115-319 has 5 membrane keys on the front panel which allows users to adjust the LCD on/off, LCD brightness and volume setting easily

#### **Aluminum Back Chassis with Excellent Thermal Solution**

With Axiomtek's patent for plastic plus aluminum mechanism design, the GOT115-319 can dissipate the heat easily and keep the system operation stable.



- 1. Power LED
- 2. HDD LED
- 3. Brightness adjust +/-
- 4. Display on/off
- 5. Volume +/-
- 6. Microphone



- 1. Remote power switch
- 2. Power button
- 3. Screw connector for power input
- 4. AT/ATX switch
- 5. 2 x LAN
- 6. 2 x USB 3.0
- 7. 1 x RS-232/422/485
- 8. Line-out
- 9. Micro SD card slot
- 10. 2 x USB 2.0 11. 1 x RS-232

Front Bezel	IP65, NEMA 4 rugged protection, plastic front bezel	
LCD Panel	Display Type	15" XGA TFT LCD with LED backlight
	Brightness (cd/m²)	300 nits (XGA)
	Resolution	1024 x 768
	Viewing Angel (H/V)	160°/160°
Main System	CPU	Intel® Celeron® processor N3350 2 cores (up to 2.4 GHz) Intel® Pentium® processor N4200 4 cores (up to 2.5 GHz)
	System Memory	1 x 204-pin DDR3L-1600 SO-DIMM, up to 8GB
	BIOS	AMI UEFI BIOS
	Storage	1 x 2.5" SATA HDD (9.5 mm height) 1 x mSATA 1 x MicroSD card
	Watchdog Timer	255 levels, 0 to 255 sec.
	Onboard Graphics	Integrated in Intel® GFX

I/O Connector	1 x RS-232/422/485 (default RS-232)
	1 x RS-232
	2 x 10/100/1000 Mbps Ethernet
	2 x USB 3.0
	2 x USB 2.0
	1 x Screw type connector for power
	1 x Power button (ATX)
	1 x Remote power switch
	1 x Audio (Line-out)
	1 x ATX/AT selectable switch
Expansion Interface	1 x M.2 Key E for wireless module
	1 x Full-size PCI Express Mini Card slot
Touchscreen	Projected capacitive multi-touch
	5-wire flat resistive touch
Power Supply	DC version: 9 to 24 VDC with adapter cable
Power Consumption	28.8W
Dimensions	329.69 mm (13") (W) x 50 mm (2") (D) x 306 mm (12") (H)
Packing Dimensions	510 mm (20.1") (W) x 190 mm (7.5") (D) x 540 mm (21.2") (H)
Weight (net/gross)	3.2 kg (7.1 lb)/4.8 kg (10.6 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F)
Relative Humidity	10% - 90% @ +40°C; non-condensing
Operation Vibration	2G, 5 - 500Hz, random for SSD
Certifications	CE

#### **Packing List**

- 1 x GOT115-319 1 x DC cable
- 4 x M3 screws for SSD/HDD
- 1 x M3 screw for M.2 card slot 1 x M2 screw for mSATA card slot

#### **Ordering Information**

Standard	
GOT115-319-C-DC (P/N: E22B115100)	15" XGA fanless touch panel computer with Intel® Celeron® processor N3350 onboard, projected capacitive, EMI Class A, screw type connector with DC cable
GOT115-319-R-DC (P/N: E22B115101)	15" XGA fanless touch panel computer with Intel® Celeron® processor N3350 onboard, 5 wire resistive touch, EMI Class A, screw type connector with DC cable
GOT115-319-N4200-C-DC (P/N: E22B115102)	15" XGA fanless touch panel computer with Intel® Pentium® processor N4200 onboard, projected capacitive multi-touch, EMI Class A, screw type connector with DC cable
GOT115-319-N4200-R-DC (P/N: E22B115103)	15" XGA fanless touch panel computer with Intel® Pentium® processor N4200 onboard, 5 wire resistive touch, EMI Class A, screw type connector with DC cable

<sup>\*</sup> Other configuration by request

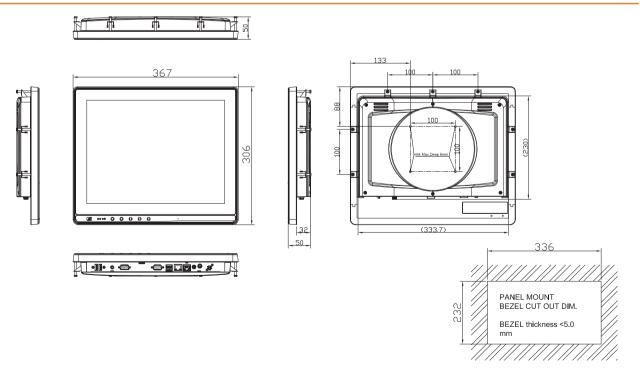
#### **Optional Accessories**

Wi-Fi + Bluetooth kit	
RFID kit	
8812B1150A0E	Panel mount kit
8812B1100A0E	Wall mount kit
50966124050E	Adapter 12V/60W
E226171119	Stand kit

#### **Optional OS Installation**

Windows® 10





<sup>\*</sup> Specification and certifications may vary based on different requirements

## GOT5103W-845

10.1" WXGA TFT Fanless Touch Panel Computer with Intel® Celeron® N3060 Processor or Intel® Pentium® N3710 Processor

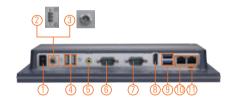
## **Features**

- 10.1" WXGA wide screen TFT LCD display with LED backlight
- Projected capacitive multi-touch
- Fanless design with Intel® Celeron® N3060 processor or Intel® Pentium® N3710 processor
- 1 mSATA and 1 half-slim SATA SSD (optional)
- 2 GbE LAN, 4 USB, 2 COM, 2W speakers and optional Mic-in
- IP65-rated front bezel and IPX1 full enclosure design
- Supports panel mount, wall mount, VESA arm and desktop stand
- External AT/ATX mode selection switch





- 1. Power LED 2. HDD LED
- 3. Brightness adjust +/-
- 4. Display on/off 5. Volume adjust
- 6. Mic-in (optional)



- 1. Power switch (ATX)
- 2. Terminal block for DC power input
- or 3. Screw connector for AC power adapter
- 4. 2 x USB 2.0

- 5. 1 x Line-out
- 6. 1 x RS-232/422/485 7. 1 x RS-232
- 8. 1 x HDMI
- 9. 2 x USB 3.0
- 10. 2 x I AN 11. AT/ATX switch
- 12. Speaker















#### Introduction

The GOT5103W-845 is a 10.1" WXGA fanless touch panel computer. In response to market demand, this panel computer is a cost effective solution. It adopts a modern, sleek and fanless design and is equipped with the Intel® Celeron® N3060 processor or Intel® Pentium® N3710 processor. For wireless network connection, the GOT5103W-845 offers two PCI Express Mini Card slots. By just installing a WLAN card and antennas, customers can have instant access to wireless LAN/GPRS/GSM/4G environments. Besides, it provides two types of power input: DC power with terminal block connector and AC power adapter with screw type connector.

#### Slim & Lightweight Design

The GOT5103W-845 is slim and lightweight which make it fit for limited space installation.

#### **Optional Internal WLAN Antenna**

The GOT5103W-845 provides two PCI Express Mini Card slots and optional internal WLAN antennas for wireless network connections. Customers can use the GOT5103W-845 in wireless LAN/GPRS/GPS/4G environment.

#### **Support Front Membrane Keys (optional)**

The GOT5103W-845 has 5 membrane keys on the front panel which allows users to adjust the LCD on/off, LCD brightness and volume setting easily.

Front Bezel	IP65, plastic front be	zel
LCD Panel	Display Type	10.1" WXGA TFT LCD with LED backlight
	Brightness (cd/m²)	350 nits
	Resolution	1280 x 800
Main System	CPU	Intel® Celeron® processor N3060 2 cores (up to 2.48 GHz) Intel® Pentium® processor N3710 4 cores (up to 2.56 GHz)
	System Memory	1 x 204-pin DDR3L-1600 SO-DIMM, up to 8GB
	BIOS	AMI UEFI BIOS
	Storage	1 x Half-slim SATA SSD (only for GOT5103W-845-PCT-J) 1 x mSATA
	Watchdog Timer	255 levels, 0 to 255 sec.
	Onboard Graphics	Integrated Intel® HD GFX

opcomoations	<b>,</b>
I/O Connector	1 x RS-232 1 x RS-232/422/485 1 x HDMI 1 x Switch for power on/off 1 x AT/ATX mode selection switch 2 x USB 2.0 2 x USB 3.0 1 x Audio (Line-out) 2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT)
TPM	N/A
Expansion Interface	1 x Full-size PCI Express Mini Card with mSATA 1 x Full-size PCI Express Mini Card with SIM
Touchscreen	Projected capacitive multi-touch
Power Supply	AC version: 100 to 240 VAC-DC, 60W power adapter or DC version: 24 VDC with over current protection fuse
Power Consumption	40.32W
Dimensions	260.8 mm (10.27") (W) x 38 mm (1.50" (D) x 194.1 mm (7.65") (H)
Packing Dimensions	380 mm (14.96") (W) x 100 mm (3.94") (D) x 280 mm (11.02") (H)
Weight (net/gross)	1.08 kg (2.38 lb)/2.18 kg (4.8 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F) 0°C to +45°C (+32°F to +113°F) (GOT5103W-845 N3710)
Relative Humidity	20% to 90% @ 40oC; non-condensing
Operation Vibration	2G, 10 - 500Hz, random for SSD
Certifications	CE, FCC, UL60950-1
* W.T. Wide Temperatur	All WT supported products have to be sorted by Aviomtek

W.T.: Wide Temperature. All W.T. supported products have to be sorted by Axiomtek.

#### **Packing List**

- 1 x G0T5103W-845 1 x Adapter (G0T5103W-845-J)
- 1 x Power cord (GOT5103W-845-J) 1 x Phoenix connector (GOT5103W-845 24 VDC)

#### **Ordering Information**

Standard	
GOT5103W-845-PCT-J (P/N: E225103100)	10.1" WXGA fanless touch panel computer with Intel® Celeron® processor N3060, projected capactive multi-touch screen, AC-DC 60W power adapter (screw type connector) and EMI class A
GOT5103W-845-PCT- 24VDC (P/N: E225103102)	10.1" WXGA fanless touch panel computer with Intel® Celeron® processor N3060, projected capacitive multi-touch screen and 24 VDC terminal block connector
GOT5103W-845-PCT-J N3710 (P/N: E225103114)	10.1" WXGA fanless touch panel computer with Intel® Pentium® processor N3710, projected capactive multi-touch screen, AC-DC 60W power adapter (screw type connector) and EMI class A
GOT5103W-845-PCT- 24VDC N3710 (P/N: E225103115)	10.1" WXGA fanless touch panel computer with Intel® Pentium® processor N3710, projected capacitive multi- touch screen and 24 VDC terminal block connector

<sup>\*</sup> Other configuration by request

#### **Optional Accessories**

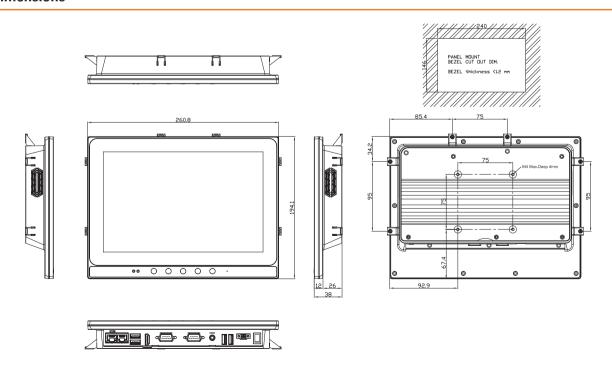
Wi-Fi + Bluetooth kit		
RFID kit		
881251030A0E	Panel mount kit	
8812B1070A0E	Wall mount kit	
E226171119	Stand kit	
Half slim SSD kit SFP (AC Version only)		

#### **Optional EOS Installation**

WES7	
WE8S (64-bit)	
Windows® 10 IoT Enterprise (64bit)	

#### **Optional OS Installation**

Windows® 7
Windows® 8.1 (64-bit)
Windows® 10
Windows® 8.1 (64-bit)



<sup>\*</sup> Specification and certifications may vary based on different requirements

# GOT5153W-845

15.6" WXGA TFT Fanless Touch Panel Computer with Intel® Celeron® Processor N3060

## **Features**

- 15.6" WXGA wide screen TFT LCD display with LED backlight
- Projected capacitive touch or 5-wire flat resistive touch
- Fanless design with Intel® Celeron® processor N3060
- 2.5" SATA HDD or mSATA
- 2 GbE LANs. 4 USB. 2 COM and speakers
- IP65-rated front bezel and IPX1 full enclosure
- Supports wall mount, VESA arm and desktop stand
- Supports RFID (optional)





A Rear view











#### Introduction

The GOT5153W-845 is a 15.6" WXGA fanless touch panel computer. In response to market demand, this panel computer is a cost effective solution. It adopts a modern, sleek and fanless design and is equipped with the Intel® Celeron® processor N3060 up to 2.48 GHz. For wireless network connection, the GOT5153W-845 offers two PCI Express Mini Card slots. By just plugging in a WLAN card, customers can have instant access to wireless LAN/GPRS/GSM/4G environments. Besides, it provides two types of power input. One is DC power input (9 to 36VDC) with terminal block connector, and another is AC power adapter with screw type connector

#### Slim & Lightweight Design

The GOT5153W-845 is slim and lightweight which make it fit for limited space installation.

#### **Built-in Internal WLAN Antenna**

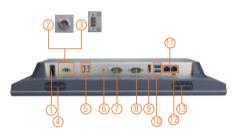
The GOT5153W-845 provides two PCI Express Mini Card slots and a built-in WLAN antenna for wireless network connections. By simply plugging in the wireless LAN card, customers can use the GOT5153W-845 in wireless LAN/GPRS/GPS/4G environment.

#### **Support Front Membrane Keys (optional)**

The GOT5153W-845 has 5 membrane keys on the front panel which allows users to adjust the LCD on/off, LCD brightness and volume setting easily.



- 1. Power LED
- 2. HDD LED
- 3. Brightness adjust +/-
- 4. Display on/off
- 5. Volume adjust



- 1. Power switch (ATX)
- 2. Power input connector (screw)
- 3. Power input connector (phoenix)
- 4. Speaker
- 5. 2 x USB 2.0
- 6. 1 x Line-out 7. 1 x RS-232/422/485
- 8. 1 x RS-232
- 9 1 x HDMI
- 10. 2 x USB 3.0
- 11. 2 x LAN
- 12. AT/ATX selectable switch
- 13. Speaker

Front Bezel	IP65, NEMA 4 rugge	d protection, plastic front bezel
LCD Panel	Display Type	15.6" WXGA TFT LCD with LED backlight
	Brightness (cd/m²)	300 nits
	Resolution	1366 x 768
Main System	CPU	Intel® Celeron® processor N3060 2 cores (up to 2.48 GHz)
	System Memory	1 x 204-pin DDR3L-1600 SO-DIMM, up to 8GB
	BIOS	AMI UEFI BIOS
	Storage	1 x 2.5" SATA HDD (9.5 mm height) (AC version only) 1 x mSATA
	Watchdog Timer	255 levels, 0 to 255 sec.
	Onboard Graphics	Integrated Intel® HD GFX

I/O Connector	1 x RS-232/422/485 (default RS-232)
	1 x RS-232
	1 x AT/ATX mode selection switch
	1 x Switch for power on/off
	2 x USB 2.0
	2 x USB 3.0
	1 x HDMI
	1 x Audio (Line-out)
	2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT)
TPM	N/A
Expansion Interface	1 x Full-size PCI Express Mini Card with mSATA
	1 x Full-size PCI Express Mini Card with SIM
Touchscreen	Projected capacitive multi-touch
	5-wire flat resistive touch
Power Supply	DC version: 9 to 36 VDC with over-current protection fuse
	AC version: 100 to 240 VAC-DC, 60W power adapter
Power Consumption	30W
Dimensions	394.2 mm (15.53") (W) x 57 mm (2.25") (D) x 257.2 mm
	(10.13") (H)
Packing Dimensions	508 mm (20.00") x 106 mm (4.17") x 383 mm (15.08")
Weight (net/gross)	3.0 kg (6.61 lb)/4.5 kg (9.92 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F) with W.T. DRAM/SSD
Relative Humidity	20% to 90% @ 40°C; non-condensing
Operation Vibration	2G, 5 - 500Hz, random for CFast™
Certifications	CE, FCC, UL60950-1

#### **Packing List**

- 1 x GOT5153W-845
- 1 x Adapter (AC version only)
  1 x Power cord (AC version only)

#### **Ordering Information**

Standard	
GOT5153W-845-PCT-J (P/N: E225153116)	15.6" WXGA fanless touch panel computer with Intel® Celeron® processor N3060, projected capacitive multi-touch screen and AC-DC 60W power adapter (screw type connector)
GOT5153W-845-FR-J (P/N: E225153114)	15.6" WXGA fanless touch panel computer with Intel® Celeron® processor N3060, 5-wire flat resistive touch screen and AC-DC 60W power adapter (screw type connector)

- \* Other configuration by request
- \* Specification and certifications may vary based on different requirements

#### **Optional Accessories**

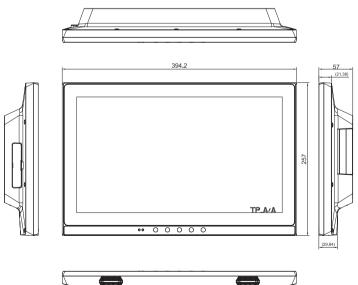
Wi-Fi + Bluetooth kit	
RFID kit	
881251531A0E	Wall mount kit
E226171119	Stand kit

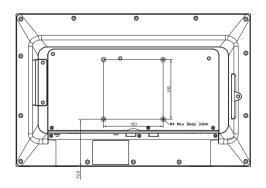
#### **Optional EOS Installation**

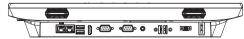
WES7
WE8S (64-bit)
Windows® 10 IoT Enterprise 64-bit

#### **Optional OS Installation**

Windows® 7	
Windows® 8.1 (64-bit)	
Windows® 10	









# Heavy-duty Fanless Touch Panel Computers

Axiomtek's heavy-duty GOT300 series is designed for kiosk and automation applications. It has a fashionable mechanism design and industrial-grade IP65-rated front bezel for water/dust-proof operation. It is suitable for use in industrial automation and control systems, building automation, machinery manufacturing environments, self-service kiosks, and other HMI applications.

	Selection Guide		314
NEW	GOT315W-521	15.6" WXGA TFT Multi-touch Panel Computer with 8th Gen Intel® Core™ i5 & Pentium® G5400T Processor	317
	G0T315WL-845-PCT	15.6" WXGA TFT Multi-touch Panel Computer with Intel® Pentium® Processor N3710	319
	G0T317-502-FR	17" SXGA TFT Expandable Touch Panel Computer with 7th/6th Gen Intel® Core™ i7/i5/i3 Processor	321
	GOT318WL-845	18.5" WXGA TFT Multi-touch Panel Computer with Intel® Pentium® Processor N3710	323
NEW	G0T3187WL-834	18.5" WXGA TFT Multi-touch Panel Computer with Intel® Celeron® Processor J1900	325
	GOT321W-502	21.5" FHD TFT Multi-touch Panel Computer with 7th/6th Gen Intel® Core™ i7/i5/i3 Processor	327
NEW	G0T3217WL-845-PCT	21.5" FHD TFT Multi-touch Panel Computer with	329

# Industrial Panel PCs

# Heavy-duty Fanless Touch Panel Computers

Selection Guide









Features Wodels	GOT315W-521	GOT315WL-845-PCT	GOT317-502-FR
CPU Level	8th Gen Intel® Core™ processor, up to 35W Coffee Lake-S i5-8500T Tj 100°C Coffee Lake-S G5400T Tj 100/88°C	Intel® Pentium® processor N3710 4C @ 1.6 GHz (Braswell)	LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® (Kaby lake/Skylake)
Chipset	Intel® H310	SoC integrated	Intel® H110
System Memory	1 x 260-pin DDR4 2133/2400MHz SO-DIMM, up to 32GB	1 x 204-pin DDR3L-1333/1600 SO-DIMM, up to 8GB	2 x 260-pin DDR4-2400 SO-DIMM, up to 32GB
Display	15.6" WXGA TFT LCD, 400 nits	15.6" WXGA TFT LCD, 400 nits	17" SXGA TFT LCD, 350 nits
I/O	1x 9-pin D-sub Male / Via cable (option) for RS-232  1 x RS-232/422/485  2 x 10/100/1000 Mbps Ethernet  2 x USB 3.0, 2 x USB 2.0  1 x Phoenix type connector for DC power input  1 x Switch for power on/off (ATX)  1 x Line out  1 x HDMI  1 x DisplayPort  1 x VGA  1 x Remote power switch  1 x AT/ATX switch (DC type only)  1 x Grounding Hole	1 x RS-232 1 x RS-232/422/485 1 x Switch for power on/off (ATX) 1 x Audio (Line-out) 2 x USB 3.0 2 x USB 2.0 2 x 10/100/1000 Mbps Ethernet (Intel® i217-LM & i210-AT)	2 x RS-232/422/485 1 x HDMI v1.4 1 x VGA (up to 1920 x 1200 60Hz) 1 x DisplayPort v1.2 (DP++) 4 x USB 3.0 2 x 10/100/1000 Mbps Ethernet (Intel® i219LM/i211AT) 1 x Audio (Mic-in/Line-out)
Storage	1 x 2.5" SATA HDD/SSD (7mm/9.5mm, removable)	1 x 2.5" SATA HDD 1 x mSATA	1 x 2.5" SATA HDD
Expansion Interface	1 x M.2 Key E slot 1 x Full-size PCI Express Mini Card slot	1 x Full-size PCI Express Mini Card slot with mSATA 1 x Full-size PCI Express Mini Card slot with SIM	1 x Half-size PCI Express Mini Card slot (mPCle 1) 1 x Full-size PCI Express Mini Card slot (mSATA_mPCle 2)
Touchscreen	Projected capacitive multi-touch	Projected capacitive multi-touch	Flat resistive touch
Operating System	Windows® 10	Windows® 10	Skylake: Windows® 7, Windows® 8.1, Windows® 10 Kaby Lake: Windows® 10
Power Supply	DC terminal block: +12V/+19V/+24V	DC version: 24 VDC	DC terminal block: +12V / +19V / +24V AC adapter: 19V, 6.32A
Power Consumption	60W	72W	120W (include 35W processor)
Watchdog Timer	255 levels, 0 to 255 sec.	255 levels, 0 to 255 sec.	255 levels, 0 to 255 sec.
Dimensions (W x D x H)	396.8 x 53.0 x 247.1 mm (15.6" x 2.08" x 9.73")	396.8 x 59.0 x 247.1 mm (15.62" x 2.3" x 9.73")	398.02 x 77.5 x 330.44 mm (15.67" x 3.05" x 13.01")
Weight (net/gross)	6.5 kg(14.3 lb)/8.5kg(18.7 lb)	4.5 kg (9.9 lb)/6.5 kg (14.3 lb)	6.7 kg (14.77 lb)/9.0 kg (19.84 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F)	0°C to +50°C (+32°F to +122°F)	0°C to +40°C (+32°F to +104°F)
Certifications	CE	CE	CE

# Heavy-duty Fanless Touch Panel Computers

## Selection Guide







Features Wodels	GOT318WL-845	GOT321W-502	GOT3187WL-834
CPU Level	Intel® Pentium® processor N3710 4C @ 1.6 GHz (Braswell)	LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® (Kaby lake/Skylake)	Intel® Celeron® processor J1900 4C @ 2.0 GHz (Bay Trail-D)
Chipset	SoC integrated	Intel® H110	SoC integrated
System Memory	1 x 204-pin DDR3L-1333/1600 SO-DIMM, up to 8GB	2 x 260-pin DDR4-2400 SO-DIMM, up to 32GB	1 x 204-pin DDR3L-1333/1600 SO-DIMM, up to 8GB
Display	18.5" WXGA TFT LCD, 250 nits	21.5" FHD TFT LCD, 250 nits	18.5" FHD TFT LCD, 500 nits
1/0	1 x RS-232 1 x RS-232/422/485 1 x Switch for power on/off (ATX) 1 x Audio (Line-out) 2 x USB 3.0 2 x USB 2.0 2 x 10/100/1000 Mbps Ethernet (Intel® i217-LM & i210-AT)	2 x RS-232/422/485 1 x HDMI v1.4 1 x VGA (up to 1920 x 1200 60Hz) 1 x DisplayPort v1.2 (DP++) 4 x USB 3.0 2 x 10/100/1000 Mbps Ethernet (Intel® i219-LM/i211-AT) 1 x Audio (Mic-in/Line-out)	2 x RS-232/422/485 (COM 1/2) 1 x Switch for power on/off (ATX) 1 x Audio (Line-out) 2 x USB 3.0 2 x USB 2.0 2 x 10/100/1000 Mbps Ethernet (Intel® i210-IT)
Storage	1 x 2.5" SATA HDD 1 x mSATA	1 x 2.5" SATA HDD	1 x 2.5" SATA HDD (7/9.5 mm height) 1 x CFast™ or 1 x mSATA
Expansion Interface	1 x Full-size PCI Express Mini Card slot with mSATA 1 x Full-size PCI Express Mini Card slot with SIM	1 x Half-size PCI Express Mini Card slot (mPCle 1) 1 x Full-size PCI Express Mini Card slot (mSATA_mPCle 2)	2 x Full-size PCI Express Mini Card slot
Touchscreen	Projected capacitive multi-touch / Flat resistive touch (optional)	10-point projected capacitive multi-touch	Projected capacitive multi-touch
Operating System	Windows® 10	Skylake: Windows® 7, Windows® 8.1, Windows® 10 (64-bit) Kaby Lake: Windows® 10	Windows® 8.1, WE8S, Windows® 7, WES 7, Windows® 10
Power Supply	DC version: 24 VDC	DC terminal block: +12V / +19V / +24V AC adapter: 19V, 6.32A	DC version: 9 to 36 VDC AC version: 12 VDC 60W adapter
Power Consumption	48W	105W	48W
Watchdog Timer	255 levels, 0 to 255 sec.	255 levels, 0 to 255 sec.	255 levels, 0 to 255 sec.
Dimensions (W x D x H)	460.8 x 58.5 x 285 mm (18.11" x 2.3" x 11.22")	547.59 x 339.05 x 75.6 mm (21.56" x 13.49" x 2.98")	460.8 x 58.5 x 285 mm (18.11" x 2.3" x 11.22")
Weight (net/gross)	5.8 kg (12.8 lb)/8.2 kg (18.1 lb)	8.4 kg (18.5 lb)/11.3 kg (24.9 lb)	5.8 kg (12.8 lb)/8.2 kg (18.1 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F)	0°C to +40°C (+32°F to +104°F)	0°C to +50°C (+32°F to +122°F)
Certifications	CE	CE	CE





Features Wodels	GOT3217WL-845-PCT
CPU Level	Intel® Pentium® processor N3710 4C @ 1.6 GHz (Braswell)
Chipset	SoC integrated
System Memory	1 x 204-pin DDR3L-1333/ 1600 SO-DIMM, up to 8GB
Display	21.5" FHD TFT LCD, 250 nits
1/0	1 x RS-232 1 x RS-232/422/485 1 x Switch for power on/off (ATX) 1 x Audio (Line-out) 2 x USB 3.0 2 x USB 2.0 2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT)
Storage	1 x 2.5" SATA HDD 1 x mSATA
Expansion Interface	2 x Full-size PCI Express Mini Card slot
Touchscreen	Projected capacitive multi-touch
Operating System	Windows® 10
Power Supply	DC version: DC 24V AC version: 12VDC, 5A adapter
Power Consumption	48W
Watchdog Timer	255 levels, 0 to 255 sec.
Dimensions (W x D x H)	547.6 mm x 58.5 mm x 339.0 mm (21.56" x 2.30" x 13.35")
Weight (net/gross)	7.6 kg (16.8 lb)/10.5 kg (23.1 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F)
Certifications	CE

# GOT315W-521

15.6" WXGATFT Multi-touch Panel Computer with 8th Gen Intel® Core™ i5 & Pentium® G5400T Processor

## **Features**

- 15.6" WXGA projected capacitive multi-touch widescreen
- Fanless design with 8th Gen Intel® Core™ i5 & Pentium® G5400T processor
- Supports WLAN module & antenna (optional)
- 2.5" SATA HDD/SSD
- 2 LAN, 4 USB, 2 COM, 1 HDMI, 1 DP and 1 VGA
- IP65-rated aluminum front bezel
- Supports panel mount and VESA mount and wall mount



#### Introduction

The GOT315W-521-PCT is a multi touch fanless type panel PC with 15.6-inch WXGA LCD and supports LGA1151 socket 8th Gen Intel® Core™ i5 & Pentium® G5400T processor. It also provides M.2 Key E and mini-PCI Express slots for add-on devices such like Wi-Fi module for factory automation, and oil pipe monitoring system.

#### 15.6-inch WXGA LCD with Projected Capacitive Multi-touch

The 15.6" WXGA touch panel PC supports 400 nits brightness, able to display contents in HD resolution. With projected capacitive multi-touch screen, users can operate the device more directly and friendly. The touch glass surface is up to 3H for anti scratch purpose.

Front Bezel	IP65 front bezel	
LCD Panel	Display Type	15.6" WXGA TFT LCD
	Brightness (cd/m²)	400 nits
	Resolution	1366 x 768
Main System	CPU	8th Gen Intel® Core™ processor, up to 35W Coffee Lake-S i5-8500T Tj 100°C Coffee Lake-S G5400T Tj 100/88°C
	Chipset	Intel® H310
	System Memory	1 x 260-pin DDR4 2133/2400MHz SO-DIMM, up to 32GB
	BIOS	AMI UEFI BIOS
	Storage	1 x 2.5" SATA HDD/SSD (7mm and 9.5mm, removable)
	Watchdog Timer	255 levels, 0 to 255 sec.
	Onboard Graphics	Intel® integrated Gfx graphic engine

Opecinications	,
I/O Connector	1 x 9-pin D-sub Male/via cable(optional) for RS-232 1 x COM for RS232/422/485 2 x RJ45 for Giga Ethernet 2 x USB 3.0, 2 x USB 2.0 1 x Phoenix type connector for DC power input 1 x Switch for power on/off (ATX) 1 x Line-out 1 x HDMI 1 x DP 1 x VGA 1 x Remote power switch 1 x AT/ATX switch (DC type only) 1 x Grounding hole (DC Version)
TPM	N/A
Expansion Interface	1 x M.2 Key E slot 1 x Full-size PCI Express Mini Card slot
Touchscreen	Projected capacitive multi-touch
Power Supply	+12V/+19V/+24VDC 1x terminal block
Power Consumption	60W
Dimensions	396.8 mm (15.6") (W) x 53 mm (2.08") (D) x 247.1 mm (9.73") (H)
Packing Dimensions	525 mm (20.67") (W) x 470 mm (18.51") (D) x 186 mm (7.32") (H)
Weight (net/gross)	6.5 kg(14.3 lb)/8.5kg(18.7 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F)
Relative Humidity	20% to 90% @ +40°C; non-condensing
Operation Vibration	1G, 10 - 500 Hz, random for 2.5" SATA HDD
Certifications	CE, EN 61000-6-2, EN 61000-6-4

#### **Packing List**

- 1 x GOT315WL-521
- 1 x Phoenix connector
- 1 x Panel mount kit

#### **Ordering Information**

GOT315W-521-PCT-DC-S	LGA1151 8th Generation Intel® Core™ i5 & Pentium® G5400T processor, projected capacitive multi-touch screen
	and 24 VDC terminal block with small Phoenix connector

- \* Other configuration by request
- \* Specification and certifications may vary based on different requirements

#### **Optional Accessories**

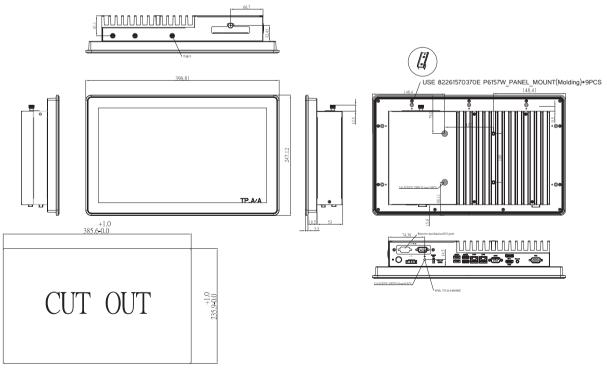
4G LTE Kit	
Wi-Fi kit	
881231770A0E	Wall mount kit
50906D24000E	Adaptor 24V/120W, wire only, FSP120-AAAN3

#### **Optional EOS Installation**

Windows® 10 IoT Enterprise

#### **Optional OS Installation**

Windows® 10

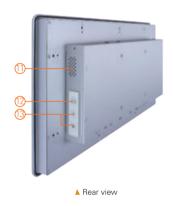


# GOT315WL-845-PCT

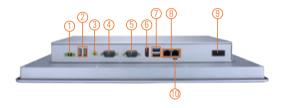
15.6" WXGATFT Multi-touch Panel Computer with Intel® Pentium® Processor N3710

## **Features**

- 15.6" WXGA projected capacitive multi-touch widescreen
- Fanless design with Intel® Pentium® processor N3710
- 2.5" SATA HDD & mSATA
- 3G, WLAN module & antennas (optional)
- 2 GbE LANs, 2 USB 3.0, 2 USB 2.0 and 2 COM
- IP65-rated aluminum front bezel
- Supports panel mount and VESA mount (VESA arm/desktop) stand/wall mount optional)
- Adjustable RS-232/422/485 setting via BIOS







- 1. Terminal block for DC power input
- 2. 2 x USB 2.0
- 3. 1 x Line-out
- 4. 1 x RS-232/422/485
- 5. 1 x RS-232
- 6. 1 x HDMI 7. 2 x USB 3.0
- 8. 2 x LAN 9. Power switch (ATX)
- 10. AT/ATX selectable switch
- 11. Speaker 12. Blacklight switch
- 13. Brightness adjust +/-













#### Introduction

The GOT315WL-845 has a 15.6-inch WXGA LCD and supports the low power Intel® Pentium® processor N3710. It also provides two PCI Express Mini Card slots for 3G, wireless network connectivity. This 15.6" multi-touch panel computer is suitable for transportation, heavy-duty industry, smart factory automation, and oil pipe monitoring systems.

#### 15.6-inch WXGA LCD with Projected Capacitive Multi-touch

The 15.6" WXGA touch panel PC, supports 400 nits brightness, is able to display contents in HD resolution. With projected capacitive multi-touch screen, users can operate the device more directly and friendly. The hardness of touch glass surface is up to 7H for antiscratch purpose.

#### WALN Antenna Supported (optional)

The GOT315WL-845 provides two PCI Express Mini Card slots and WLAN antennas for 3G and wireless network connectivity.

Front Bezel	IP65 front bezel	
LCD Panel	Display Type	15.6" WXGA TFT LCD
	Brightness (cd/m²)	400 nits
	Resolution	1366 x 768
Main System	CPU	Intel® Pentium® processor N3710 4C @ 1.6 GHz (Braswell)
	Chipset	SoC integrated
	System Memory	1 x 204-pin DDR3L-1333/1600 SO-DIMM, up to 8GB
	BIOS	AMI UEFI BIOS
	Storage	1 x 2.5" SATA HDD (9.5 mm height) 1 x mSATA
	Watchdog Timer	255 levels, 0 to 255 sec.
	Onboard Graphics	Integrated Intel® HD Graphics

I/O Connector	1 x RS-232
	1 x RS-232/422/485
	1 x Switch for power on/off (ATX)
	1 x Audio (Line-out)
	2 x USB 3.0
	2 x USB 2.0
	2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT)
TPM	N/A
Expansion Interface	1 x Full-size PCI Express Mini Card slot with mSATA
	1 x Full-size PCI Express Mini Card slot with SIM
Touchscreen	Projected capacitive multi-touch
Power Supply	DC version: 24 VDC
Power Consumption	72W
Dimensions	396.8 mm (15.62") (W) x 59.0 mm (2.3") (D) x 247.1 mm (9.73") (H)
Packing Dimensions	525 mm (20.67") (W) x 186 mm (7.32") (D) x 470 mm (18.51") (H)
Weight (net/gross)	4.5 kg (9.9 lb)/6.5 kg (14.3 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F)
Relative Humidity	20% to 90% @ +40°C; non-condensing
Operation Vibration	1G, 10 - 500 Hz, random for 2.5" SATA HDD
Certifications	CE

#### **Packing List**

- 1 x GOT315WL-845
- 1 x Phoenix connector
- 1 x Panel mount kit

#### **Ordering Information**

GOT315WL-845-PCT-DC	15.6" WXGA TFT fanless touch panel computer with Intel®
(P/N: E22B315101)	Pentium® N3710 1.6 GHz processor, projected capacitive
	multi-touch screen and 24 VDC terminal block connector

- \* Other configuration by request
- \* Specification and certifications may vary based on different requirements

#### **Optional Accessories**

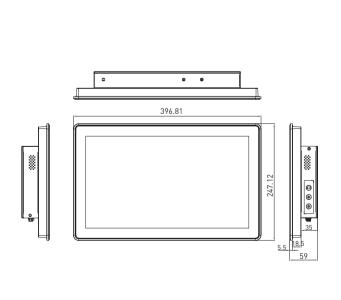
4G LTE Kit	
Wi-Fi kit	
881231770A0E	Wall mount kit
50906D24000E	Adaptor 24V/120W, wire only, FSP120-AAAN3

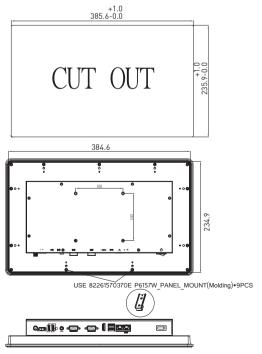
#### **Optional EOS Installation**

Windows® 10 IoT Enterprise

#### **Optional OS Installation**

Windows® 10





# GOT317-502-FR

17" SXGA TFT Expandable Touch Panel Computer with 7th/6th Gen Intel® Core™ i7/i5/i3 Processor

## **Features**

- 17" SXGA TFT flat resistive touch
- LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® processor
- Intel® H110 chipset
- 4 USB 3 0 and 2 COM
- 2.5" SATA HDD and mSATA
- WLAN module & antenna (optional)
- IP65 front bezel
- Supports panel mount and VESA mount (VESA arm/desktop stand/wall mount optional)
- Built-in speakers and removable hard drive design



















#### Introduction

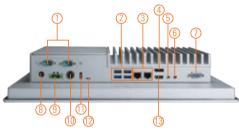
The GOT317-502-FR is a multimedia 17" SXGA touch panel PC for kiosk application. It has a fashionable mechanism design and industrial-grade front bezel which can avoid damage from chemical corrosion. To meet the demands of multimedia application, the GOT317-502-FR is powered by the high performance LGA1151 socket 7th/6th generation Intel® Core™ processor with the Intel® H110 chipset. It features two COM ports, two Gigabit Ethernet and up to 32GB memory of dual-channel DDR4-2400. The industrial touch panel PC is suitable for kiosk and factory automation.

#### Removable hard drive design

The GOT317-502-FR has designed with removable HDD. User can easily plug in standard 2.5" HDD based on any application needs.

#### Speaker and WLAN Antenna Supported

The GOT317-502-FR features built-in speakers for kiosk application to display multimedia content. It also supports WLAN module antenna (optional) for wireless network connectivity.



- 1.2 x COM (cable)
- 2. 4 x USB 3.0
- 3. 2 x LAN
- 4. 1 x DisplayPort
- 5. 1 x Line-out
- 6.1 x Mic-in
- 7. 1 x VGA (cable)
- 8. Power button (ATX)
- 9. Terminal block for DC power input
- 10. Power input connector
- 11. Remote power switch port
- 12. AT/ATX selectable switch
- 13. 1 x HDMI
- 14. Backlight switch 15. Brightness adjust +/-
- 16. Swappable HDD

Front Bezel	Aluminum w/ IP65/NE	EMA 4 rugged protection
LCD Panel	Display Type	17" SXGA TFT LCD
	Brightness	350 nits
	Resolution	1280 x 1024 pixels
	Viewing Angle	160°/140°
Main System	CPU	LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® processor
	Chipset	Intel® H110
	System Memory	2 x 260-pin DDR4-2400 SO-DIMM, up to 32GB
	BIOS	AMI UEFI BIOS
	Storage	1 x 2.5" SATA HDD
	Drive	N/A
	Watchdog Timer	255 levels, 1 to 255 sec.

IO Connector	2 x RS-232/422/485 1 x HDMI v1.4 1 x VGA (up to 1920 x 1200 60Hz) 1 x DisplayPort v1.2 (DP++) 4 x USB 3.0 2 x 10/100/1000 Mbps Ethernet 1 x Audio (Mic-in/Line-out)
Expansion Interface	1 x Half-size PCI Express Mini Card slot (mPCle 1) 1 x Full-size PCI Express Mini Card slot (mSATA_mPCle 2)
Touchscreen	5-wire flat resisitve touch
Power Supply	DC terminal block: +12V/+19V/+24V AC adapter: 19V, 6.32A
Power Consumption	120W (include 35W processor)
Dimensions	398.02 mm (15.67") (W) x 77.5 mm (3.05") (D) x 330.44 mm (13.01") (H)
Packing Dimension	510 mm (20.08") (W) x 190 mm (7.48") (D) x 540 mm (21.26") (H)
Weight (net/gross)	6.7 kg (14.77 lb)/9.0 kg (19.84 lb)
Environment	Operating temperature: 0°C to +40°C (+32°F to +104°F) Relative humidity: 10% to 90% @ +40°C, non-considering Operating vibration: 1.0G, 5 to 500Hz, random
Certificate	CE

#### **Packing List**

- 1 x GOT317-502
- 1 x Phoenix connector
- 1 x Panel mount kit (by model)
  1 x Adapter (by model)

#### **Ordering Information**

GOT317-502-FR (P/N: E22B317100) With Adapter and Panel Mount Kit	17" SXGA TFT fanless touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™, Pentium®, Celeron® processor, 5-wire flat resistive touch screen and redundant power input with 1 x terminal block and 1x 4-pin din connector
GOT317-502-FR-DC (P/N: E22B317101) W/O Adapter and Panel Mount Kit	17" SXGA TFT fanless touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™, Pentium®, Celeron® processor, 5-wire flat resistive touch screen and redundant power input with 1 x terminal block and 1x 4-pin din connector

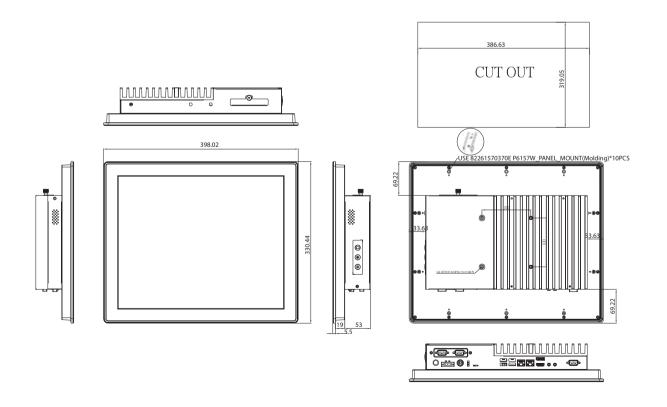
<sup>\*</sup> Other configuration by request

#### **Optional Accessories**

4G LTE Kit	
Wi-Fi Kit	
Wi-Fi + BT Kit	
881231770A0E	Wall mount kit
881261510A0E	Panel mount kit
50904D24010E	AC adapter 120W 19V/6.32A, FSP120-ABAN3

#### **Optional OS Installation**

Windows® 7 32/64-bit, Windows® 8.1 64-bit, Windows® 10 64-bit (Sky Lake) Windows® 10 64-bit (Kaby Lake)



<sup>\*</sup> Specification and certifications may vary based on different requirements

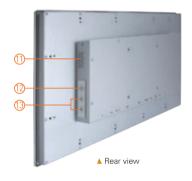
# GOT318WL-845

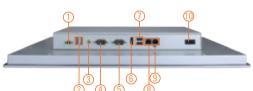
18.5" WXGATFT Multi-touch Panel Computer with Intel® Pentium® Processor N3710

## **Features**

- 18.5" WXGA multi-touch projected capacitive widescreen or flat resistive touch (optional)
- Fanless design with Intel® Pentium® processor N3710
- 2.5" SATA HDD & mSATA
- 3G. WLAN module & antennas (optional)
- 2 GbE LANs, 2 USB 3.0, 2 USB 2.0 and 2 COM
- IP65-rated aluminum front bezel
- Supports panel mount and VESA mount (VESA arm/desktop) stand/wall mount optional)
- Adjustable RS-232/422/485 setting via BIOS







- 1. Terminal block for DC power input
- 2. 2 x USB 2.0
- 3. 1 x Line-out
- 4. 1 x RS-232/422/485
- 5. 1 x RS-232
- 6. 1 x HDMI 7. 2 x USB 3.0
- 8. 2 x LAN 9. AT/ATX selectable switch
- 10. Power switch (ATX)
- - 11. Speaker 12. Backlight switch
  - 13. Brightness adjust +/-















#### Introduction

The GOT318WL-845 adopts an 18.5-inch WXGA LCD and supports low power Intel® Pentium® processor N3710. It also provides two PCI Express Mini Card slots for 3G, wireless network connectivity. This 18.5" multi-touch panel computer is suitable for transportation, heavy-duty industry, smart factory automation, and oil pipe monitoring systems.

#### 18.5-inch WXGA LCD with Projected Capacitive Multi-touch

The 18.5" WXGA touch panel PC supports 250 nits brightness, able to display contents in HD resolution. With projected capacitive multi-touch screen, users can operate the device more directly and friendly. The hardness of touch glass surface is up to 7h for anti-scratch purpose

#### WALN Antenna Supported (optional)

The GOT318WL-845 provides two PCI Express Mini Card slots and WLAN antennas for 3G and wireless network connectivity.

Front Bezel	IP65 front bezel	
LCD Panel	Display Type	18.5" WXGA TFT LCD
	Brightness (cd/m²)	250 nits
	Resolution	1366 x 768
Main System	CPU	Intel® Pentium® processor N3710 4C @ 1.6 GHz (Braswell)
	Chipset	SoC integrated
	System Memory	1 x 204-pin DDR3L-1333/1600 SO-DIMM, up to 8GB
	BIOS	AMI UEFI BIOS
	Storage	1 x 2.5" SATA HDD (9.5 mm height) 1 x mSATA
	Watchdog Timer	255 levels, 0 to 255 sec.
	Onboard Graphics	Integrated Intel® HD Graphics

I/O Connector	1 x RS-232
	1 x RS-232/422/485
	1 x Switch for power on/off (ATX)
	1 x Audio (Line-out)
	2 x USB 3.0
	2 x USB 2.0
	2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT)
TPM	N/A
Expansion Interface	1 x Full-size PCI Express Mini Card slot with mSATA
	1 x Full-size PCI Express Mini Card slot with SIM
Touchscreen	Projected capacitive multi-touch/5-wire flat resistive touch
	(optional)
Power Supply	DC version: 24 VDC
Power Consumption	48W
Dimensions	460.8 mm (18.11") (W) x 58.5 mm (2.3") (D)
	x 285 mm (11.22") (H)
Packing Dimensions	600 mm (23.58") (W) x 195 mm (7.67") (D)
ŭ	x 500 mm (19.68") (H)
Weight (net/gross)	5.8 kg (12.8 lb)/8.2 kg (18.1 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F)
Relative Humidity	20% to 90% @ +40°C; non-condensing
Operation Vibration	1G, 10 - 500 Hz, random for 2.5" SATA HDD
Certifications	CE

#### **Packing List**

- 1 x GOT318WL-845
- 1 x Phoenix connector 1 x Panel mount kit

#### **Ordering Information**

GOT318WL-845-FR-DC (P/N: E22B318102)	18.5" WXGA TFT fanless touch panel computer with Intel® Pentium® N3710 1.6 GHz processor, 5-wire resistive screen and 24 VDC terminal block connector
GOT318WL-845-PCT-DC (P/N: E22B318100)	18.5" WXGA TFT fanless touch panel computer with Intel® Pentium® N3710 1.6 GHz processor, projected capacitive multi-touch screen and 24 VDC terminal block connector

<sup>\*</sup>Other configuration by request

#### **Optional Accessories**

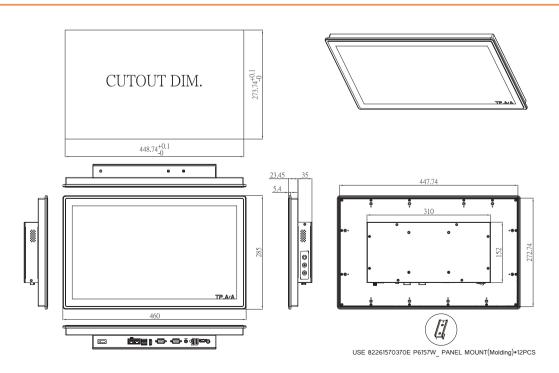
4G LTE kit		
Wi-Fi kit		
881231770A0E	Wall mount kit	
50906D24000E	Adaptor 24V/120W, wire only, FSP120-AAAN3	

#### **Optional EOS Installation**

Windows® 10 IoT Enterprise

#### **Optional OS Installation**

Windows® 10



<sup>\*</sup> All specifications and photos are subject to change without notice. www.axiomtek.com © 2021 Axiomtek Co., Ltd. All rights reserved.

<sup>\*</sup>Specification and certifications may vary based on different requirements

# GOT3187WL-834

18.5" WXGATFT Multi-touch Panel Computer with Intel® Celeron® Processor J1900

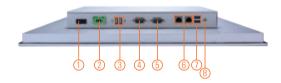
## **Features**

- 18.5" projected capacitive multi-touch wide screen
- Resolution up to FHD
- Fanless design with Intel® Celeron® Processor J1900
- 2.5" 7/9.5 mm SATA HDD & CFast™ or mSATA
- 3G. WLAN module & antennas (optional)
- 2 GbE LANs, 2 USB 3.0, 2 USB 2.0 and 2 COM
- IP65 aluminum front bezel
- Supports panel mount and optional VESA arm/desktop stand/ wall mount
- 0°C to +40°C wide operating temperature range
- Adjust RS-232/422/485 setting via BIOS









- 1. Power switch
- 2. Terminal block for DC power input
- 3. 2 x USB 2.0
- 4. COM 1 (RS-232/422/485)
- 5. COM 2 (RS-232/422/485)
- 6 2 x Ethernet
- 7. 2 x USB 3.0
- 8. Audio (Line-out)
- 9. CFast™ slot
- 10. Backlight switch
- 11. Brightness adjustment















#### Introduction

The GOT3187WL-834-PCT adopts an 18.5-inch WXGA/FHD LCD and supports Intel® Bay Trail-D processor. The Lite rugged industrial panel PC supports low power Intel® Celeron® processor J1900. It also provides two PCI Express Mini card slots for 3G, wireless network connectivity. This 18.5" multi-touch panel computer is suitable for transportation, heavy-duty industry, smart factory automation, and oil pipe monitoring

#### 18.5-inch LCD with Projected Capacitive Multi-touch

The 18.5" WXGA/FHD touch panel PC supports 250/500 nits brightness and can display contents in HD resolution. With projected capacitive multi-touch screen, users can operate the device more directly and friendly. The hardness of touch glass surface is up to 7h for anti-scratch purpose.

#### WALN Antenna Supported (optional)

The IP65-rated industrial panel PC, GOT3187WL-834-PCT, provides two PCI Express Mini card slots and WLAN antennas for 3G and wireless network connectivity.

Front Bezel	IP65 front bezel	
LCD Panel	Display Type	18.5" WXGA TFT LCD 18.5" FHD TFT LCD
	Brightness (cd/m²)	250 nits (WXGA) 500 nits (FHD)
	Resolution	1366 x 768 1920 x 1080
Main System	CPU	Intel® Celeron® processor J1900 4C @ 2.0 GHz
	Chipset	SoC Intergrated
	System Memory	1 x 204-pin DDR3L-1333/1600 SO-DIMM SO-DIMM, up to 8GB
	BIOS	AMI UEFI BIOS
	Storage	1 x 2.5" 7/9.5 mm SATA HDD 1 x CFast™ or 1 x mSATA
	Watchdog Timer	255 levels, 0 to 255 sec.
	Onboard Graphics	Integrated Intel® HD Graphics

I/O Connector	2 x RS-232/422/485
	1 x awitch for power on/off (ATX)
	1 x audio (Line-out)
	2 x USB 3.0
	2 x USB 2.0
	2 x 10/100/1000 Mbps Ethernet (Intel® i210-IT)
TPM	N/A
Expansion Interface	1 x full-size PCI Express Mini Card slot with mSATA 1 x full-size PCI Express Mini Card slot with SIM
Touchscreen	Projected capacitive multi-touch
Power Supply	DC version: 9 to 36 VDC
11 /	AC version: 12 VDC 60W adapter
Power Consumption	49 W
Dimensions	460.8 mm (18.11") (W) x 58.5 mm (2.3") (D)
	x 285 mm (11.22") (H)
Packing Dimensions	600 mm (23.58") (W) x 195 mm (7.67") (D)
	x 500 mm (19.68") (H)
Weight (net/gross)	5.8 kg (12.8 lb)/8.2 kg (18.1 lb)
Operating Temperature	0°C to +40°C (+32°F to +104°F)
Relative Humidity	20% to 90% @ +40°C; non-condensing
Operation Vibration	2G, 10 - 500Hz, random for CFastTM
Certificate	CE

#### **Packing List**

- 1 x GOT3187W-834
- 1 x Adapter (AC Version)
- 1 x Phoenix connector (DC Version)
- 1 x Panel mount kit

#### **Ordering Information**

GOT3187WL-834-PCT- FHD-DC (P/N: E223187109)	18.5" FHD TFT fanless touch panel computer with Intel® Celeron® J1900 2.0 GHz quad core processor, projected capacitive multi-touch screen and 12 to 36 VDC terminal block connector
GOT3187WL-834-PCT-J (P/N: E223187106)	18.5" WXGA TFT fanless touch panel computer with Intel® Celeron® J1900 2.0 GHz quad core processor, projected capacitive multi-touch screen and AC-DC 12 VDC power adapter (screw type connector)
GOT3187WL-834-PCT-DC (P/N: E223187107)	18.5" WXGA TFT fanless touch panel computer with Intel® Celeron® J1900 2.0 GHz quad core processor, projected capacitive multi-touch screen and 9 to 36 VDC terminal block connector

- \* Other configuration by request
- \* Specification and certifications may vary based on different requirements

#### **Optional Accessories**

Wi-Fi Kit	
881231770A0E	Wall mount kit

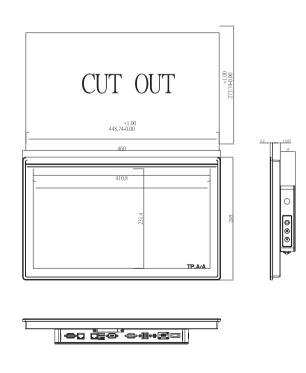
#### **Optional EOS Installation**

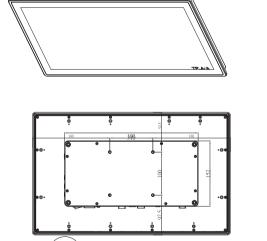
WE8S
WES 7
Windows® 10 IoT Enterprise

#### **Optional OS Installation**

Nindows® 7	
Vindows® 8.1	
Vindows® 10	

#### **Dimensions**







USE 82261570370E P6157W\_ PANEL MOUNT(Molding)\*12PCS

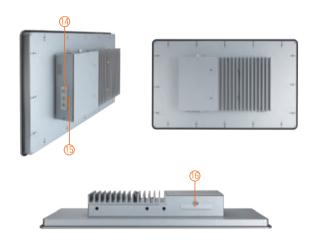
# GOT321W-502

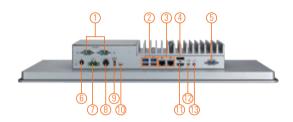
21.5" FHD TFT Multi-touch Panel Computer with 7th/6th Gen Intel® Core™ i7/i5/i3 Processor

## **Features**

- 21.5" FHD 10-point multi-touch projected capacitive widescreen or Resistive touch (optional)
- LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® processor
- Intel® H110 chipset
- 4 USB 3.0 and 2 COM
- 2.5" SATA HDD and mSATA
- WLAN module & antenna (optional)
- IP65-rated front bezel
- Supports panel mount and VESA mount (VESA arm/desktop) stand/wall mount optional)
- Built-in speakers and swappable hard drive design







- 1. 2 x COM (cable) 2. 4 x USB 3.0
- 3. 2 x LAN
- 4. 1 x DisplayPort
- 5. 1 x VGA
- 6. Power button (ATX)
- 7. Terminal block for DC power input
- 8. Power input for adapter 9. Remote power switch
- 10. AT/ATX selectable switch
- 11 1 x HDMI
- 12. 1 x Line-out
- 13. 1 x Mic-in 14. Backlight switch
- 15. Brightness adjust +/-
- 16. Swappable HDD













#### Introduction

The GOT321W-502 is a 21.5" fanless touch panel PC for kiosk and automation applications. It has a fashionable mechanism design and industrial-grade IP61-rated front bezel which can avoid damage from chemical corrosion. To meet the demands of multimedia application, the G0T321W-502 is powered by the high performance LGA1151 socket 7th/6th gen Intel® Core™ processor with the Intel® H110 chipset. It features two COM ports, two Gigabit Ethernet and up to 32GB memory of dual-channel DDR4-2400. The industrial touch panel PC is suitable for kiosk and factory automation.

#### Swappable Hard Drive Design

The GOT321W-502 is equipped with an easy-swappable 2.5" HDD for extensive storage needs

#### Speaker and WLAN Module Supported

The G0T321W-502 is equipped with built-in speakers for multimedia applications. It also supports WLAN module and antennas (optional) for wireless network connectivity.

Front Bezel	Aluminum w/ IP65/NEMA 4 rugged protection	
LCD Panel	Display Type	21.5" FHD TFT
	Brightness	250 nits
	Resolution	1920 x 1080 pixels
	Viewing Angle	178°/178°
Main System	CPU	LGA1151 socket 7/6th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® processor
	Chipset	Intel® H110
	System Memory	2 x 260-pin DDR4-2400 SO-DIMM, up to 32GB
	BIOS	AMI UEFI BIOS
	Storage	1 x 2.5" SATA HDD (9.5 mm height)
	Drive	N/A
	Watchdog Timer	255 levels, 1 to 255 sec.

2 x RS-232/422/485 1 x HDMI v1.4 1 x VGA (up to 1920 x 1200 60Hz) 1 x DisplayPort v1.2 (DP++)
4 x USB 3.0 2 x 10/100/1000 Mbps Ethernet (Intel® i219-V & i211-AT) 1 x Audio (Mic-in & Line-out)
N/A
1 x Half-size PCI Express Mini Card slot with mPCle 1 1 x Full-size PCI Express Mini Card slot with mSATA or mPCle 2
10-point projected capacitive multi-touch 5-wire flat resistive touch
DC terminal block: +12V/+19V/+24V AC adapter: 19V, 6.32A
105W
547.59 mm (21.56") (W) x 339.05 mm (13.49") x 75.6 mm (2.98")
720 mm (28.34") (W) x 210 mm (8.27") (D) x 550 mm (2.17") (H)
8.4 kg (18.5 lb)/11.3 kg (24.9 lb)
0°C to +45°C (+32°F to +113°F)
10% to 90% @ +40°C, non-considering
1.0G, 5 - 500Hz, random
CE

#### **Packing List**

- 1 x G0T321W-502
- 1 x Phoenix connector
- 1 x Panel mount kit (by model)
- 1 x Adapter (by model)

#### **Ordering Information**

GOT321W-502-PCT With Adapter and Panel Mount Kit (P/N: E22B321100)	21.5" FHD TFT fanless multi-touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™, Pentium®, Celeron® processor, 10-point projected capacitive multitouch screen and 12/19/24 VDC terminal block connector
GOT321W-502-PCT-DC W/O Adapter and Panel Mount Kit (P/N: E22B321103)	21.5" FHD TFT fanless multi-touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™, Pentium®, Celeron® processor, 10-point projected capacitive multi-touch screen and 12/19/24 VDC terminal block connector
GOT321W-502-FR With Adapter and Panel Mount Kit (P/N: E22B321102)	21.5" FHD TFT fanless touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™, Pentium®, Celeron® processor, 5-wire flat resistive touch screen and 12/19/24 VDC terminal block connector

<sup>\*</sup> Other configuration by request

#### **Optional Accessories**

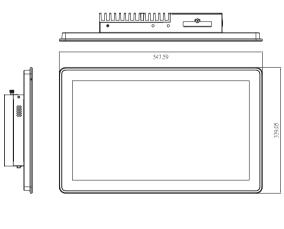
Wi-Fi kit	
881231770A0E	Wall mount kit
881262170A0E	Panel mount kit
50904D24010E	AC adapter 120W 19V/6.32A,FSP120-ABAN3

#### **Optional EOS Installation**

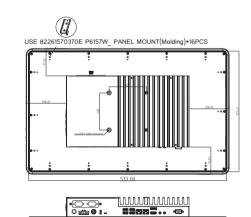
Windows® 7	
Windows® 8.1	
Windows®10 IoT Enterprise	

#### **Optional OS Installation**

Skylake: Windows® 7	
Windows® 8.1	
Windows® 10	
Kaby Lake: Windows® 10	







<sup>\*</sup> Specification and certifications are based on requirements and may vary.

# GOT3217WL-845-PCT

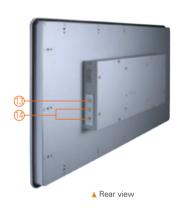
21.5" FHD TFT Multi-touch Panel Computer with Intel® Pentium® Processor N3710

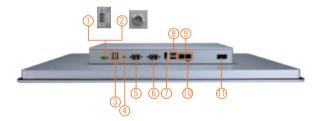
## **Features**

- 21.5" FHD 10-point multi-touch projected capacitive widescreen
- Fanless design with Intel® Pentium® processor N3710
- 2.5" 7/9.5 mm SATA HDD & mSATA
- 3G. WLAN module & antennas (optional)
- 2 GbE LANs, 2 USB 3.0, 2 USB 2.0 and 2 COM
- IP65-rated aluminum front bezel
- Supports panel mount and VESA mount (VESA arm/desktop) stand/wall mount optional)
- Adjustable RS-232/422/485 setting via BIOS









- 1. Terminal block for DC power input or 6. 1 x RS-232
- 2. Screw conn. w/ AC power adapter
- 3. 2 x USB 2.0
- 4. 1 x Line-out
- 5. 1 x RS-232/422/485
- 7. 1 x HDMI 8. 2 x USB 3.0
- 9.2 x LAN 10. AT/ATX selectable switch
- 11. Power Switch (ATX) 12. Speaker
- 13. Backlight switch 14. Brightness adjust +/-















#### Introduction

The GOT3217WL-845-PCT adopts a 21.5-inch FHD LCD and supports supports low power Intel® Pentium® processor N3710. It also provides two PCI Express Mini card slots for 3G, wireless network connectivity. This 21.5" multi-touch panel computer is suitable for transportation, heavy-duty industry, smart factory automation, and oil pipe monitoring systems.

#### 21.5-inch FHD LCD with Projected Capacitive Multi-touch

The 21.5" FHD touch panel PC has a 21.5-inch FHD TFT LCD display with a 10-point multitouch screen and 250 nits of brightness. The hardness of touch glass surface is up to 7h for anti-scratch purpose.

#### WALN Antenna Supported (optional)

The GOT3217WL-845-PCT provides two PCI Express Mini card slots and WLAN antennas for 4G and wireless network connectivity.

Front Bezel	IP65 front bezel	
LCD Panel	Display Type	21.5" FHD TFT LCD
	Brightness (cd/m²)	250 nits
	Resolution	1920 x 1080
Main System	CPU	Intel® Pentium® processor N3710 4C @ 1.6 GHz (Braswell)
	Chipset	SoC Integrated
	System Memory	1 x 204-pin DDR3L-1333/1600 SO-DIMM, up to 8GB
	BIOS	AMI UEFI BIOS
	Storage	1 x 2.5" SATA HDD (9.5 mm height) 1 x mSATA
	Watchdog Timer	255 levels, 0 to 255 sec.
	Onboard Graphics	Integrated Intel® HD Graphics

оросиновно	
I/O Connector	1 x RS-232 1 x RS-232/422/485 1 x Switch for power on/off (ATX) 1 x Audio (Line-out) 2 x USB 3.0 2 x USB 2.0 2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT)
TPM	N/A
Expansion Interface	1 x full-size PCI Express Mini Card slot with mSATA 1 x full-size PCI Express Mini Card slot with SIM
Touchscreen	10-point projected capacitive multi-touch
Power Supply	1. DC version: 24 VDC 2. AC version: 12 VDC 60W adapter
Power Consumption	48 W
Dimensions	547.6 mm (21.56") (W) x 58.5 mm (2.30") (D) x 339.0 mm (13.35") (H)
Packing Dimensions	720 mm (28.34") (W) x 210 mm (8.27") (D) x 550 mm (2.17") (H)
Weight (net/gross)	7.6 kg (16.8 lb)/10.5 kg (23.1 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F)
Relative Humidity	20% to 90% @ +40°C; non-condensing
Operation Vibration	1G, 10 - 500 Hz, random for 2.5" SATA HDD
Certificate	CE

#### **Packing List**

- 1 x G0T3217WL-845-PCT
- 1 x Adapter (GOT3217WL-845-PCT-J)
- 1 x Phoenix connector (GOT3217WL-845-PCT-DC, 24 VDC)
- 1 x Panel mount kit

#### **Ordering Information**

GOT3217WL-845-PCT-J (P/N: E223217101)	21.5" FHD TFT fanless touch panel computer with Intel® Pentium® N3710 1.6 GHz quad core processor, 10-point projected capacitive multi-touch screen and AC-DC 12 VDC power adapter (screw type connector)
GOT3217WL-845-PCT-DC (P/N: E223217102)	21.5" FHD TFT fanless touch panel computer with Intel® Pentium® N3710 1.6 GHz quad core processor, 10-point projected capacitive multi-touch screen and 24 VDC terminal block connector

- \* Other configuration by request \* Specification and certifications are based on requirements and may vary.

#### **Optional Accessories**

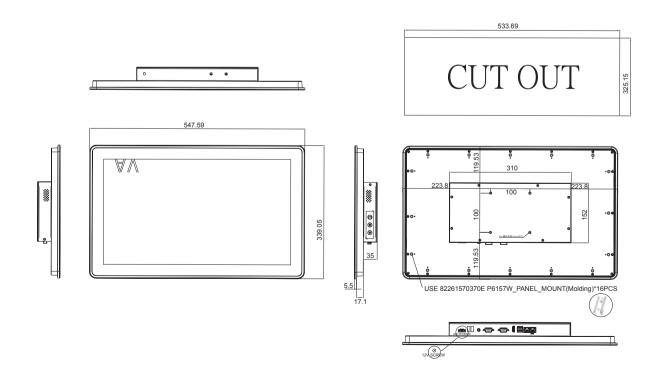
4G LTE kit	
Wi-Fi kit	
881231770A0E	Wall mount kit
50906D24000E	Adaptor 24V/120W, wire only, FSP120-AAAN3 (for DC model)

#### **Optional EOS Installation**

Windows® 10 IoT Enterprise

#### **Optional OS Installation**

Windows® 10





**Fanless Touch Panel Computers** 

Heavy-duty Fanless Touch Panel Computers

**Stainless Touch Panel Computers** 

**Transportation Touch Panel Computers and Monitors** 

**Industrial Touch Panel Computers** 

**Industrial Touch Monitors** 

**Medical Panel Computers** 

Modular Panel PCs

Self-service Kiosk

# **Industrial Panel PCs**

# 3

## Stainless Touch Panel Computers

The GOT800 series is specifically designed for dusty or wet spaces in food factories or kitchen and low temperature environments such as cold storage warehouses. This product line provides an IP66-rated or IP69K-rated housing option, a sunlight readable display and a wide operating temperature range.

Selection Guide		333
G0T810-845	10.4" XGA TFT IP66 & IP69K-rated Stainless Steel Fanless PCT (or Resistive Touch) Panel Computer with Intel® Celeron® N3060 and Flat Bezel Design (-10°C to +50°C)	335
GOT815L-511	15" XGA TFT IP66 & IP69K-rated Stainless Steel Fanless PCT (or Resistive Touch) Panel Computer with Intel® Core™ i5-7300U Processor and Flat Bezel Design (-20°C to +50°C)	337
GOT815-834	15" XGA TFT IP66 & IP69K-rated Stainless Steel Fanless PCT (or Resistive Touch) Panel Computer with Intel® Atom® Processor E3827 and Flat Bezel Design (-20°C to +55°C)	339
GOT817L-511	17" SXGA TFT IP66 & IP69K-rated Stainless Steel Fanless PCT (or Resistive Touch) Panel Computer with Intel® Core™ i5-7300U Processor and Flat Bezel Design (-20°C to +50°C)	341
GOT817-834	17" SXGA TFT IP66 & IP69K-rated Stainless Steel Fanless PCT (or Resistive Touch) Panel Computer with Intel® Atom® Processor F3827 and Flat Bezel Design (-20°C to +55°C)	343

## Stainless Touch Panel Computers

#### Selection Guide







Features Wodels	GOT810-845	GOT815L-511	GOT815-834
CPU Level	Intel® Celeron® N3060 2C@1.6 GHz	Intel® Core™ i5-7300U 3.5 GHz (Kaby Lake)	Intel® Atom® E3827 1.75 GHz
Chipset	SoC intergrated	SoC integrated	SoC integrated
System Memory	1 x DDR3L 1333 MHz SO-DIMM, up to 8GB	1 x 260-pin DDR4-2133 SO-DIMM, up to 16GB	1 x 204-pin DDR3L-1333 SO-DIMM, up to 8GB
Display	10.4" XGA TFT LCD, 350 nits	15" XGA TFT LCD, 420 nits	15" XGA TFT, 420 nits
1/0	1 x RS-232/422/485 (default RS-232, M12 A-coded) 1 x RS-232 (M12 A-coded) 2 x USB 2.0 (M12 A-coded) 1 x 10/100/1000 Mbps Ethernet (M12 X-coded) 1 x DC power connector (M12)	2 x RS-232/422/485 (default RS-232, M12 A-coded) 4 x USB 2.0(M12 A-coded) 1 x 10/100/1000 Mbps Ethernet (M12 X-coded) 1 x DC power connector (M12)	2 x RS-232/422/485 (default RS-232, M12 A-coded) 4 x USB 2.0 (M12, A-coded) 1 x 10/100/1000 Mbps Ethernet (M12, X-coded) 1 x DC power connector (M12)
Storage	1 x mSATA 1 x SATA	1 x 2.5" SSD HDD or 1 x 2.5" SATA HDD	1 x 2.5" SSD 1 x CFast™
Expansion Interface	2 x PCI Express Mini Card slot	1 x Full-size PCI Express Mini Card slot 1 x Half-size PCI Express Mini Card slot	2 x PCI Express Mini Card slot
Touchscreen	5-wire resistive type or projected capacitive touch	5-wire resistive touch or projected capacitive multi-touch	5-wire resistive type or projected capacitive touch
Operating System	Windows® 8.1, WE8S, Windows® 7, WES 7, Windows® 10	Windows® 10 loT, Windows® 10	Windows® 8.1, WE8S, Windows® 7, WES 7, Windows® 10
Power Supply	9 to 36 VDC	9 to 36 VDC	9 to 36 VDC
Power Consumption	29W	45W	30W
Watchdog Timer	255 levels, 1 to 255 sec.	255 levels, 1 to 255 sec.	255 levels, 1 to 255 sec.
Front Bezel	Stainless steel with IP66/IP69K protection	Stainless steel IP66/IP69K protection	Stainless steel with IP66/IP69K protection
Dimensions (W x D x H)	284 x 56 x 241 mm (11.2" x 2.2" x 9.49")	382 x 55 x 305 mm (15.4" x 2.17" x 12.01")	382 x 55 x 305 mm (15.4" x 2.2" x 12.01")
Weight (net/gross)	2.8 kg (6.17 lb)/4 kg (8.82 lb)	5.2 kg (11.46 lb)/8.4 kg (18.5 lb)	6.94 kg (15.3 lb)/10.2 kg (22.5 lb)
Operating Temperature	-10°C to +50°C (14°F to +122°F)	-20°C to +50°C (-4°F to +122°F)	-20°C to +50°C (-4°F to +122°F)
Certifications	CE	CE	CE





Features Wodels	GOT817L-511	GOT817-834
CPU Level	Intel® Core™ i5-7300U 3.5 GHz (Kaby Lake)	
Chipset	SoC integrated SoC integrated	
System Memory	1 x 260-pin DDR4-2133 SO-DIMM, 1 x 204-pin DDR3L-1333 SO-DIMI up to 16GB up to 8GB	
Display	17" SXGA TFT LCD, 350 nits	17" SXGA TFT, 350 nits
1/0	2 x RS-232/422/485 (default RS-232 (default RS-232, M12 A-coded) 4 x USB 2.0 (M12 A-coded) 4 x USB 2.0 (M12 A-coded) 4 x USB 2.0 (M12 A-coded) 1 x 10/100/1000 Mbps Ethernet (M12 X-coded) 1 x DC power connector (M12)  2 x RS-232/422/485 (default RS-232 (d	
Storage	1 x 2.5" SSD HDD	
Expansion Interface	1 x Full-size PCI Express Mini Card slot 1 x Half-size PCI Express Mini Card slot	2 x PCI Express Mini Card slot
Touchscreen	5-wire resistive touch or projected capacitive multi-touch	5-wire resistive type or projected capacitive touch
Operating System	Windows® 10 loT, Windows® 10	Windows® 8.1, WE8S, Windows® 7, WES 7, Windows® 10
Power Supply	9 to 36 VDC 12 to 36 VDC	
Power Consumption	67.5W 50W	
Watchdog Timer	255 levels, 1 to 255 sec.	255 levels, 1 to 255 sec.
Front Bezel	Stainless steel IP66/IP69K protection	Stainless steel IP66/IP69K protection
Dimensions (W x D x H)	415.92 x 55 x 348.34 mm (16.37" x 2.16" x 13.71")	415.92 x 54.96 x 348.34 mm (16.37" x 2.16" x 13.71")
Weight (net/gross)	6.94 Kg (15.3 lb) / 10.2 Kg (22.5 lb)	7.04 kg (15.52 lb) /10.3 kg (22.71 lb)
Operating Temperature	-20°C to +50°C (-4°F to +122°F)	-20°C to +55°C (-4°F to +131°F)
Certifications	CE	CE

### GOT810-845

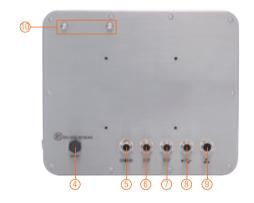
10.4" XGA TFT IP66 & IP69K-rated Stainless Steel Fanless PCT (or Resistive Touch) Panel Computer with Intel® Celeron® N3060 and Flat Bezel Design (-10°C to +50°C)

#### **Features**

- 10.4" XGA TFT LCD flat bezel projected capacitive (or resistive) touch
- IP66/IP69K-rated (NEMA 4X) water/dust/corrosion-proof design
- Full stainless steel enclosure with type 316
- -10°C to +50°C wide operating temperature range
- Fanless system with Intel® Celeron® N3060
- Optional Wi-Fi/3G kit for wireless network connectivity
- 9 to 36 VDC wide range power input
- M12 type I/O connectors for harsh environments







- 1. Backlight on/off
- 2. Brightness adjust
- 3. Power on/off
- 4. Ventilation valve 5. DC power connector
- 7. 1 x RS-232 8. 2 x USB 2.0

6. 1 x RS-232/422/485 (default RS-232)

- 9. 1 x Ethernet
- 10. 2 x Antenna opening

















#### Introduction

The 10.4-inch GOT810-845 is specially designed for food processing applications. Its IP66-rated stainless steel housing protects entire system from damage of water, powder and dust. It also supports a wide operating temperature range from -10°C to +50°C. Thus, this robust unit is specifically designed for high humidity, dusty or wet spaces in food factories or kitchens and more harsh applications.

#### Full IP66 and IP69K Compliance

The GOT810-845 adopts a water/dust-proof housing design with five IP66-rated M12 I/O connectors and IP69K compliance that ensures the product's ability to resist ingress of high temperature and high pressure water. It passed entire system IP66 test by SGS, and verified salt mist test. Additionally, it was tested by a spray nozzle with high temperature water (+80°C), a flow rate of 14 to 16 L/min and a nozzle hold with distance 10 to 15 cm away from the device at angles of 0°, 30°, 60° and 90° for 30 seconds. The GOT810-845 is qualified to meet harsh environment applications.

#### Wide Temperature (-10°C to +50°C) & Anti-vibration (2G) Design

The GOT810-845 featuring fanless and noiseless design supports a wide operating temperature range from -10°C to +50°C. Besides, the patent of anti-vibration for SSD ensures system reliability and stability.

Enclosure         Stainless type 316           LCD Panel         Display Type         10.4" XGA TFT LCD           Brightness (cd/m²)         350 nits           Resolution         1024 x 768           Viewing Angle (H/V)         160°/160°           Main System         CPU         Intel® Celeron® N3060 2C@1.6 GHz (up to 2.48 GHz)           Chipset         SoC integrated           System Memory         1 x DDR3L 1333 MHz SO-DIMM, up to 8GB           BIOS         AMI with Axiomtek standard features; such as, SmartView, Ethernet Boot ROM (RPL & PXE), customer CMOS backup				
Brightness (cd/m²) 350 nits	Enclosure	Stainless type 316		
Resolution	LCD Panel	Display Type	10.4" XGA TFT LCD	
Viewing Angle (H/V)   160°/160°		Brightness (cd/m²)	350 nits	
Main System  CPU Intel® Celeron® N3060 2C@1.6 GHz (up to 2.48 GHz)  Chipset SoC integrated  System Memory 1 x DDR3L 1333 MHz SO-DIMM, up to 8GB  BIOS AMI with Axiomtek standard features; such as, SmartView, Ethernet Boot ROM (RPL & PXE),		Resolution	1024 x 768	
(up to 2.48 GHz)  Chipset SoC integrated  System Memory 1 x DDR3L 1333 MHz SO-DIMM, up to 8GB  BIOS AMI with Axiomtek standard features; such as, SmartView, Ethernet Boot ROM (RPL & PXE),		Viewing Angle (H/V)	160°/160°	
Chipset SoC integrated  System Memory 1 x DDR3L 1333 MHz SO-DIMM, up to 8GB  BIOS AMI with Axiomtek standard features; such as, SmartView, Ethernet Boot ROM (RPL & PXE),	Main System	CPU		
System Memory  1 x DDR3L 1333 MHz SO-DIMM, up to 8GB  BIOS  AMI with Axiomtek standard features; such as, SmartView, Ethernet Boot ROM (RPL & PXE),			(up to 2.48 GHZ)	
up to 8GB  BIOS AMI with Axiomtek standard features; such as, SmartView, Ethernet Boot ROM (RPL & PXE),		Chipset	SoC integrated	
BIOS AMI with Axiomtek standard features; such as, SmartView, Ethernet Boot ROM (RPL & PXE),		System Memory	1 x DDR3L 1333 MHz SO-DIMM,	
features; such as, SmartView, Ethernet Boot ROM (RPL & PXE),			up to 8GB	
Ethernet Boot ROM (RPL & PXE),		BIOS	AMI with Axiomtek standard	
· · · · · · · · · · · · · · · · · · ·			features; such as, SmartView,	
customer CMOS backup			Ethernet Boot ROM (RPL & PXE),	
			customer CMOS backup	
Storage 1 x mSATA		Storage	1 x mSATA	
1 x SATA			1 x SATA	
Watchdog Timer 255 levels, 1 to 255 sec.		Watchdog Timer	255 levels, 1 to 255 sec.	
Onboard Graphics Integrated in Intel® GFX		Onboard Graphics	Integrated in Intel® GFX	

I/O Connector	1 x RS-232/422/485 (default RS-232, M12 A-coded)
	1 x RS-232 (M12 A-coded)
	2 x USB 2.0 (M12 A-coded)
	1 x 10/100/1000 Mbps Ethernet (M12 X-coded)
	1 x DC power connector (M12)
Expansion Interface	2 x PCI Express Mini Card slot
Touchscreen	5-wire resistive touch or projected capacitive multi-touch
Power Input	9 to 36 VDC
Power Consumption	29W
Dimensions	284 mm (11.2") (W) x 56 mm (2.2") (D) x 241 mm (9.49") (H)
Packing Dimensions	415 mm (16.34") (W) x 100 mm (3.94") (D) x 315 mm (12.4") (H)
Weight (net/gross)	2.8 kg (6.17 lb)/4 kg (8.82 lb)
Operating Temperature	-10°C to +50°C (14°F to +122°F)
Relative Humidity	20% - 90% @40°C; non-condensing
Operation Vibration	2G/10 - 500Hz/operation (SSD/mSATA, random)
Certifications	CE

<sup>\*</sup> W.T.: Wide Temperature. All W.T. supported products have to be sorted by Axiomtek.

#### **Packing List**

1	x GOT810-845
1	x DC cable

#### **Ordering Information**

GOT810-845-R (P/N: E22B810101)	10.4* IP66 & IP69K stainless steel fanless touch panel computer with flat resistive touch, Intel® Celeron® N3060 onboard, XGA 350 nits LCD, water-proof power cable (1.8 m)
GOT810-845-C (P/N: E22B810102)	10.4" IP66 & IP69K stainless steel fanless touch panel computer with projected capacitive touch, Intel® Celeron® N3060 onboard, XGA 350 nits LCD, water-proof power cable (1.8 m)

#### **Optional Accessories**

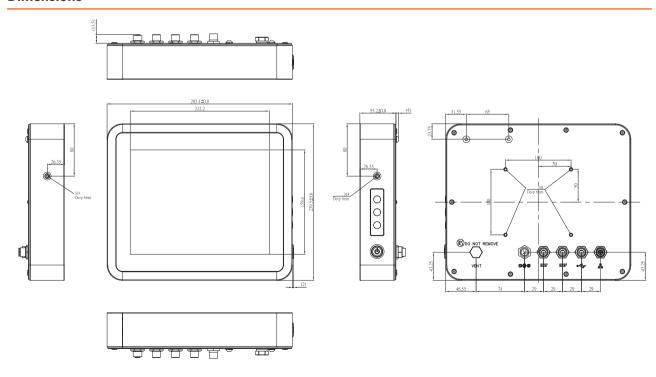
Wi-Fi kit	
594B8122100E	Water-proof COM cable (1.8 m)
594B8122820E	USB cable M12-8P-F/2 x type A (1.8 m)
594B8152710E	Water-proof LAN cable (1.8 m)
50966224010E	Adapter 24V 90W, M12 A-code 5P FSP090AAAN3

#### **Optional EOS Installation**

WES 7	
WE8S	

#### **Optional OS Installation**

Windows® 7	
Windows® 8/8.1	
Windows® 10	



<sup>\*</sup> Other configuration by request \* Specification and certifications may vary based on different requirements

### GOT815L-511

15" XGA TFT IP66 & IP69K-rated Stainless Steel Fanless PCT (or Resistive Touch) Panel Computer with Intel® Core™ i5-7300U Processor and Flat Bezel Design (-20°C to +50°C)

#### **Features**

- 15" XGA TFT flat bezel LCD display
- IP66/IP69K-rated (NEMA 4X) water/dust/corrosion-proof design
- Full stainless steel enclosure with type 316
- -20°C to +50°C wide operating temperature range
- Fanless design with Intel® Core™ i5-7300U processor
- Optional Wi-Fi/3G kit for wireless network connectivity
- 9 to 36 VDC wide range power input
- Supports VESA mount
- M12 type connectors for harsh environments



- 1. Backlight on/off
- 2. Brightness adjust +/-
- 3. Power on/off















#### Introduction

The 15-inch GOT815L-511 is specially designed for food processing applications. Its IP66rated stainless steel housing protects entire system from damage of water, powder and dust. It also supports a wide operating temperature range from -20°C to +50°C. Thus, this robust unit is specifically designed for high humidity, dusty or wet spaces in food factories or kitchens and more harsh applications.

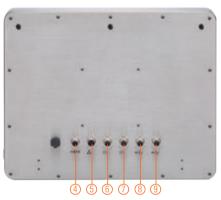
#### Full IP66 and IP69K Certified

The GOT815L-511 adopts a water/dust-proof housing design with five IP66-rated M12 I/O connectors and IP69K that ensures the product's ability to resist ingress of high temperature and high pressure water. It passed entire system IP66 test by SGS, and verified salt mist test. Additionally, it was tested by a spray nozzle with high temperature water (+80°C), a flow rate of 14 to 16 L/min and a nozzle hold with distance 10 to 15 cm away from the device at angles of 0°, 30°, 60° and 90° for 30 seconds. The GOT815L-511 is qualified to meet harsh environment applications.

#### Wide Temperature (-20°C to +50°C) & Anti-vibration (1G) Design

The GOT815L-511 featuring fanless and noiseless design supports a wide operating temperature range from -20°C to +50°C. Besides, the patent of anti-vibration for SSD ensures system reliability and stability.





- 4. DC power connector
- 5. 1 x LAN
- 6. 1 x RS-232/422/485 (default RS-232)
- 7. 1 x RS-232/422/485 (default RS-232)
- 8. 2 x USB 2.0
- 9 2 x USB 2 0

Enclosure	Stainless type 316	
LCD Panel	Display Type	15" XGA TFT LCD
	Brightness (cd/m²)	420 nits
	Resolution	1024 x 768
	Viewing Angle (H/V)	160°/160°
Main System	CPU	Intel® Core™ i5-7300U 3.5 GHz (Kaby Lake)
	Chipset	SoC integrated
	System Memory	1 x 260-pin DDR4-2133 SO-DIMM, up to 16GB
	BIOS	AMI UEFI BIOS
	Storage	1 x 2.5" SSD HDD or 1 x 2.5" SATA HDD (9.5 mm height)
	Watchdog Timer	255 levels, 1 to 255 sec.
	Onboard Graphics	Integrated in Intel® GFX

-	
I/O Connector	2 x RS-232/422/485 (default RS-232, A-coded) 4 x USB 2.0 (A-coded) 1 x 10/100/1000 Mbps Ethernet with Intel® i210-IT (X-coded); support Wake-on-LAN, PXE Boot ROM 1 x DC power input (M12)
Expansion Interface	1 x Full-size PCI Express Mini Card slot 1 x Half-size PCI Express Mini Card slot
Touchscreen	5-wire resistive touch or projected capacitive multi-touch
Power Input	9 to 36 VDC
Power Consumption	45W
Dimensions	382 mm (15.4") (W) x 55 mm (2.17") (D) x 305 mm (12.01") (H)
Packing Dimensions	510 mm (20.07") (W) x 186 mm (7.32") (D) x 532 mm (20.94") (H)
Weight (net/gross)	5.2 kg (11.46 lb)/8.4 kg (18.5 1b)
Operating Temperature	-20°C to +50°C (-4°F to +122°F)
Relative Humidity	10% - 95% @ +40°C, non-condensing
Operation Vibration	1G, 5 - 500Hz, random for 2.5" SSD
Certifications	CE
AVAIT VAIL .	AUDA/T

<sup>\*</sup>W.T.: Wide temperature. All W.T. supported products have to be sorted by Axiomtek.

#### **Packing List**

1 x GOT815L-511 1 x DC cable

#### **Ordering Information**

GOT815L-511-C-DC (P/N: E22B815116)	15" XGA fanless IP66 & IP69K-rated stainless steel fanless touch panel computer with Intel® Core™ i5-7300U, projected capacitive touch screen, 420 nits LCD and 9 to 36 VDC power input
GOT815L-511-R-DC (P/N: E22B815113)	15" XGA fanless IP66 & IP69K-rated stainless steel fanless touch panel computer with Intel® Core™ i5-7300U, 5-wire flat resistive touch screen and 9 to 36 VDC power input

<sup>\*</sup> Other configuration by request

#### **Optional Accessories**

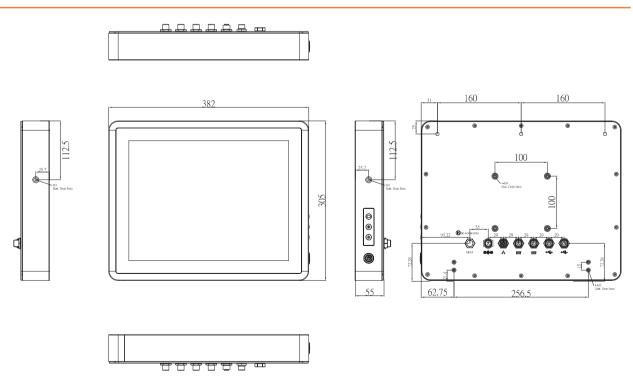
594B8122100E	Water-proof COM cable (1.8 m)
594B8152710E	Water-proof LAN cable (1.8 m)
594B8152820E	Water-proof USB cable (1.8 m)
50966224010E	Adapter 24V 90W, M12 A-code 5P FSP090AAAN3

#### **Optional EOS Installation**

Windows® 10 loT

#### **Optional OS Installation**

Windows® 10



<sup>\*</sup> Specification and certifications may vary based on different requirements

### GOT815-834

15" XGA TFT IP66 & IP69K-rated Stainless Steel Fanless PCT (or Resistive Touch) Panel Computer with Intel® Atom® Processor E3827 and Flat Bezel Design (-20°C to +55°C)

#### **Features**

- 15" XGA TFT LCD flat bezel projected capacitive (or resistive) touch
- IP66/IP69K-rated (NEMA 4X) water/dust/corrosion-proof design
- Full stainless steel enclosure with type 316
- -20°C to +55°C wide operating temperature range
- Fanless system with Intel® Atom® processor E3827
- Optional Wi-Fi/3G kit for wireless network connectivity
- 9 to 36 VDC wide range power input
- M12 type I/O connectors for harsh environments

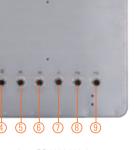












- 1. Backlight switch
- 2. Brightness adjust
- 3. Power on/off
- 4. DC power connector
- 5. 1 x RS-232/422/485
- 6. 1 x RS-232/422/485
- 7. 1 x LAN
- 8. 2 x USB 2.0
- 9. 2 x USB 2.0
- 10. 3 x Wi-Fi/3G antenna (optional, only for RF version)

















#### Introduction

The 15-inch GOT815-834 is specially designed for food processing applications. Its IP66rated stainless steel housing protects entire system from damage of water, powder and dust. It also supports a wide operating temperature range from -20°C to +55°C. Thus, this robust unit is specifically designed for high humidity, dusty or wet spaces in food factories or kitchens and more harsh applications

#### Full IP66 and IP69K Compliance

The GOT815-834 adopts a water/dust-proof housing design with five IP66-rated M12 I/O connectors and IP69K compliance that ensures the product's ability to resist ingress of high temperature and high pressure water. It passed entire system IP66 test by SGS, and verified salt mist test. Additionally, it was tested by a spray nozzle with high temperature water (+80°C), a flow rate of 14 to 16 L/min and a nozzle hold with distance 10 to 15 cm away from the device at angles of 0°, 30°, 60° and 90° for 30 seconds. The GOT815-834 is qualified to meet harsh environment applications.

#### Wide Temperature (-20°C to +55°C) & Anti-vibration (2G)

The GOT815-834 featuring fanless and noiseless design supports a wide operating temperature range from -20°C to +55°C. Besides, the patent of anti-vibration for SSD ensures system reliability and stability.

Enclosure	Stainless type 316	
LCD Panel	Display Type	15" XGA TFT LCD
	Brightness (cd/m²)	420 nits
	Resolution	1024 x 768
	Viewing Angle (H/V)	160°/160°
Main System	CPU	Intel® Atom® processor E3827 1.75 GHz (Bay Trail)
	Chipset	SoC integrated
	System Memory	1 x 204-pin DDR3L-1333 SO-DIMM dual channel, up to 8GB
	BIOS	AMI with Axiomtek standard features, such as SmartView, Ethernet Boot ROM (RPL & PXE), customer CMOS backup
	Storage	1 x 2.5" SSD 1 x CFast™
	Watchdog Timer	255 levels, 1 to 255 sec.
	Onboard Graphics	Integrated in Intel® GFX

I/O Connector	2 x RS-232/422/485 (default RS-232, A-coded)
	4 x USB 2.0 (A-coded)
	1 x 10/100/1000 Mbps Ethernet (X-coded)
	1 x DC power connector (M12)
Expansion Interface	2 x PCI Express Mini Card slot
Touchscreen	5-wire resistive touch or projected capacitive multi-touch
Power Input	9 to 36 VDC
Power Consumption	30W
Dimensions	382 mm (15.4") (W) x 55 mm (2.17") (D) x 305 mm (12.01") (H)
Packing Dimensions	510 mm (20.07") (W) x 186 mm (7.32") (D) x 532 mm (20.94") (H)
Weight (net/gross)	5.2 kg (11.46 lb)/8.4 kg (18.51 lb)
Operating Temperature	-20°C to +55°C (-4°F to +131°F)
Relative Humidity	10% - 95% @ +40oC, non-condensing
Operation Vibration	2G, 5 - 500Hz, random for 2.5" SSD
	2G, 5 - 500Hz, random for CompactFlash™
Certifications	CE
A LACE LACE T	AUDICE A L. L. A.

<sup>\*</sup> W.T.: Wide Temperature. All W.T. supported products have to be sorted by Axiomtek.

#### **Packing List**

1	x GOT815-834
1	x DC cable

#### **Ordering Information**

GOT815-834-C-DC (P/N: E22B815112)	15" XGA IP66-rated stainless steel fanless touch panel computer with Intel® Atom® E3827, projected capacitive touch screen, flat bezel design and 9 to 36 VDC power input
GOT815-834-R-DC (P/N: E22B815110)	15" XGA IP66-rated stainless steel fanless touch panel computer with Intel® Atom® E3827, 5-wire flat resistive touch screen, flat bezel design and 9 to 36 VDC power input
GOT815-834-R-RF-DC (P/N: E22B815109)	15" XGA IP66-rated stainless steel fanless touch panel computer with Intel® Atom® E3827, 5-wire flat resistive touch screen, flat-bezel design, 9 to 36 VDC power input and Wi-Fi or 3G

#### **Optional Accessories**

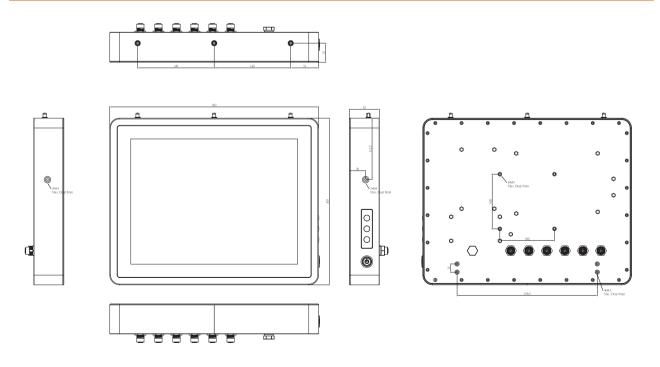
594B8122100E	Water-proof COM cable (1.8 m)
594B8122820E	Water-proof USB cable (1.8 m)
594B8152710E	Water-proof LAN cable (1.8 m)
50966224010E	Adapter 24V 90W, M12 A-code 5P FSP090AAAN3

#### **Optional EOS Installation**

WES 7	
WF8S	

#### **Optional OS Installation**

Windows® 7	
Windows® 8/8.1	
Windows® 10	



<sup>\*</sup> Other configuration by request \* Specification and certifications may vary based on different requirements

### GOT817L-511

17" SXGATFT IP66 & IP69K-rated Stainless Steel Fanless PCT (or Resistive Touch) Panel Computer with Intel® Core™ i5-7300U Processor and Flat Bezel Design (-20°C to +50°C)

#### **Features**

- 17" SXGA TFT flat bezel LCD display
- IP66/IP69K-rated (NEMA 4X) water/dust/corrosion-proof design
- Full stainless steel enclosure with type 316
- -20°C to +50°C wide operating temperature range
- Fanless design with Intel® Core™ i5-7300U processor
- Optional Wi-Fi/3G kit for wireless network connectivity
- 9 to 36 VDC wide range power input
- Supports VESA mount
- M12 type connectors for harsh environments



















#### Introduction

The 17-inch GOT817L-511 is specially designed for food processing applications. Its IP66rated stainless steel housing protects entire system from damage of water, powder and dust. It also supports a wide operating temperature range from -20°C to +50°C. Thus, this robust unit is specifically designed for high humidity, dusty or wet spaces in food factories or kitchens and more harsh applications.

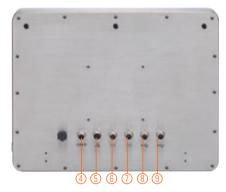
#### Full IP66 and IP69K Certified

The GOT817L-511 adopts a water/dust-proof housing design with five IP66-rated M12 I/O connectors and IP69K that ensures the product's ability to resist ingress of high temperature and high pressure water. It passed entire system IP66 test by SGS, and verified salt mist test. Additionally, it was tested by a spray nozzle with high temperature water (+80°C), a flow rate of 14 to 16 L/min and a nozzle hold with distance 10 to 15 cm away from the device at angles of 0°, 30°, 60° and 90° for 30 seconds. The GOT817L-511 is qualified to meet harsh environment applications.

#### Wide Temperature (-20°C to +50°C) & Anti-vibration (1G) Design

The GOT817L-511 featuring fanless and noiseless design supports a wide operating temperature range from -20°C to +50°C. Besides, the patent of anti-vibration for SSD ensures system reliability and stability.





- 4. DC power connector
- 5. 1 x LAN
- 6. 1 x RS-232/422/485 (default RS-232)
- 7. 1 x RS-232/422/485 (default RS-232)
- 8. 2 x USB 2.0
- 9 2 x USB 2 0

Enclosure	Stainless type 316		
LCD Panel	Display Type	17" SXGA TFT LCD	
	Brightness (cd/m²)	350 nits	
	Resolution	1280 x 1024	
	Viewing Angle (H/V)	170°/160°	
Main System	CPU	Intel® Core™ i5-7300U 3.5 GHz (Kaby Lake)	
	Chipset	SoC integrated	
	System Memory	1 x 260-pin DDR4-2133 SO-DIMM, up to 16GB	
	BIOS	AMI UEFI BIOS	
	Storage	1 x 2.5" SSD HDD or 1 x 2.5" SATA HDD (9.5 mm height)	
	Watchdog Timer	255 levels, 1 to 255 sec.	
	Onboard Graphics	Integrated in Intel® GFX	

I/O Connector	2 x RS-232/422/485 (default RS-232, A-coded) 4 x USB 2.0 (A-coded) 1 x 10/100/1000 Mbps Ethernet supporting PXE and LAN wake-up (Intel® I210-IT; X-coded) 1 x DC power connector (M12)
Expansion Interface	1 x Full-size PCI Express Mini Card slot 1 x Half-size PCI Express Mini Card slot
Touchscreen	5-wire resistive touch or projected capacitive multi-touch
Power Input	9 to 36 VDC
Power Consumption	67.5W
Dimensions	415.92 mm (16.4") (W) x 55 mm (2.2") (D) x 348.34 mm (13.7") (H)
Packing Dimensions	615 mm (24.2") (W) x 250 mm (9.84") (D) x 585 mm (23") (H)
Weight (net/gross)	6.94 kgs (15.3 lb)/10.2 kgs (22.5 lb)
Operating Temperature	-20°C to +50°C (-4°F to +122°F)
Relative Humidity	10% - 95% @ +40°C, non-condensing
Operation Vibration	1G, 5 - 500Hz, random for 2.5" SSD
Certifications	CE

<sup>\*</sup>W.T.: Wide temperature. All W.T. supported products have to be sorted by Axiomtek.

#### **Packing List**

1 x GOT817L-511 1 x DC cable

#### **Ordering Information**

GOT817L-511-C-DC (P/N: E22B817105)	17" SXGA IP66 & IP69K-rated stainless steel fanless touch panel computer with Intel® Core™ i5-7300U, projected capacitive touch screen, 420 nits LCD and 9 to 36 VDC power input
GOT817L-511-R-DC (P/N: E22B817106)	17" SXGA IP66 & IP69K-rated stainless steel fanless touch panel computer with Intel® Core™ i5-7300U, 5-wire flat resistive touch screen, 9 to 36 VDC power input

<sup>\*</sup> Other configuration by request

#### **Optional Accessories**

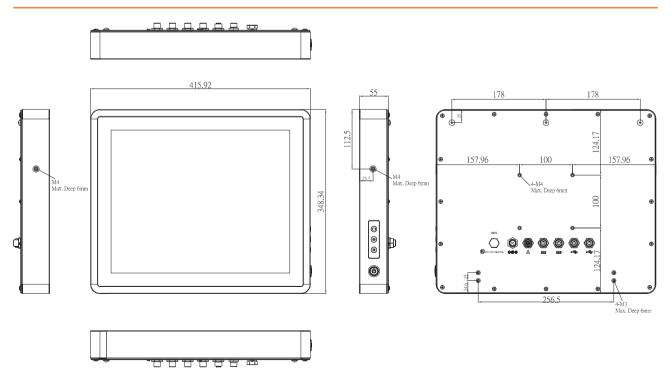
594B8122100E	Water-proof COM cable (1.8 m)
594B8152710E	Water-proof LAN cable (1.8 m)
594B8152820E	Water-proof USB cable (1.8 m)
50966224010E	Adapter 24V 90W, M12 A-code 5P FSP090AAAN3

#### **Optional EOS Installation**

Windows® 10 IoT

#### **Optional OS Installation**

Windows® 10



<sup>\*</sup> Specification and certifications may vary based on different requirements

### GOT817-834

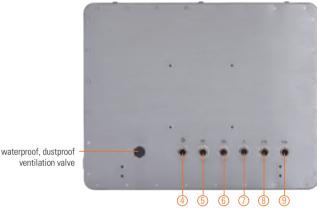
17" SXGATFT IP66 & IP69K-rated Stainless Steel Fanless PCT (or Resistive Touch) Panel Computer with Intel® Atom® Processor E3827 and Flat Bezel Design (-20°C to +55°C)

#### **Features**

- 17" SXGA TFT LCD flat bezel projected capacitive (or resistive) touch
- IP66/IP69K-rated (NEMA 4X) water/dust/corrosion-proof design
- Full stainless steel enclosure with type 316
- -20°C to +55°C wide operating temperature range
- Fanless system with Intel® Atom® processor E3827
- Optional Wi-Fi/3G kit for wireless network connectivity
- 12 to 36 VDC wide range power input
- M12 type I/O connectors for harsh environments







- 1. Backlight switch
- 2. Brightness adjust
- 3. Power on/off
- 4. DC power connector
- 5. 1 x RS-232/422/485
- 6. 1 x RS-232/422/485
- 7. 1 x LAN
- 8. 2 x USB 2.0
- 9.2 x USB 2.0
- 10. 3 x Wi-Fi/3G antenna (optional, only for RF version)

















#### Introduction

The 17-inch GOT817-834 is specially designed for food processing applications. Its IP66rated stainless steel housing protects entire system from damage of water, powder and dust. It also supports a wide operating temperature range from -20°C to +55°C. Thus, this robust unit is specifically designed for high humidity, dusty or wet spaces in food factories or kitchens and more harsh applications.

#### Full IP66 and IP69K Compliance

The GOT817-834 adopts a water/dust-proof housing design with five IP66-rated M12 I/O connectors and IP69K compliance that ensures the product's ability to resist ingress of high temperature and high pressure water. It passed entire system IP66 test by SGS, and verified salt mist test. Additionally, it was tested by a spray nozzle with high temperature water (+80°C), a ow rate of 14 to 16 L/min and a nozzle hold with distance 10 to 15 cm away from the device at angles of 0°, 30°, 60° and 90° for 30 seconds. The outstanding GOT817-834 stainless touch panel PC is qualified to meet harsh environment applications.

#### Wide Temperature (-20°C to +55°C) & Anti-vibration (2G) Design

The rugged 17" industrial stainless touch panel PC featuring fanless and noiseless design supports a wide operating temperature range from -20°C to +55°C. Besides, the patent of anti-vibration for SSD ensures system reliability and stability.

Enclosure	Stainless type 316	
LCD Panel	Display Type	17" SXGA TFT LCD
	Brightness (cd/m²)	350 nits
	Resolution	1280 x 1024
	Viewing Angle (H/V)	160°/140°
Main System	CPU	Intel® Atom® processor E3827
		1.75 GHz (Bay Trail)
	Chipset	SoC integrated
	System Memory	1 x 204-pin DDR3L-1333 SO-DIMM
		dual channel, up to 8GB
	BIOS	AMI with Axiomtek standard
		features, such as SmartView,
		Ethernet Boot ROM (RPL & PXE),
		customer CMOS backup
	Storage	1 x 2.5" SSD
		1 x CFast™
	Watchdog Timer	255 levels, 1 to 255 sec.
	Onboard Graphics	Integrated in Intel® GFX

I/O Connector	2 x RS-232/422/485 (default RS-232, A-coded) 4 x USB 2.0 (A-coded) 1 x 10/100/1000 Mbps Ethernet (X-coded) 1 x DC power connector (M12)	
Expansion Interface	2 x PCI Express Mini Card slot	
Touchscreen	5-wire resistive touch or projected capacitive multi-touch	
Power Input	12 to 36 VDC	
Power Consumption	50W	
Dimensions	415.92 mm (16.37") (W) x 54.96 mm (2.16") (D) x 348.34 mm (13.71") (H)	
Packing Dimensions	615 mm (24.2") (W) x 250 mm (9.84") (D) x 585 mm (23") (H)	
Weight (net/gross)	7.04 kg (15.52 lb)/10.3 kg (22.71 lb)	
Operating Temperature	-20°C to +55°C (-4°F to +131°F)	
Relative Humidity	10% - 95% @ +40°C, non-condensing	
Operation Vibration	2G, 5 - 500Hz, random for 2.5" SSD 2G, 5 - 500Hz, random for CFast™	
Certifications	CE	
XAA/T AA/T T . AHAA/T . I I . I . I . I . I A		

<sup>\*</sup> W.T.: Wide Temperature. All W.T. supported products have to be sorted by Axiomtek.

#### **Packing List**

1 x GOT817-834 1 x DC cable

#### **Ordering Information**

Sunlight readable type		
GOT817-834-C-DC (P/N: E22B817103)	17" SXGA IP66 & IP69K-rated stainless steel fanless touch panel computer with Intel® Atom® E3827, projected capacitive touch screen, flat-bezel design and 12 to 36 VDC power input	
GOT817-834-R-DC (P/N: E22B817101)	17" SXGA IP66 & IP69K-rated stainless steel fanless touch panel computer with Intel® Atom® E3827, 5-wire flat resistive touch screen, flat-bezel design and 12 to 36 VDC power input	

#### **Optional Accessories**

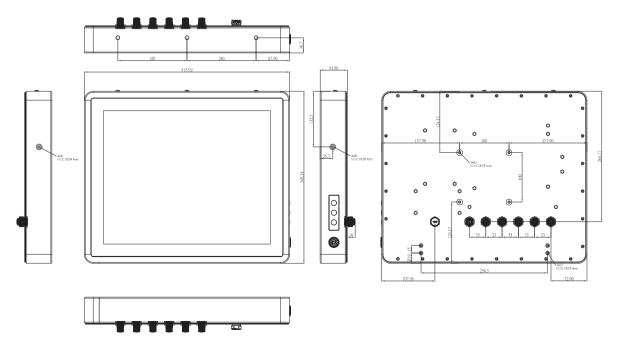
594B8122100F	Water-proof COM cable (1.8 m)
OO IBOTEL TOOL	Trate: pree: certi cable (rie iii)
594B8122820E	Water-proof USB cable (1.8 m)
594B8152710E	Water-proof LAN cable (1.8 m)
50966224010E	Adapter 24V 90W, M12 A-code 5P FSP090AAAN3

#### **Optional EOS Installation**

/ES 7	
/E8S	
/indows® 10 loT	

#### **Optional OS Installation**

Nindows® 7	
Nindows® 8/8.1	
Nindows® 10	



<sup>\*</sup> All specifications and photos are subject to change without notice.

<sup>\*</sup> Other configuration by request
\* Specification and certifications may vary based on different requirements



**Fanless Touch Panel Computers** 

Heavy-duty Fanless Touch Panel Computers

**Stainless Touch Panel Computers** 

**Transportation Touch Panel Computers and Monitors** 

**Industrial Touch Panel Computers** 

**Industrial Touch Monitors** 

**Medical Panel Computers** 

Modular Panel PCs

Self-service Kiosk

# **Industrial Panel PCs**



## Transportation Touch Panel Computers & Monitors

Axiomtek's GOT600 series is defined as vehicle mount terminal for logistics, automation and heavy-duty markets, especially in the case of forklifts. The GOT700 series is designed as a train operator interface to inform the train engineer about the status of the train's functions during operation. It complies with the EMC, shock and vibration test requirements of the European standard EN 50155 for railway applications. The P6100 series is EN 50155 certified railway touchscreen monitor designed specifically for transportation application. The railway touchscreen monitor has an industrial-grade IP65/NEMA 4/12 compliant metal front bezel which resists water spillage and is specifically designed for railway sector. It could work perfectly for passenger information display, CCTV live view, fleet management, and many types of heavy transport equipment.

	Selection Guide		347
	GOT610-837	10.4" XGA TFT LCD Vehicle Mount Terminal with Intel® Atom® Processor E3845 1.91 GHz for Heavy-duty Vehicle (-30°C to +55°C)	349
	GOT710-837	10.4" XVGA TFT LCD Railway Fanless Touchscreen Panel PC with Intel® Atom® Processor E3845 1.91 GHz (-40°C to +70°C )	351
	GOT712-837	12.1" XGA TFT LCD Railway Fanless Touchscreen Panel PC with Intel® Atom® Processor E3845 1.91 GHz (-40°C to +70°C )	353
	P6105 P6125	10.4" XGA TFT LCD Railway Touchscreen Monitor (-25°C to +55°C) 12.1" XGA TFT LCD Railway Touchscreen Monitor (-25°C to +55°C)	355 357
w	P718W	18.5" Full HD TFT Railway Monitor for Passenger Information Display [-25°C to +55°C]	359

## Transportation Touch Panel Computers

Selection Guide







Features Wodels	GOT610-837	GOT710-837	GOT712-837
CPU Level	Intel® Atom® E3845 (1.91 GHz)	Intel® Atom® E3845 (1.91 GHz)	Intel® Atom® E3845 (1.91 GHz)
Chipset	SoC intergrated	SoC intergrated	SoC intergrated
System Memory	DDR3 4GB	DDR3 4GB	DDR3 4GB
Display	10.4" XGA TFT LCD, 500 nits	10.4" SVGA TFT LCD, 1000 nits	12.1" XGA TFT LCD, 800 nits
1/0	1 x 10/100/1000 Mbps Ethernet with isolated 1.5kV 3 x USB port type A connector 1 x RS-232/422/485 with isolated 1.5kV (D-sub 9 male) 1 x DC 1 x Audio (Line-out & Mic-in) 1 x DIO (6-in/2-out) with isolated 1.5kV (Phoenix type) 1 x CANBus with isolated 1.5kV (D-sub 9 male) 3 x Internal Antenna (SMA) 1 x SIM Card socket	2 x RS-232/422/485 with isolated 1.5kV (M12, A-coded) 2 x isolated 1.5kV (M12, X-coded) 2 x USB 2.0 (M12, A-coded) 1 x DC power input with isolated 1.5kV (M12, A-coded) 1 x Audio (Line-out & Mic-in), Speaker (D-sub) 1 x DIO (6-in/2-out) with isolated 1.5kV 1 x CANBus with isolated 1.5kV (D-sub)	2 x RS-232/422/485 with isolated 1.5kV (M12, A-coded) 2 x isolated 1.5kV (M12, X-coded) 2 x USB 2.0 (M12, A-coded) 1 x DC power input with isolated 1.5kV (M12, A-coded) 1 x Audio (Line-out & Mic-in), Speaker (D-sub) 1 x DIO (6-in/2-out) with isolated 1.5kV 1 x CANBus with isolated 1.5kV (D-sub)
Storage	16GB flash onboard 1 x mSATA	16GB flash onboard 1 x mSATA	16GB flash onboard 1 x mSATA
Expansion Interface	2 x Full-size PCI Express Mini Card slot	2 x Full-size PCI Express Mini Card slot	2 x Full-size PCI Express Mini Card slot
Touchscreen	5-wire resistive or projected capacitive touch	5-wire resistive type or glass with keyboard	5-wire resistive type or glass with keyboard
Operating System	Windows® 7, WES7 Windows® 8/8.1, WE8S Windows® 10, Windows® 10 loT	Windows® 7, WES7 Windows® 8/8.1, WE8S Windows® 10, Windows® 10 loT	Windows® 7, WES7 Windows® 8/8.1, WE8S Windows® 10, Windows® 10 IoT
Power Supply	18 to 60 VDC	24 to 110 VDC power input	24 to 110 VDC power input
Power Consumption	44.5W	36W	35W
Watchdog Timer	255 levels, 1 to 255 sec	255 levels, 1 to 255 sec.	255 levels, 1 to 255 sec.
Front Bezel	Aluminum with rugged protection	Aluminum with rugged protection	Aluminum with rugged protection
Dimensions (W x D x H)	291 x 50 x 266 mm (11.46" x 1.97" x 10.47")	310 x 65 x 216 mm (12.20" x 2.56"x 8.50")	330 x 64.4 x 245 mm (13" x 2.53"x 9.65")
Weight (net/gross)	2.0 kg (4.4 lb)/3.25 kg (7.16 lb)	2.4 kg (5.29 lb)/5 kg (11.02 lb)	2.4 kg (5.29 lb)/5 kg (11.02 lb)
Operating Temperature	-30°C to +55°C (-22°F to +131°F)	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)
Certifications	CE, EN 60721-3-5	EN 50155: 2017, EN 50121-3-2: 2016, EN 61373: 2010, EN 45545-2	EN 50155: 2017, EN 50121-3-2: 2016, EN 61373: 2010, EN 45545-2

## Transportation Touch Displays

Selection Guide







	P6105	P6125		
Display Type	10.4" XGA TFT LCD	12.1" XGA TFT LCD	18.5" FHD TFT LCD	
Max. Colors	16.2M	16.2M	16.7M	
Active Area (mm)	210.4 x 157.8	245.76 x 184.32	408.96 x 203.04	
Max. Resolution	1024 x 768	1024 x 768	1920 x 1080	
Display Mode	VGA 640 x 480 (60/72 Hz) SVGA 800 x 600 (60/72 Hz) XGA 1024 x 768 (60/72 Hz)	VGA 640 x 480 (60/72 Hz) SVGA 800 x 600 (60/72 Hz) XGA 1024 x 768 (60/72 Hz)	1920 x 1080 ((50/60/75Hz)	
Pixel Pitch (H x V, mm)	0.0685 x 0.2055	0.0685 x 0.2055	0.213 x 0.213	
Backlight	LED	LED	LED	
Backlight MTBF (hrs)	50,000	50,000	50,000	
Viewing Angle (H/V)	176°/176°	176°/176°	178°/178°	
Response Time	25ms	25ms	20 m/sec.	
Contrast Ratio	1000 (TYP)	1000 (TYP)	1000 (TYP)	
Brightness (cd/m²)	500 nits	800 nits	500 nits	
Display Control	OSD	OSD	OSD	
I/O Connectors	1 x DC power input 1 x RS-232 for touch and remote control 1 x VGA 1 x HDMI 1 x DVI-D 1 x Line-in	1 x DC power input 1 x RS-232 for touch and remote control 1 x VGA 1 x HDMI 1 x DVI-D 1 x Line-in	1 x DC power input 1 x RS-232 for touch and remote control 1 x HDMI 1 x VGA 1 x DVI-D 1 x Line-in	
Touchscreen	Optional, Res. And PCT	Optional, Res. And PCT Optional, Res. And PCT C		
Power Consumption	16W 33W		TBD	
Power Supply	24 or 110 VDC power input	24 or 110 VDC power input	24 to 110 VDC	
Dimensions (W x D x H)	310 x 49 x 214 mm (12.20" x 1.94" x 8.43")	330 x 57 x 245 mm (12.99" x 2.24" x 9.65")	445.2 x 269.4 x 50.3 mm (17.52" x 10.6" x 1.98")	
Weight (net/gross)	2.0 kg (4.4 lb)/3.25 kg (7.16 lb) 2.2 kg (4.85 lb)/3.45 kg (7.61 lb) 4.4 kg (		4.4 kg (9.7 lb)/5.9 kg (13.0 lb)	
Operating Temperature	-25°C to +55°C (-13°F to +131°F)	-25°C to +55°C (-13°F to +131°F) -25°C to +55°C (-13°F to +131°F)		
Mounting	Panel mount/Wall mount/VESA arm	Panel mount/Wall mount/VESA arm	Panel mount/VESA arm	
Certifications	EN 50155: 2017, EN 50121-3-2: 2016, EN 61373: 2010, EN 45545-2	EN 50155: 2017, EN 50121-3-2: 2016, EN 61373: 2010, EN 45545-2	EN 50155: 2017, EN 50121-3-2: 2016, EN 61373: 2010, EN 45545-2	

### GOT610-837

10.4" XGA TFT LCD Vehicle Mount Terminal with Intel® Atom® Processor E3845 1.91 GHz for Heavy-duty Vehicle (-30°C to +55°C)

#### **Features**

- Intel® Atom® processor E3845 1.91 GHz
- Auto-dimming for different environment
- Rugged IP65 front bezel design
- Front hot keys for easy access
- Wide operating temperature range from -30°C to +55°C
- Various mounting ways
- 5-wire resistive or projected capacitive touch
- EN 60721-3-5 class 5M3 and MIL-STD-810F for high vibration/shock-proof





The GOT610-837 vehicle mount terminal focuses on logistics, automation and heavyduty markets. The 10.4" vehicle mount terminal is engineered specifically for in-vehicle use and can be operated in extreme and regular environments indoor and outdoor. The GOT610-837 is designed to improve efficiencies across the facility. Especially in the case of forklifts, embedding a capable mobile terminal can improve productivity and reduce errors between docks and warehouse. Having access to accurate information at all time in real-time aids in every process from receiving to storing, moving around, cross docking and picking.

#### Wide Temperature (-30°C to +55°C)

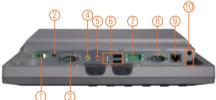
The Intel® Atom®-based vehicle mount terminal, GOT610-837, applies unique extended temperature technology with wide temperature range support as well as fanless operation. It also has a compact design to fit seamlessly into forklift and other heavy-duty vehicles

#### **Designed for Vehicle Markets**

The Axiomtek GOT610-837 is particularly suitable for demanding HMI applications in the vehicle-mounted sector, including arranging stocks and picking goods up and away. To ensure the reliable operation in a variety of different locations, the 10.4" vehicle-mounted panel PC supports various mounting options: wall mount, VESA arm and desktop stand. Moreover, it is also ready for Windows® 10, 8.1 or 7.



- 1. Multi-function key
- 2. Brightness +/-
- 3. Volume +/-
- 4. LCD on/off
- 5. LED indicator
- 6. LED light sensor



- 1. DC-in
- 2. AX/ATX mode switch
- 3. CANbus
- 4. 1 x line-out 5. 1 x mic-in
- 6. 3 x USB 2.0 type A
- 7. DIO (6-in/2-out)
- 8. 1 x RS-232/422/485
- 9.1 x LAN
- 10. 2 x Wi-Fi SMA antenna opening
- 11. 3G/LTE/Wi-Fi SMA antenna opening
- 12. SIM card socket
- 13. 1 x USB 2.0 type A

Front Bezel	IP65, NEMA 4 rugged	IP65, NEMA 4 rugged protection, aluminum front bezel		
LCD Panel	Display Type	10.4" TFT LCD		
	Brightness (cd/m²)	500 nits		
	Resolution	1024 x 768		
	Viewing Angle (H/V)	176°/176°		
Main System	CPU	Intel® Atom® processor E3845 1.91 GHz (Bay Trail)		
	Chipset	SoC integrated		
	System Memory	DDR3 4GB		
	BIOS	AMI with Axiomtek standard features, such as SmartView, Ethernet Boot ROM (RPL & PXE), customer CMOS backup		
	Storage	16GB flash onboard 1 x mSATA		
	Watchdog Timer	255 levels, 1 to 255 sec.		
	Onboard Graphics	Integrated in Intel® GFX		

•	
I/O Connector	1 x RJ-45 GbE (isolation level 1.5kV) 4 x USB 2.0 type A 1x Isolated DB9 RS-232/422/485 (isolation level 1.5kV) 1 x 4-pin terminal block DC-in 2 x Audio line-out, mic-in 1 x Isolated terminal block DIO (6-in/2-out, isolation level 1.5kV) 1 x Isolated DB9 CANbus (isolation level 1.5kV) 3 x SMA antenna opening 1 x SIM card socket
Expansion Interface	2 x PCI Express Mini Card slot
Flat Panel	5-wire resistive or projected capacitive touch
Power Supply	Typical 24/48 VDC Working range: 18 to 60 VDC
Power Consumption	44.5W
Dimensions	291 mm (11.46") (W) x 50 mm (1.97") (D) x 266 mm (10.47") (H)
Packing Dimensions	382 mm (15.04") (W) x 185 mm (7.28") (D) x 427 mm (16.81") (H)
Weight (net)	2.0 kg (4.4 lb)/3.25 kg (7.16 lb)
Operating Temperature	-30°C to +55°C (-22°F to +131°F)
Relative Humidity	10% to 95% @ 40°C, non-condensing
Certifications	CE, EN 60721-3-5
V 1 4 4 70 1 1 70	

<sup>\*</sup> W.T.: Wide Temperature. All W.T. supported products have to be sorted by Axiomtek.

#### **Packing List**

1 x GOT610-837 unit

2 x Phoenix connector (1 x power -pin/1 x DIO 12-pin)

#### **Ordering Information**

GOT610-837	10.4" XGA fanless vehicle mount terminal with Intel®
(P/N: E22B610100)	Atom® E3845, 5-wire resistive touch screen and 9 to 60
	VDC power input

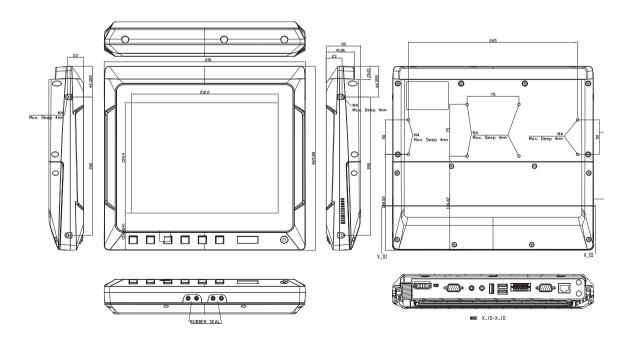
Specifications and certifications may vary based on different requirements.

#### **Optional EOS Installation**

WES 7	
WE8S	
Windows® 10 loT	

#### **Optional OS Installation**

Windows® 7	
Windows® 8/8.1	
Windows® 10	



## GOT710-837

10.4" SVGA TFT LCD Railway Fanless Touchscreen Panel PC with Intel® Atom® Processor E3845 1.91 GHz (-40°C to +70°C)

#### **Features**

- Sunlight readable 10.4" SVGA TFT LCD with high brightness of 1000nits
- Intel® Atom® processor E3845 1.91 GHz
- Alternative keypad control in the front bezel
- Lockable I/O interfaces and M12 type connectors
- Auto-dimming for different environments
- -40°C to +70°C wide temperature range (T3 Level)
- EN 50155, EN 45545-2 certified for railway applications



▲ Side view













#### Introduction

The EN 50155 certified GOT710-837 is equipped with a 10.4-inch SVGA TFT LCD with high brightness of 1000 nits which allows a train operator to easily read any operational status messages, even under direct sunlight. Design for ease of use and maintenance, this all-in-one 10.4" railway touchscreen panel PC also has an alternative keypad control on the front bezel for easy access and cleaning purposes. This feature-rich panel PC has an IP65-rated, M12 connectors and is EN 50155 certified.

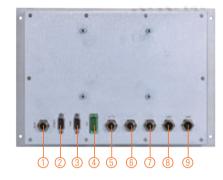
#### Wide Temperature (-40°C to +70°C)

The Intel® Atom®-based railway panel  $\overset{\cdot}{\text{PC}}$ , GOT710-837, applies unique extended temperature technology with wide temperature range support as well as fanless operation. It also has a high brightness TFT LCD display and compact design for transport heavy-duty environment.

#### **Designed for Railway Application**

The Axiomtek G0T710-837 is particularly suitable for demanding HMI applications in the railway sector, including tasks like monitoring and controlling as speed, temperature, and security, or for fleet management. To ensure the reliable operation in a variety of different locations, the 10.4-inch railway panel PC supports various mounting options: panel mount, wall mount, VESA arm and desktop stand. Moreover, it is also ready for Windows® 10, 8 and 7.





- 1. DC power input with isolation 1.5kV
- 2. CANbus with isolation 1.5kV
- 3. Audio (line-out, line-in, mic-in & speaker-out)
- 4. DIO (6-in/2-out with isolation 1.5kV)
- 5. 2 x USB 2.0

- 6. 1 x RS-232/422/485 with isolation 1.5kV
- 7. 1 x RS-232/422/485 with isolation 1.5kV
- 8. 1 x GbE with isolation 1.5kV
- 9. 1 x GbE with isolation 1.5kV

Front Bezel		IP65, NEMA 4 rugged protection, aluminum front bezel, rest area of enclosure is IP40 rated		
LCD Panel	Display Type	10.4" TFT LCD		
	Brightness (cd/m²)	1000 nits		
	Resolution	800 x 600		
	Viewing Angle (H/V)	160°/160°		
Main System	CPU	Intel® Atom® processor E3845 1.91 GHz (Bay Trail)		
	Chipset	SoC integrated		
	System Memory	DDR3 4GB		
	BIOS	AMI with Axiomtek standard features, such as SmartView, Ethernet Boot ROM (RPL & PXE), customer CMOS backup		
	Storage	16GB flash onboard 1 x mSATA		
	Watchdog Timer	255 levels, 1 to 255 sec.		
	Onboard Graphics	Integrated in Intel® GFX		

I/O Connector	2 x Isolated M12 A-coded RS-232/422/485 (isolation level
	1.5kV)
	2 x isolated M12 X-coded GbE (isolation level 1.5kV)
	1 x M12 A-coded USB 2.0 (2 port signal)
	1 x M12 A-coded DC-in
	1 x DB15 audio line-in, line-out, mic-in and speaker-out
	1 x Isolated terminal block DIO (6-in/2-out, isolation level
	1.5kV)
	1 x Isolated DB9 CANbus (isolation level 1.5kV)
Expansion Interface	2 x PCI Express Mini Card slot
Flat Panel	Alternative 5-wire resistive touchscreen or keyboard
Power Supply	Typical 24 VDC, working range 16.8 - 30 VDC
	Typical 110 VDC, working range 77 to 137.5 VDC
	Typical 24 to 110 VDC, working range 16.8 to 137.5 VDC, S3
	20ms hold up time
Power Consumption	36W
Dimensions	310 mm (12.20") (W) x 65.05 mm (2.56") (D) x 216 mm (8.50") (H)
Packing Dimensions	382 mm (15.04") (W) x 185 mm (7.28") (D) x 427 mm (16.81") (H)
Weight (net/gross)	2.4 kg (5.29 lb)/5 kg (11.02 lb)
Operating Temperature	-40°C to +70°C (-40°F to +158°F)
Relative Humidity	10% to 95% @ +40°C, non-condensing
Certifications	CE, EN 50155, EN 45545-2
	Complied UIC 612
* W.T.: Wide Temperature	e. All W.T. supported products have to be sorted by Axiomtek.

#### **Packing List**

- 1 x GOT710-837 unit
- 1 x Power cable
- 1 x Phoenix connector

#### **Optional EOS Installation**

WES 7			
WE8S			
Windows® 10 (IoT)			



▲ Touch without keypad version

#### **Ordering Information**

24 VDC Power Input	
GOT710-837-R-E3845- 24 VDC (P/N: E22B710101)	10.4" SVGA railway fanless touchscreen panel PC with Intel® Atom® E3845, sunlight readable LCD (1000 nits), 5-wire resistive touchscreen and 24 VDC power input
GOT710-837-R-E3845- 24 VDC with keypad (P/N: E22B710102)	10.4" SVGA railway fanless touchscreen panel PC with Intel® Atom® E3845, sunlight readable LCD (1000 nits), 5-wire resistive touchscreen 24 VDC power input and keypad
GOT710-837-G-E3845- 24 VDC with keypad (P/N: E22B710103)	10.4" SVGA railway fanless panel computer with Intel® Atom® E3845, sunlight readable LCD (1000 nits), non-touchscreen, 24 VDC power input and keypad
110 VDC Power Input	
GOT710-837-R-E3845- 110 VDC (P/N: E22B710104)	10.4" SVGA railway fanless touchscreen panel PC with Intel® Atom® E3845, sunlight readable LCD (1000 nits), 5-wire resistive touchscreen and 110 VDC power input
GOT710-837-R-E3845- 110 VDC with keypad (P/N: E22B710105)	10.4" SVGA EN 50155 railway fanless touchscreen panel PC with Intel® Atom® E3845, sunlight readable LCD (1000 nits), 5-wire resistive touchscreen, 110 VDC power input and keypad

#### 24 to 110 VDC Power Input

GOT710-837-R-E3845-24- 110VDC (P/N: E22B710110)	10.4" SVGA railway fanless touchscreen panel PC with Intel® Atom® E3845, sunlight readable LCD (1000 nits), 5-wire resistive touchscreen, 24 to 110 VDC power input, S3 20ms hold up time
GOT710-837-R-E3845-24- 110VDC with keypad (P/N: E22B710111)	10.4" SVGA railway fanless touchscreen panel PC with Intel® Atom® E3845, sunlight readable LCD (1000 nits), 5-wire resistive touchscreen, 24 to 110 VDC power input, S3 20ms hold up time and keypad

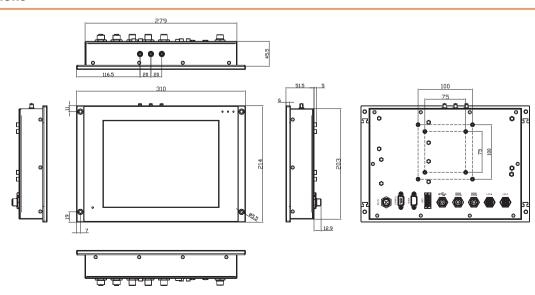
<sup>\*</sup>Specifications and certifications may vary based on different requirements.

#### **Optional Accessories**

822B7100140E	GOT710 3G+GPS kit
8812B7100A0E	GOT710 Wi-Fi Kit
594B8122820E	M12 A-coded USB cable
594B7102100E	RS-232 cable
594B7102700E	M12 X-coded LAN cable

#### **Optional OS Installation**

Windows® 7	
Windows® 8/8.1	
Windows® 10	



## GOT712-837

12.1" XGA TFT LCD Railway Fanless Touchscreen Panel PC with Intel® Atom® Processor E3845 1.91 GHz (-40°C to +70°C)

#### **Features**

- Sunlight readable 12.1" XGA TFT LCD with high brightness of 800 nits
- Intel® Atom® processor E3845 1.91 GHz
- Lockable I/O interfaces and M12 type connectors
- Auto-dimming for different environments
- -40°C to +70°C wide temperature range
- EN 50155, EN 45545-2 certified

















#### Introduction

The EN 50155 railway touchscreen panel PC, GOT712-837, is equipped with a 12.1-inch XGA TFT LCD with high brightness of 800 nits which allows a train operator to easily read any operational status messages, even under direct sunlight. Design for ease of use and maintenance, this all-in-one 12.1" railway touch panel PC also has an alternative keypad control on the front bezel for easy access and cleaning purposes. This feature-rich panel PC has an IP65-rated front bezel, M12 connectors and EN 50155 compliance.

#### Wide Temperature (-40°C to +70°C)

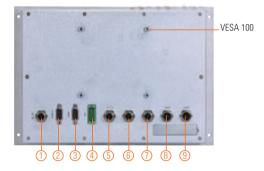
The Intel® Atom®-based railway panel  $\overset{\cdot}{\text{PC}}$ , GOT712-837, applies unique extended temperature technology with wide temperature range support as well as fanless operation. It also has a high brightness display and compact design for transport heavyduty environment.

#### **Designed for Railway Application**

The Axiomtek GOT712-837 is particularly suitable for demanding HMI applications in the railway sector, including tasks like monitoring and controlling speed, temperature, and security, or for fleet management. To ensure the reliable operation in a variety of different locations, the 12.1-inch railway panel PC supports various mounting options: panel mount, wall mount, VESA arm and desktop stand. Moreover, it is also ready for Windows® 7, 8.1 and 10.







- 1. DC power input
- 2. CANbus with isolation 1.5kV
- 3. Audio (line-out, line-in, mic-in & speaker-out)
- 4. DIO (6-in/2-out with isolation 1.5kV)
- 5. 2 x USB 2.0

- 6. 1 x RS-232/422/485 with isolation 1.5kV
- 7. 1 x RS-232/422/485 with isolation 1.5kV
- 8. 1 x GbE with isolation 1.5kV
- 9. 1 x GbE with isolation 1.5kV

Front Bezel	IP65, NEMA 4 rugged protection, aluminum front bezel, rest area of enclosure is IP40 rated	
LCD Panel	Display Type	12.1" TFT LCD
	Brightness (cd/m²)	800 nits
	Resolution	1024 x 768
	Viewing Angle (H/V)	160°/160°
Main System	CPU	Intel® Atom® processor E3845 1.91 GHz (Bay Trail)
	Chipset	SoC integrated
	System Memory	DDR3 4GB
	BIOS	AMI with Axiomtek standard features, such as SmartView, Ethernet Boot ROM (RPL & PXE), customer CMOS backup
	Storage	16GB flash onboard 1 x mSATA
	Watchdog Timer	255 levels, 1 to 255 sec.
	Onboard Graphics	Integrated in Intel® GFX

I/O Connector	2 x Isolated M12 A-coded RS-232/422/485 (isolation level	
	1.5kV)	
	2 x Isolated M12 X-coded GbE (isolation level 1.5kV)	
	1 x M12 A-coded USB 2.0 (2 port signal)	
	I x M12 A-coded DC-in	
	1 x DB15 audio line-in, line-out, mic-in and speaker-out	
	1 x Isolated terminal block DIO (6-in/2-out, isolation level 1.5kV)	
	1 x Isolated DB9 CANbus (isolation level 1.5kV)	
Expansion Interface	2 x PCI Express Mini Card slot	
Flat Panel	Alternative 5-wire resistive touchscreen or keyboard	
Power Supply	Typical 24 VDC, working range 16.8 - 30 VDC	
	Typical 110 VDC, working range 77 to 137.5 VDC	
	Typical 24 to 110 VDC, working range 16.8 to 137.5 VDC, S3	
	20ms hold up time	
Power Consumption	35W	
Dimensions	330 mm (13") (W) x 64.4 mm (2.53") (D) x 245 mm (9.65") (H)	
Packing Dimensions	510 mm (20.08") (W) x 186 mm (7.32") (D) x 532 mm (20.94") (H)	
Weight (net/gross)	5.54 kg (12.21 lb)/3 kg (6.61 lb)	
Operating Temperature	-40°C to +70°C (-40°F to +158°F)	
Relative Humidity	10% to 95% @ +40°C, non-condensing	
Certifications	CE, EN 50155, EN 45545-2	
* W.T.: Wide Temperature, All W.T. supported products have to be sorted by Axiomtek		

W.T.: Wide Temperature. All W.T. supported products have to be sorted by Axiomtek.

#### **Packing List**

- 1 x GOT712-837 unit 1 x Power cable
- 1 x Phoenix connector



▲ Touch without keypad version

#### **Ordering Information**

24 VDC Power Input		
GOT712-837-R-E3845- 24VDC (P/N: E22B712100)	Atom® E3845, sunlight readable LCD (800 nits), 5-wire	
110 VDC Power Input	resistive touchscreen and 24 vbb power input	
GOT712-837-R-E3845- 110VDC (P/N: E22B712101)	12" XGA railway fanless touch panel computer with Intel® Atom® E3845, sunlight readable LCD (800 nits), 5-wire resistive touchscreen and 110 VDC power input	
24 to 110 VDC Power Input		
GOT712-837-R-E3845-24- 110VDC (P/N: E22B712102)	12" XGA railway fanless touch panel computer with Intel® Atom® E3845, sunlight readable LCD (800 nits), 5-wire resistive touchscreen and 24 to 110 VDC power input, S3 20ms power interruption protection	

<sup>\*</sup>Specifications and certifications may vary based on different requirements.

#### **Optional Accessories**

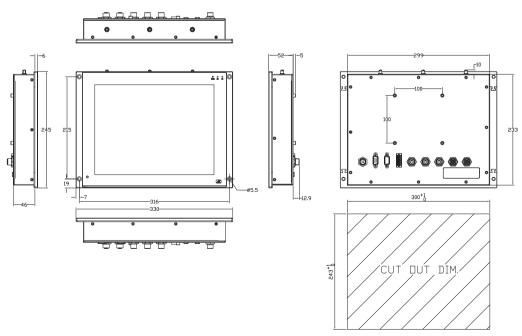
822B7100140E	GOT712 3G+GPS kit
8812B7100A0E	GOT712 Wi-Fi kit
594B8122820E	M12 A-coded USB cable
594B7102100E	RS-232 cable
594B7102700E	M12 X-coded LAN cable

#### **Optional EOS Installation**

WES 7		
WE8S		
Windows® 10 (IoT)		

#### **Optional OS Installation**

Windows® 7	_
Windows® 8/8.1	
Windows® 10	



<sup>\*</sup> All specifications and photos are subject to change without notice. www.axiomtek.com © 2021 Axiomtek Co., Ltd. All rights reserved.

## P6105

#### 10.4" XGA TFT LCD Railway Touchscreen Monitor (-25°C to +55°C)

### **Features**

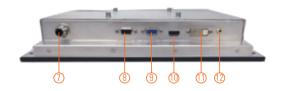
- EN 50155, EN 45545 certified railway monitor (touchscreen is optional)
- Wide viewing angle and high brightness of 500 nits
- Supports VGA, DVI-D and HDMI
- Light sensor for auto-dimming
- 24 VDC or 110 VDC power input
- -25°C to +55°C wide temperature range
- Supports 5 OSD keys on the front bezel











- 7. DC power input
- 11. 1 x DVI-D
- 8. 1 x RS-232 (touch & remote control)
- 12. 1 x Line-in

1. Menu

2. SEL+ 3. SEL-4. Fxit 5. Power LED 6. Power switch

- 9.1 x VGA 10. 1 x HDMI
- 13. Speaker







#### Introduction

The EN 50155 railway touchscreen monitor P6105 adopts a 10.4-inch XGA TFT LCD with 500 nits brightness and a 5-wire resistive touchscreen with IP65-rated aluminum front bezel to provide water-proof and user friendly control interface.

#### Wide Temperature (-25°C to +55°C)

The Axiomtek 10.4-inch railway touchscreen monitor adopts extended temperature technology with a wide range from -25°C to +55°C and fanless cooling system as well as super compact design for transportation & harsh environment.

#### 500 nits High Brightness with Wide Viewing Angle

The railway grade P6105 adopts a high brightness 500 nits 10.4-inch LCD with sunlight readable technology. With its wide viewing angle, user won't miss information on the display.

#### Anti-vibration for Railway

With an anti-vibration design and complied to EN 50155, EN 61373 Cat. 1 Class B, the Axiomtek rugged 10.4" railway touchscreen monitor can work perfectly on the train.

Front Bezel	NEMA 4/12 (IP65)-coi	NEMA 4/12 (IP65)-compliant, metal front bezel		
LCD Panel	Display Type	10.4" TFT LCD		
	Max. Resolution	1024 x 768		
	Max. Colors	16.2M/262k		
	Active Area (mm)	210.4 (H) x 157.8 (V)		
	Pixel Pitch (mm)	0.0685 (H) x 0.2055 (V)		
	Response Time	25ms		
	Backlight	LED		
	Backlight MTBF	50,000 hrs		
	Viewing Angle (H/V)	176°/176°		
	Contrast Ratio	1000 (TYP.)		
	Brightness (cd/m²)	500 nits		
Display Control	OSD (on screen displa	ay)		
Display Mode	VGA 640 x 480 (60/72	•		
Input Signal				
	HDMI			
	DVI-D	on and IP remote central		
	RS-232 for touchscreen and IR remote control			

1 x RS-232 for touchscreen and remote control     1 x HDMI	-		
1 x M12 DC-in	I/O Connectors	1 x HDMI	
1 x VGA 1 x Line-in           Power Supply         24 VDC or 110 VDC power input           Power Consumption         24V, 16W           Touchscreen         Thickness Resistive: 2.2 mm Light Transmission Resistive: 80% Power Consumption Resistive: +5V @ 100mA Touch Life Resistive: 35 million touches Controller Interface: RS-232 DB9 male connector           Dimensions         310 mm (12.20") (W) x 49 mm (1.94") (D) x 214 mm (8.43") (H)           Packing Dimensions         372 mm (14.65") (W) x 175 mm (6.89") (W) x 412 mm (16.2") (H)           Weight (net/gross)         2.2 kg (4.85 lb)/3.45 kg (7.61 lb)           Operating Temperature         -25°C to +55°C (-13°F to +131°F)           Relative Humidity         20% to 90% @ +40°C, non-condensing			
Power Supply   24 VDC or 110 VDC power input			
Power Consumption         24V, 16W           Touchscreen         Thickness             Resistive: 2.2 mm             Light Transmission             Resistive: 80%             Power Consumption             Resistive: 5V @ 100mA             Touch Life             Resistive: 35 million touches             Controller Interface: RS-232             DB9 male connector           Dimensions         310 mm (12.20") (W) x 49 mm (1.94") (D) x 214 mm (8.43") (H)             Packing Dimensions           372 mm (14.65") (W) x 175 mm (6.89") (W) x 412 mm (16.2") (H)             Weight (net/gross)             2.2 kg (4.85 lb) /3.45 kg (7.61 lb)             Operating Temperature             -25°C to +55°C (-13°F to +131°F)             Relative Humidity             20% to 90% @ +40°C, non-condensing		1 x Line-in	
Thickness   Resistive: 2.2 mm   Light Transmission   Resistive: 80%   Power Consumption   Resistive: 45V @ 100mA   Touch Life   Resistive: 35 million touches   Controller Interface: RS-232   DB9 male connector	Power Supply	24 VDC or 110 VDC power input	
Resistive: 2.2 mm	Power Consumption	24V, 16W	
Light Transmission Resistive: 80% Power Consumption Resistive: +5V @ 100mA Touch Life Resistive: 35 million touches Controller Interface: RS-232 DB9 male connector  Dimensions 310 mm (12.20") (W) x 49 mm (1.94") (D) x 214 mm (8.43") (H) Packing Dimensions 372 mm (14.65") (W) x 175 mm (6.89") (W) x 412 mm (16.2") (H) Weight (net/gross) 2.2 kg (4.85 lb) /3.45 kg (7.61 lb) Operating Temperature -25°C to +55°C (-13°F to +131°F) Relative Humidity 20% to 90% @ +40°C, non-condensing	Touchscreen	Thickness	
Resistive: 80%		Resistive: 2.2 mm	
Power Consumption Resistive: +5V @ 100mA Touch Life Resistive: 35 million touches Controller Interface: RS-232 DB9 male connector  Dimensions 310 mm (12.20") (W) x 49 mm (1.94") (D) x 214 mm (8.43") (H) Packing Dimensions 372 mm (14.65") (W) x 175 mm (6.89") (W) x 412 mm (16.2") (H) Weight (net/gross) 2.2 kg (4.85 lb)/3.45 kg (7.61 lb) Operating Temperature -25°C to +55°C (-13°F to +131°F) Relative Humidity 20% to 90% @ +40°C, non-condensing		0	
Resistive: +5V @ 100mA   Touch Life   Resistive: 35 million touches   Controller Interface: RS-232   DB9 male connector		Resistive: 80%	
Touch Life   Resistive: 35 million touches   Controller Interface: RS-232   DB9 male connector			
Resistive: 35 million touches   Controller Interface: RS-232   DB9 male connector		Resistive: +5V @ 100mA	
Controller Interface: RS-232 DB9 male connector  Dimensions 310 mm (12.20") (W) x 49 mm (1.94") (D) x 214 mm (8.43") (H) Packing Dimensions 372 mm (14.65") (W) x 175 mm (6.89") (W) x 412 mm (16.2") (H) Weight (net/gross) 2.2 kg (4.85 lb) /3.45 kg (7.61 lb) Operating Temperature -25°C to +55°C (-13°F to +131°F) Relative Humidity 20% to 90% @ +40°C, non-condensing			
DB9 male connector           Dimensions         310 mm (12.20") (W) x 49 mm (1.94") (D) x 214 mm (8.43") (H)           Packing Dimensions         372 mm (14.65") (W) x 175 mm (6.89") (W) x 412 mm (16.2") (H)           Weight (net/gross)         2.2 kg (4.85 lb)/3.45 kg (7.61 lb)           Operating Temperature         -25°C to +55°C (-13°F to +131°F)           Relative Humidity         20% to 90% @ +40°C, non-condensing		Resistive: 35 million touches	
Packing Dimensions         372 mm (14.65") (W) x 175 mm (6.89") (W) x 412 mm (16.2") (H)           Weight (net/gross)         2.2 kg (4.85 lb)/3.45 kg (7.61 lb)           Operating Temperature         -25°C to +55°C (-13°F to +131°F)           Relative Humidity         20% to 90% @ +40°C, non-condensing		DB9 male connector	
Weight (net/gross)         2.2 kg (4.85 lb) /3.45 kg (7.61 lb)           Operating Temperature         -25°C to +55°C (-13°F to +131°F)           Relative Humidity         20% to 90% @ +40°C, non-condensing	Dimensions	310 mm (12.20") (W) x 49 mm (1.94") (D) x 214 mm (8.43") (H)	
Operating Temperature -25°C to +55°C (-13°F to +131°F)  Relative Humidity 20% to 90% @ +40°C, non-condensing	Packing Dimensions	372 mm (14.65") (W) x 175 mm (6.89") (W) x 412 mm (16.2") (H)	
Relative Humidity 20% to 90% @ +40°C, non-condensing	Weight (net/gross)	2.2 kg (4.85 lb) /3.45 kg (7.61 lb)	
·	Operating Temperature	-25°C to +55°C (-13°F to +131°F)	
Certifications CE, EN 50155, EN 45545 compliant	Relative Humidity	20% to 90% @ +40°C, non-condensing	
	Certifications	CE, EN 50155, EN 45545 compliant	

#### **Packing List**

- 1 x P6105 unit 1 x VGA cable 1 x RS-232 cable (for resisitve touch)

#### **Ordering Information**

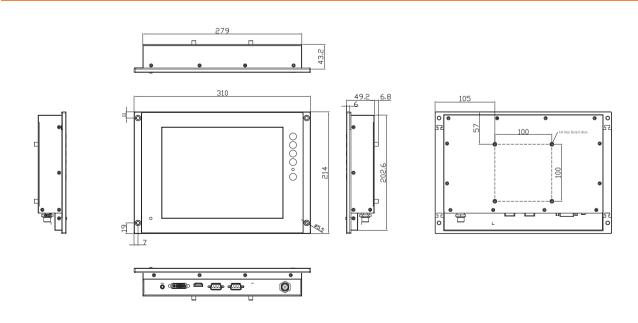
	10.4" XGA LCD railway touchscreen monitor with 24 VDC
(P/N: E226105103)	power input
P6105PR-110VDC with VGA	10.4" XGA LCD railway touchscreen monitor with 110 VDC
(P/N: E226105104) power input	
*Specifications and certifications may vary based on different requirements.	

#### **Optional Accessories**

5946L203800E	HDMI cable
59461713400E	DVI cable



▲ Rear view



## P6125

#### 12.1" XGA TFT LCD Railway Touchscreen Monitor (-25°C to +55°C)

#### **Features**

- EN 50155 compliant monitor for railway application
- 12.1" high brightness XGA TFT touchscreen LCD
- Wide viewing angle and high brightness of 800nits
- Supports VGA, DVI-D and HDMI
- Light sensor for auto-dimming
- 24 to 110 VDC power input
- -25°C to +55°C wide temperature range
- Supports 5 OSD keys in the front panel











#### Introduction

The EN 50155 compliant railway touchscreen monitor P6125 adopts a 12.1inch XGA TFT LCD with 800 nits of brightness and a 5-wire resistive touchscreen with IP65-rated aluminum front bezel to provide protection of liquad damage and user friendly control interface.

#### Wide Temperature (-25°C to +55°C)

The EN50155 compliant railway touchscreen monitor supports a wide temperature range from -25°C to +55°C. Its fanless cooling system and super compact designs are suited for rolling stock applications as well as other harsh environments.

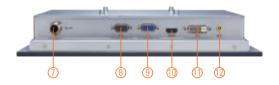
#### 800 nits High Brightness with Wide Viewing Angle

The railway grade P6125 adopts a high brightness of 800 nits 12.1-inch LCD with sunlight readable technology. The screen is legible even under strong sunlight and is readable under skies outdoor in parking lots and more. Additionally, with its wide viewing angle feature, users won't miss any information.

#### Anti-vibration for Railway

With an anti-vibration design and complied to EN 50155, EN 61373 Cat. 1 Class B, the Axiomtek rugged 12.1" railway touchscreen monitor can work perfectly on the train.





7. DC power input

11. 1 x DVI-D

8. 1 x RS-232 (touch & remote control)

12. 1 x Line-in

9. 1 x VGA 10. 1 x HDMI 13. Speaker

Front Bezel	NEMA 4/12 (IP65)-co	NEMA 4/12 (IP65)-compliant, metal front bezel		
LCD Panel	Display Type	12.1" TFT LCD		
	Max. Resolution	1024 x 768		
	Max. Colors	16.2M/262k		
	Active Area (mm)	210.4 (H) x 157.8 (V)		
	Pixel Pitch (mm)	0.0685 (H) x 0.2055 (V)		
	Response Time	25ms		
	Backlight	LED		
	Backlight MTBF	50,000 hrs		
	Viewing Angle (H/V)	176°/176°		
	Contrast Ratio	1000 (TYP.)		
	Brightness (cd/m²)	800 nits		
Display Control	OSD (on screen displa	OSD (on screen display)		
Display Mode	VGA 640 x 480 (60/72	•		
	SVGA 800 x 600 (60/7	· ·		
	XGA 1024 x 768 (60/72 Hz)			
Input Signal	VGA			
	HDMI			
	DVI-D			
	RS-232 for touchscreen and IR remote control			

Opcomoduons		
I/O Connectors	1 x RS-232 for touchscreen and remote control 1 x HDMI 1 x DVI-D 1 x M12 DC-in 1 x VGA 1 x Line-in	
Power Supply	24 to 110 VDC power input	
Power Consumption	33W	
Touchscreen	Thickness Resistive: 2.2 mm Light Transmission Resistive: 80% Power Consumption Resistive: +5V @ 100mA Touch Life Resistive: 35 million touches Controller Interface: RS-232 D-type 9-pin male connector	
Dimensions	330 mm (12.99") (W) x 57 mm (2.24") (D) x 245 mm (9.65") (H)	
Packing Dimensions	510 mm (20.08") (W) x 186 mm (7.32") (W) x 532 mm (20.94") (H	
Weight (net/gross)	2.2 kg (4.85 lb)/3.45 kg (7.61 lb)	
Operating Temperature	-25°C to +55°C (-13°F to +131°F)	
Relative Humidity	20% to 90% @ +40°C, non-condensing	
Certifications	CE, EN 50155, EN 45545 compliant	

#### **Packing List**

- 1 x P6125 unit 1 x VGA cable 1 x RS-232 cable (for resisitve touch)

#### **Ordering Information**

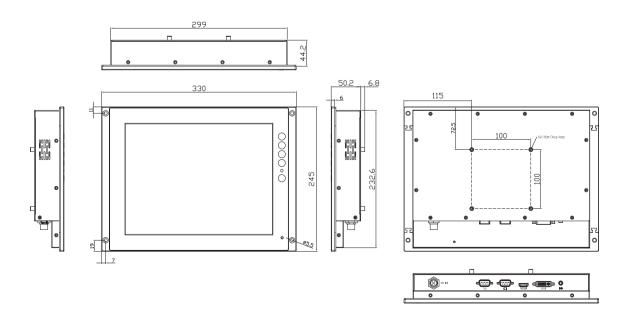
	12.1" XGA LCD railway touchscreen monitor with 24 to 110	
(P/N: E226125100)	VDC power input	
*Specifications and certifications may vary based on different requirements.		

## **Optional Accessories**

5946L203800E	HDMI cable
59461713400E	DVI cable



▲ Raer view

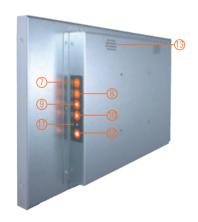




18.5" Full HDTFT LCD Railway Monitor for Passenger Information System  $(-25^{\circ}C \text{ to } +55^{\circ}C)$ 

#### **Features**

- EN 50155. EN 45545 certified
- IP42-rated front bezel design
- 18.5" Full HD TFT LCD with high brightness of 500 nits
- Supports HDMI, DVI-D and VGA
- 24 to 110 VDC power input
- Supports VESA arm (100 x 100 mm)
- -25°C to +55°C wide operating temperature range
- Anti-fog glass
- Supports 5 OSD keys









#### Introduction

The P718W is an EN 50155 certified and slim-type monitor with IP42 (NEMA 4)-rated front bezel and flat front bezel design, which adopts 18.5-inch 500 nits Full HD TFT LCD and supports multi-signal video-in interfaces including HDMI, DVI-D and VGA. With the compact mechanism design and supporting VESA mounting, The P718W is proper for Passenger Information System (PIS) in railway environments.

#### Wide Temperature (-25°C to +55°C) & Wide DC Power Input

The P718W supports a wide temperature range from -25°C to +55°C. Its fanless cooling system and wide range power input of 24V to 110V DC are suited for railway application as well as other harsh environments.

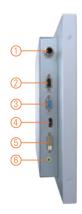
#### 500 nits High Brightness with Wide Viewing Angle

The railway grade P718W adopts a high brightness of 500 nits 18.5-inch TFT LCD, with its wide viewing angle feature, passengers may check the information on the TFT LCD from any angel of positions.

#### Anti-vibration for Railway

With an anti-vibration design and complied to EN 50155, IEC 60571 and EN 45545, the Axiomtek rugged 18.5" railway monitor can work perfectly on the rolling stock.





- 1. DC power input
- 2. 1 x RS-232 (touch & remote control)
- 3. 1 x VGA
- 4. 1 x HDMI
- 5. 1 x DVI-D
- 6. 1 x Line-in
- 7. Exit
- 8. Menu

13 Speaker

- 9. Select -10. Select +
- 11. Power LED
- 12. Power switch

Front Bezel	IP42, metal front bezel		
Mounting	VESA arm (100 x 100 mm)		
LCD Panel	Display	18.5" TFT LCD	
	Max. Resolution	1920 x 1080	
	Max. Colors	16.7M colors (8-bit)	
	Active Area (mm)	408.96 (H) x 203.04 (V)	
	Pixel Pitch (mm)	0.213 x 0.213	
	Response Time	20ms	
	Backlight	LED	
	Viewing Angle (H/V)	178°/178°	
	Contrast Ratio	1000 (TYP.)	
	Brightness (cd/m²)	500 nits	
Display Control	OSD		
Display Mode	VGA 640 x 480 (60/72/75Hz) SVGA 800 x 600 (56/60/75Hz) XGA 1024 x 768 (60/70/75Hz) WSXGA 1680 x 1050 (60Hz)		
Input Signal	HDMI VGA DVI-D		

I/O Connectors	1 x RS-232 for remote control	
	1 x HDMI	
	1 x VGA	
	1 x DVI-D	
	1 x M12 DC-in	
	1 x Line-in	
Power Supply	24 to 110 VDC	
Dimensions	445.2 mm (17.52") (W) x 269.4 mm (10.6") (D) x 50.3 mm (1.98"	
Packing Dimensions	575 mm (22.63") (W) x 170 mm (6.69") (D) x 460 mm (18.11") (H	
Weight (net/gross)	4.4 kg (9.7 lb)/5.9 kg (13.0 lb)	
Operating Temperature	-25°C to +55°C (-13°F to +131°F)	
Relative Humidity	20% - 90% @ +40°C, non-condensing	
Certifications	CE, EN 50155/IEC 60571, EN 45545	

#### **Optional Accessories**

**Ordering Information** 

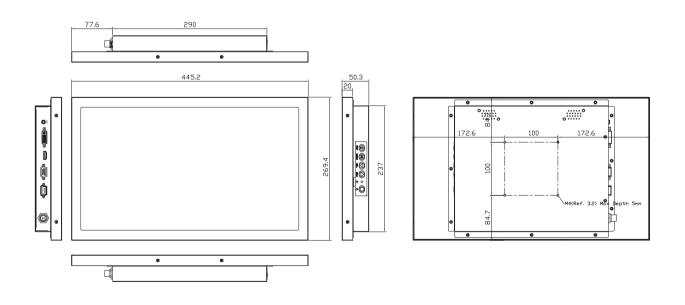
P718W

5946L203800E	HDMI cable
59461713400E	DVI cable

18.5" full HD TFT LCD railway monitor with 24 to 110 VDC power input for passenger information system

#### **Packing List**

1 x P718W unit		
1 x VGA cable		





**Fanless Touch Panel Computers** 

Heavy-duty Fanless Touch Panel Computers

**Stainless Touch Panel Computers** 

**Transportation Touch Panel Computers and Monitors** 

**Industrial Touch Panel Computers** 

**Industrial Touch Monitors** 

**Medical Panel Computers** 

Modular Panel PCs

Self-service Kiosk

# **Industrial Panel PCs**

# 5

## Industrial Touch Panel Computers

Axiomtek provides a complete range of industrial panel computers for automation applications. The high performance P1000 series focuses on factory and machinery market, offering ideal thermal solution, featuring compact sized, easy maintenance design and light weight. The IP65-rated front bezel is specially designed for continuous use in harsh environments. The P1000 series can help customers reduce time-to-market for industry automation.

Selection Guide		363
P1127E-500	12.1" XGA TFT Expandable Industrial Touch Panel Computer with 7th/6th Gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® Processor and PCI/PCIe Slot	365
P1157E-500	15" XGA TFT Expandable Industrial Touch Panel Computer with 7th/6th Gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® Processor and PCI/PCIe Slot	367
P1177E-500	17" SXGA TFT Expandable Industrial Touch Panel Computer with 7th/6th Gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® Processor and PCI/PCIe Slot	369
P1197E-500	19" SXGA TFT Expandable Industrial Touch Panel Computer with 7th/6th Gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® Processor, PCI/PCIe Slot	371

## **Industrial Touch Panel Computers**

Selection Guide







Features Wodels	P1127E-500	P1157E-500	P1177E-500
CPU Level	LGA1151 socket 6/7th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium®	LGA1151 socket 6/7th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium®	LGA1151 socket 6/7th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium®
Chipset	Intel® H110	Intel® H110	Intel® H110
System Memory	2 x 288-pin DDR4-2133 Long-DIMM dual channel, up to 32GB	2 x 288-pin DDR4-2133 Long-DIMM dual channel, up to 32GB	2 x 288-pin DDR4-2133 Long-DIMM dual channel, up to 32GB
Display	12.1" XGA TFT, 500 nits	15" XGA TFT, 250 nits	17" SXGA TFT, 250 nits
I/O	3 x RS-232  1 x RS-232/422/485  1 x HDMI  1 x VGA  1 x DisplayPort  4 x USB 3.0  2 x USB 2.0  2 x 10/100/1000 Mbps Ethernet  1 x Audio (Mic-in & Line-out)  1 x PS/2 combo  1 x Remote power switch	3 x RS-232  1 x RS-232/422/485  1 x HDMI  1 x VGA  1 x DisplayPort  4 x USB 3.0  2 x USB 2.0  2 x 10/100/1000 Mbps Ethernet  1 x Audio (Mic-in & Line-out)  1 x PS/2 combo  1 x Remote power switch	3 x RS-232 1 x RS-232/422/485 1 x HDMI 1 x VGA 1 x DisplayPort 4 x USB 3.0 2 x USB 2.0 2 x 10/100/1000 Mbps Ethernet 1 x Audio (Mic-in & Line-out) 1 x PS/2 combo 1 x Remote power switch
Storage	1 x 2.5" SATA HDD	1 x 3.5" or 2 x 2.5" SATA HDD	1 x 3.5" or 2 x 2.5" SATA HDD
DVD-RW	N/A	N/A	N/A
Expansion Interface	1 x PCle x4 or 1 x PCl	1 x PCle x4 or 1 x PCl	1 x PCle x4 or 1 x PCl
Touchscreen	5-wire resistive type	5-wire resistive type	5-wire resistive type
Operation System	Skylake: Windows® 7, Windows® 8.1, Windows® 10 Kaby Lake: Windows® 10	Skylake: Windows® 7, Windows® 8.1, Windows® 10 Kaby Lake: Windows® 10	Skylake: Windows® 7, Windows® 8.1, Windows® 10 Kaby Lake: Windows® 10
Power Supply	200W, 100 to 240 VAC	200W, 100 to 240 VAC	200W, 100 to 240 VAC
Power Consumption	121W	97.6W	143W
Watchdog Timer	255 levels, 1 to 255 sec	255 levels, 1 to 255 sec	255 levels, 1 to 255 sec
Front Bezel	Aluminum with IP65/NEMA 4 rugged protection	Aluminum with IP65/NEMA 4 rugged protection	Aluminum with IP65/NEMA 4 rugged protection
Dimensions (W x D x H)	314.2 x 105 x 253.7 mm (12.37" x 4.13" x 9.99")	378.3 x 90 x 310.3 mm (14.89" x 3.54" x 12.22")	411.82 x 90 x 353.24 mm (16.21" x 3.54" x 13.91")
Weight (net/gross)	4.2 kg (9.26 lb)/6.3 kg (13.89 lb)	5.4 kg (11.90 lb)/7.8 kg (17.20 lb)	6.4 kg (14.11 lb)/10.2 kg (22.49 lb)
Operating Temperature	0°C to +50°C (+32°F to +122°F)	0°C to +50°C (+32°F to +122°F)	0°C to +50°C (+32°F to +122°F)
Certifications	CE	CE	CE



Features Wodels	P1197E-500	
CPU Level	LGA1151 socket 6/7th Gen Intel® Core™ i7/i5/i3, Celeron® & Pentium®	
Chipset	Intel® H110	
System Memory	2 x 288-pin DDR4-2133 Long-DIMM dual channel, up to 32GB	
Display	19" SXGA TFT, 250 nits	
I/O	3 x RS-232 1 x RS-232/422/485 1 x HDMI 1 x VGA 1 x DisplayPort 4 x USB 3.0 2 x USB 2.0 2 x 10/100/1000 Mbps Ethernet 1 x Audio (Mic-in & Line-out) 1 x PS/2 combo	
Storage	1 x 3.5" or 2 x 2.5" SATA HDD	
DVD-RW	1 x Built-in slim type (optional)	
Expansion Interface	1 x PCle x4 or 1 x PCl	
Touchscreen	5-wire resistive type	
Operation System	Skylake: Windows® 7 \ Windows® 8.1 \ Windows® 10 Kaby Lake: Windows® 10	
Power Supply	200W, 100 to 240 VAC	
Power Consumption	157W	
Watchdog Timer	255 levels, 1 to 255 sec.	
Front Bezel	Aluminum with IP65/NEMA 4 rugged protection	
Dimensions (W x D x H)	378 x 72.2 x 309 mm (14.88" x 2.84" x 12.17")	
Weight (net/gross) 8 kg (17.64 lb)/10.4 kg (22.93		
Operating Temperature	0°C to +45°C (+32°F to +113°F)	
Certifications	CE	

## P1127E-500

12.1" XGA TFT Expandable Industrial Touch Panel Computer with 7th/6th Gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® Processor and PCI/PCIe Slot

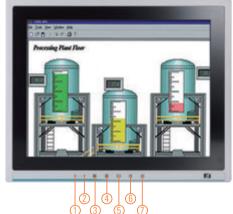
#### **Features**

- 12.1" XGA TFT LCD display
- LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® processors
- Intel® H110 chipset
- Less screw design for easy installation
- 4 USB 3.0. 2 USB 2.0 and 4 COM
- One PCle x4 or one PCle slot
- Built-in speakers and optional Wi-Fi 802.11 b/g/n module
- Robust IP65 compliant aluminum front bezel
- Supports 5 OSD keys in front panel

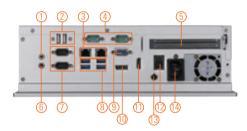




▲ Back view



- 1. Display status LED
- 2. SATA status LED 3. Brightness -
- 4. Brightness +
- 5. Display monitor ON/OFF
- 6. Volume
- 7. Volume +



6. 1 x Mic-in 1. 1 x Line-out

7. 1 x RS-232/422/485 & 1 x RS-232 2. 2 x USB 2.0 3. 2 x LAN 8. 4 x USB 3.0

4. 2 x RS-232

5. PCI or PCIe x4 Card expansion slot 10. 1 x DisplayPort

11. 1 x HDMI

12. Switch for power on/off 13. Remote switch button

14. AC plug







#### Introduction

The P1127E-500 is a multimedia 12.1" touch panel PC for kiosk application. It has a fashionable mechanism design and industrial-grade material front bezel which can avoid damage from chemical corrosion. To meet the demands of multimedia application, the P1127E-500 is powered by a high performance LGA1151 socket 7th/6th generation Intel® Core™ processor with the Intel® H110 chipset. It features four COM ports, two Gigabit Ethernet and up to 32GB memory of dual-channel DDR4-2133 that delivers high computing capability for high performance-demanding applications. The industrial touch panel PC is most suitable for kiosk, factory and automation.

#### Expandable for 1 PCle or 1 PCl

The P1127E-500 has one PCle x4 or one PCl slot for expansion purpose. User can easily plug in standard half-size PCI or PCIe card based on any application needs.

#### Speaker and WLAN Antenna Supported

The P1127E-500 features built-in speakers for kiosk application to display multimedia content program. It also supports WLAN module antenna (optional) for wireless network connectivity.

#### Friendly Less Screw Design

The P1127E-500 is designed with easy of maintenance in mind. There are only three screws on the back chassis, so that technicians can quickly remove the system's back cover with minimum effort.

Front Bezel	Aluminum w/ IP65/NEMA 4 rugged protection		
LCD Panel	Display Type	12.1" XGA TFT LCD	
	Brightness	500 nits	
	Resolution	1024 x 768 pixels	
	Viewing Angle	160°/140°	
Main System	CPU	LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® processor	
	Chipset	Intel® H110	
	System Memory	2 x 288-pin DDR4-2133 Long-DIMM, up to 32GB	
	BIOS	AMI UEFI BIOS	
	Storage	1 x 2.5" SATA HDD (9.5 mm height)	
	Drive	N/A	
	Watchdog Timer	255 levels, 1 to 255 sec.	

-	
IO Connector	3 x RS-232
	1 x RS-232/422/485
	1 x HDMI
	1 x VGA
	1 x DisplayPort 4 x USB 3 0
	2 x USB 2 0
	2 x 10/100/1000 Mbps Ethernet (Intel® i219-LM/i211-AT)
	1 x Audio (Mic-in & Line-out)
	1 x Remote Power Switch
TPM	N/A
Expansion Interface	1 x PCle x4 or 1 x PCl
Touchscreen	5-wire resistive type
	Light transmission 79%
	1 million activations (typical) at a single point
Power Supply	100 to 240 VAC, 200W
Power Consumption	121W
Dimensions	314.2 mm (12.37") (W) x 105 mm (4.13") (D) x 253.7 mm (9.99") (H)
Packing Dimensions	510 mm (20.08") (W) x 190 mm (7.48") (D) x 540 mm (21.26") (H)
Weight(net/gross)	4.2 kg (9.26 lb)/6.3 kg (13.89 lb)
Operating temperature	0°C to +50°C (+32°F to +122°F)
Relative humidity	10% to 90% @ +40°C, non-considering
Operating vibration	1.0G, 5 - 500 Hz, random
Certifications	CE

#### **Packing list**

- 1 x P1127E-500
- 1 x Panel mount kit
- 1 x US power cord

#### **Ordering Information**

P1127E-500 with PCIe (P/N: E221127109)	12.1" XGA expandable industrial touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor, resistive touch screen, PCle x4 slot and 100 to 240 VAC
P1127E-500 with PCI (P/N: E221127107)	12.1" XGA expandable industrial touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor, resistive touch screen, PCI slot and 100 to 240 VAC

#### **Optional Accessories**

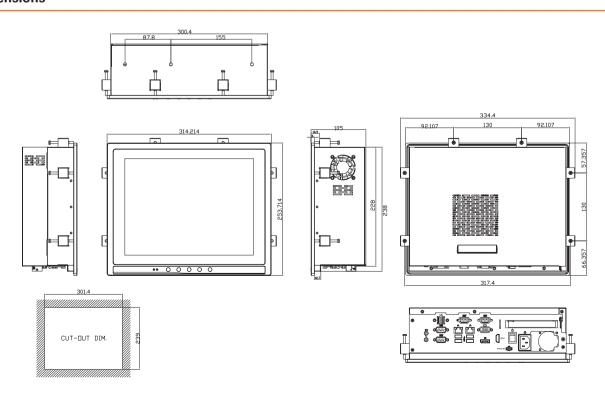
Wi-Fi kit	
881211270A0E	VESA & wall mount kit
E981604011	ATC10 (VESA arm clamp type)
E981604012	ATW10 (VESA arm wall mount)
E226171119	Stand kit
59403200B00E	Remote power switch cable (100 cm)

#### **Optional EOS Installation**

Windows® 7
Windows® 8.1
Windows® 10 IoT Enterprise

#### **Optional OS Installation**

Skylake: Windows® 7 Windows® 8.1 Windows® 10 Kaby Lake: Windows® 10



<sup>\*</sup> Other configuration by request \* Specification and certifications may vary based on different requirements

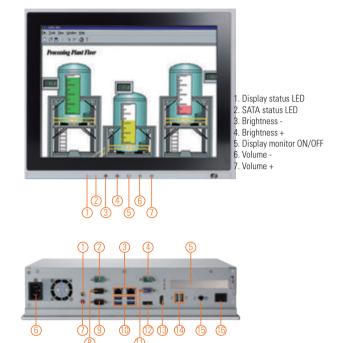
# P1157E-500

15" XGA TFT Expandable Industrial Touch Panel Computer with 7th/6th Gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® Processor and PCI/PCIe Slot

#### **Features**

- 15" XGA TFT LCD display
- LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® processors
- Intel® H110 chipset
- Less screw design for easy installation
- 4 USB 3.0. 2 USB 2.0 and 4 COM
- One PCle x4 or one PCle slot
- Built-in speakers and optional Wi-Fi 802.11 b/g/n module
- Robust IP65 compliant aluminum front bezel
- Supports 5 OSD keys in front panel





- 1. 1 x Line-out
- 2. 1 x RS-232
- 3. 2 x LAN
- 4. 1 x RS-232 5. PCI or PCIe x4 expansion slot
- 6. AC plug
- 7. 1 x Mic-in
- 8. 1 x RS-232/422/485
- 9. 1 x RS-232
- 10. 4 x USB 3.0 11. 1 x VGA
- 12. 1 x DisplayPort
- 13. 1 x HDMI
- 14. 2 x USB 2.0
- 15. Remote power switch 16. Switch for power on/off







#### Introduction

The P1157E-500 is a multimedia 15" touch panel PC for kiosk application. It has a fashionable mechanism design and industrial-grade material front bezel which can avoid damage from chemical corrosion. To meet the demands of multimedia application, the P1157E-500 is powered by a high performance LGA1151 socket 7th/6th generation Intel® Core™ processor with the Intel® H110 chipset. It features four COM ports, two Gigabit Ethernet and up to 32GB memory of dual-channel DDR4-2133 that delivers high computing capability for high performance-demanding applications. The industrial touch panel PC is most suitable for kiosk, factory and automation.

#### Expandable for 1 PCIe or 1 PCI

The P1157E-500 has one PCle x4 or PCl slot for expansion purpose. User can easily plug in standard half-size PCI or PCIe card based on any application needs.

#### Speaker and WLAN Antenna Supported

The P1157E-500 features built-in speakers for kiosk application to display multimedia content program. It also supports WLAN module antenna (optional) for wireless network

#### Friendly Less Screw Design

The P1157E-500 is designed with easy of maintenance in mind. There are only four screws on the back chassis, so that technicians can quickly remove the system's back

Front Bezel	Aluminum w/ IP65/NE	EMA 4 rugged protection
LCD Panel	Display Type	15" XGA TFT LCD
	Brightness	250 nits
	Resolution	1024 x 768 pixels
	Viewing Angle	160°/140°
Main System	CPU	LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® processor
	Chipset	Intel® H110
	System Memory	2 x 288-pin DDR4-2133 Long-DIMM, up to 32GB
	BIOS	AMI UEFI BIOS
	Storage	1 x 3.5" or 1 x 2.5" SATA HDD (9.5 mm height)
	Drive	N/A
	Watchdog Timer	255 levels, 1 to 255 sec.

10 Connector	3 x RS-232 1 x RS-232/422/485 1 x HDMI 1 x VGA 1 x DisplayPort 4 x USB 3.0 2 x USB 2.0 2 x 10/100/1000 Mbps Ethernet (Intel® i219-LM/i211-AT) 1 x Audio (Mic-in & Line-out)
	1 x Remote power switch
TPM	N/A
Expansion Interface	1 x PCle x4 or 1 x PCl
Touchscreen	5-wire resistive type or projected capacitive multi-touch
Power Supply	100 to 240 VAC, 200W
Power Consumption	97.6W
Dimensions	378.3 mm (14.89") (W) x 90 mm (3.54") (D) x 310.3 mm (12.22") (H)
Packing Dimensions	510 mm (20.08") (W) x 186 mm (7.32") (D) x 532 mm (20.94") (H)
Weight (net/gross)	5.4 kg (11.90 lb)/7.8 kg (17.20 lb)
Operating temperature	0°C to +50°C (+32°F to +122°F)
Relative humidity	10% to 90% @ +40°C, non-considering
Operating vibration	1.0G, 5 - 500 Hz, random
Certifications	CE

#### **Packing list**

- 1 x P1157E-500
- 1 x Panel mount kit
- 1 x US power cord

#### **Ordering Information**

P1157E-500 w/PCle (P/N: E221157114)	15" XGA expandable industrial touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor, resistive touch screen, PCle x4 slot and 100 to 240 VAC
P1157E-500 w/PCI (P/N: E221157112)	15" XGA expandable industrial touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor, resistive touch screen, PCI slot and 100 to 240 VAC
P1157E-500-PCT w/PCIe (P/N: E221157121)	15" XGA expandable industrial touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™ i7/i5i/i3, Pentium® & Celeron® processor, PCAP multi-touch screen, PCle x4 slot and 100 to 240VAC
P1157E-500-PCT w/PCI (P/N: E221157119)	15" XGA expandable industrial touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™ i7/i5i/i3, Pentium® & Celeron® processor, PCAP multi-touch screen, PCI slot and 100 to 240VAC

- \* Other configuration by request
- \* Specification and certifications may vary based on different requirements

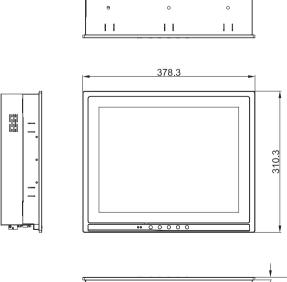
#### **Optional Accessories**

Wi-Fi kit		
P1157E-500 2.5" slim HDD kit		
881211572A0E	P1157E-500 rack mount kit	
881211575A0E	VESA & wall mount kit	
E981604011	ATC10 (VESA arm clamp type)	
E981604012	ATW10 (VESA arm wall mount)	
E226171119	Stand kit	
59403200B00E	Remote power switch cable (100 cm)	

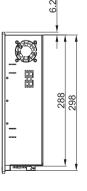
#### **Optional OS Installation**

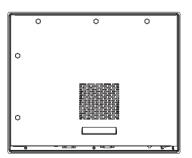
Skylake: Windows® 7 Windows® 8.1 Windows® 10 Kaby Lake: Windows® 10

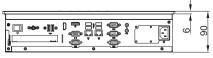
#### **Dimensions**



367







# P1177E-500

17" SXGA TFT Expandable Industrial Touch Panel Computer with 7th/6th Gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® Processor and PCI/PCIe Slot

#### **Features**

- 17" SXGA TFT LCD display
- LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® processors
- Intel® H110 chipset
- Less screw design for easy installation
- 4 USB 3.0. 2 USB 2.0 and 4 COM
- One PCle x4 or one PCle slot
- Built-in speakers and optional Wi-Fi 802.11 b/g/n module
- Robust IP65 compliant aluminum front bezel
- Supports 5 OSD keys in front panel











#### Introduction

The P1177E-500 is a multimedia 17" touch panel PC for kiosk application. It has a fashionable mechanism design and industrial-grade material front bezel which can avoid damage from chemical corrosion. To meet the demands of multimedia application, the P1177E-500 is powered by a high performance LGA1151 socket 7th/6th generation Intel® Core™ processor with the Intel® H110 chipset. It features four COM ports, two Gigabit Ethernet and up to 32GB memory of dual-channel DDR4-2133 that delivers high computing capability for high performance-demanding applications. The industrial touch panel PC is most suitable for kiosk, factory and automation.

#### Expandable for 1 PCle or 1 PCl

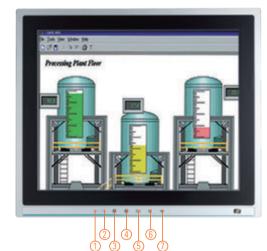
The P1177E-500 has one PCle x4 or one PCl slot for expansion purpose. User can easily plug in standard half-size PCI or PCIe card based on any application needs.

#### Speaker and WLAN Antenna Supported

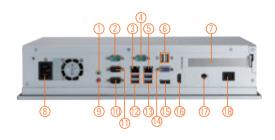
The P1177E-500 is equipped with built-in speakers for multimedia applications. It also supports WLAN module antenna (optional) for wireless network connectivity.

#### Friendly Less Screw Design

The P1177E-500 is designed with easy of maintenance in mind. There are only four screws on the back chassis, so that technicians can quickly remove the system's back cover with minimum effort.



- 1. Display status LED
- 2. SATA status LED
- 3. Brightness -
- 4. Brightness +
- 5. Display monitor ON/OFF
- 6. Volume -
- 7. Volume +



v	Line-out	7	PCI or
Ā	LIIIE-UUL	1.	LCI OI

2. 1 x RS-232 8. AC plug

3, 1 x LAN 9. 1 x Mic-in

4. 1 x RS-232 10, 1 x RS-232 11, 1 x RS-232/422/485 5 1 x I A N

6. 2 x USB 2.0 12. 2 x USB 3.0

PCle x4 Card expansion slot 13. 2 x USB 3.0

14. 1 x VGA

15, 1 x DisplayPort

16. 1 x HDMI 17. Remote switch button

18. Switch for power on/off

Front Bezel	Aluminum w/ IP65/NI	EMA 4 rugged protection
LCD Panel	Display Type	17" SXGA TFT LCD
	Brightness	250 nits
	Resolution	1280 x 1024 pixels
	Viewing Angle	160°/140°
Main System	CPU	LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® processor
	Chipset	Intel® H110
	System Memory	2 x 288-pin DDR4-2133 Long-DIMM, up to 32GB
	BIOS	AMI UEFI BIOS
	Storage	$1\times3.5"$ or $1\times2.5"$ SATA HDD (9.5 mm height) $2\times2.5"$ SATA HDD (9.5 mm height) (optional)
	Drive	N/A
	Watchdog Timer	255 levels, 1 to 255 sec.

Opcomodulons	
IO Connector	3 x RS-232 1 x RS-232/422/485 1 x HDMI 1 x VGA 1 x DisplayPort 4 x USB 3.0 2 x USB 2.0 2 x 10/100/1000 Mbps Ethernet (Intel® i219-LM/i211-AT) 1 x Audio (Mic-in & Line-out) 1 x Remote power switch
TPM	N/A
Expansion Interface	1 x PCle x4 or 1 x PCl
Touchscreen	5-wire resistive type Light transmission 79% 1 million activations (typical) at a single point
Power Supply	100 to 240 VAC, 200W
Power Consumption	143W
Dimensions	411.82 mm (16.21") (W) x 90 mm (3.54") (D) x 353.24 mm (13.91") (H)
Packing Dimensions	610 mm (24.02") (W) x 260 mm (10.24") (D) x 590 mm (23.23") (H)
Weight (net/gross)	6.4 kg (14.11 lb)/10.2 kg (22.49 lb)
Operating temperature	0°C to +50°C (+32°F to +122°F)
Relative humidity	10% to 90% @ +40°C, non-considering
Operating vibration	1.0G, 5 - 500 Hz, random
Certifications	CE

#### **Packing list**

- 1 x P1177E-500
- 1 x Panel mount kit 1 x US power cord

#### **Ordering Information**

P1177E-500 with PCIe (P/N: E221177114)	17" SXGA expandable industrial touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor, resistive touch screen, PCle x4 slot and 100 to 240 VAC
P1177E-500 with PCI (P/N: E221177112)	17" SXGA expandable industrial touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor, resistive touch screen, PCI slot and 100 to 240 VAC

#### **Optional Accessories**

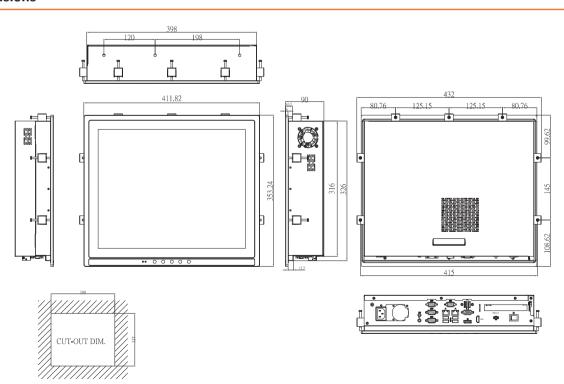
Wi-Fi kit		
P1157E-500 2.5" slim HDD kit supports 15"/17" touch panel PC		
881211772A0E	VESA & wall mount kit	
E981604011	ATC10 (VESA arm clamp type)	
E981604012	ATW10 (VESA arm wall mount)	
E221177116	PPC HA741L black stand (L)	
59403200B00E	Remote power switch cable (100 cm)	
881211773A0E	P1177E-500 rack mount kit	

#### **Optional EOS Installation**

Windows® 7
Windows® 8.1
Windows® 10 IoT Enterprise

#### **Optional OS Installation**

Skylake: Windows® 7 Windows® 8.1 Windows® 10 Kaby Lake: Windows® 10



<sup>\*</sup> Other configuration by request
\* Specification and certifications may vary based on different requirements

# P1197E-500

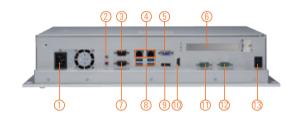
19" SXGA TFT Expandable Industrial Touch Panel Computer with 7th/6th Gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® Processor, PCI/PCIe Slot

## **Features**

- 19" SXGA TFT LCD display
- LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® processor
- Intel® H110 chipset
- Less screw design for easy installation
- 4 USB 3.0, 2 USB 2.0 and 4 COM
- One PCIe x4 or one PCIe expansion slots
- Built-in speakers and optional Wi-Fi 802.11 b/g/n module
- Robust aluminum with IP65 compliant front bezel design







- 1. AC plug
- 2. Audio (Mic-in/Line-out)
- 3. 1 x RS-232/422/485
- 4 2 x I AN
- 5 VGA
- 6. PCle x4 or PCI 7. 1 x RS-232
- 8. 4 x USB 3.0
- 9. 1 x DisplayPort 10 1 x HDMI
- 11. 1 x RS-232 12. 1 x RS-232
- 13. Power switch
- 14. Rack mount hole







#### Introduction

The P1197E-500 is a multimedia 19" touch panel PC for kiosk application. It has a fashionable mechanism design and industrial-grade material front bezel which can avoid damage from chemical corrosion. To meet the demands of multimedia application, the P1197E-500 is powered by a high performance LGA1151 socket 7th/6th generation Intel® Core™ processor with the Intel® H110 chipset. It features four COM ports, two Gigabit Ethernet and up to 32GB memory of dual-channel DDR4-2133 that delivers high computing capability for high performance-demanding applications. The industrial touch panel PC is most suitable for kiosk, factory and automation.

#### Expandable for 1 PCIe or 1 PCI

The P1197E-500 has one PCIe x4 or one PCI slot for expansion purpose. User can easily plug in standard half-size PCI or PCIe card based on any application needs.

#### Speaker and WLAN Antenna Supported

The P1197E-500 is equipped with built-in speakers for multimedia applications. It also supports WLAN module antenna (optional) for wireless network connectivity.

#### Friendly Less Screw Design

The P1197E-500 is designed with ease of maintenance in mind. There are only three screws on the back chassis, so that technicians can quickly remove the system's back cover with minimum effort.

Front Bezel	Aluminum w/ IP65/NEMA 4 rugged protection	
LCD Panel	Display Type	19" SXGA TFT LCD
	Brightness	250 nits
	Resolution	1280 x 1024 pixels
	Viewing Angle	170°/160°
Main System	CPU	LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Celeron® & Pentium® processor
	Chipset	Intel® H110
	System Memory	2 x 288-pin DDR4-2133 Long-DIMM, up to 32GB
	BIOS	AMI UEFI BIOS
	Storage	1 x 3.5" or 1 x SATA HDD (9.5 mm height)
	Drive	1 x Built-in slim DVD-RW (optional)
	Watchdog Timer	255 levels, 1 to 255 sec.

opoomounom.	
IO Connector	3 x RS-232 1 x RS-232/422/485
	1 x HDMI
	1 x VGA
	1 x DisplayPort
	4 x USB 3.0 2 x USB 2.0
	2 x 10/100/1000 Mbps Ethernet (Intel® i219-LM/i211-AT)
	1 x Audio (Mic-in & Line-out)
TPM	N/A
Expansion Interface	1 x PCle x4 or 1 x PCl
Touchscreen	5-wire resistive type
	Light transmission 79%
	1 million activations (typical) at a single point
Power Supply	100 to 240 VAC, 200W
Power Consumption	157W
Dimensions	482 mm (18.98") (W) x 94.7 mm (3.73") (D) x 380.8 mm (14.99") (H)
Packing Dimensions	615 mm (24.21") (W) x 250 mm (9.84") (D) x 585 mm (23.03") (H)
Weight(net/gross)	8 kg (17.64 lb)/10.4 kg (22.93 lb)
Operating temperature	0°C to +45°C (+32°F to +113°F)
Relative humidity	10% to 90% @ +40°C, non-considering
Operating vibration	1.0G, 5 - 500 Hz, random
Certifications	CE

#### **Packing list**

- 1 x P1197E-500
- 1 x Panel mount kit
- 1 x US power cord

#### **Ordering Information**

P1197E-500 with PCIe (P/N: E221197104)	19" SXGA expandable industrial touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor, resistive touch screen, PCle x4 slot and 100 to 240 VAC
P1197E-500 with PCI (P/N: E221197105)	19" SXGA expandable industrial touch panel computer with LGA1151 socket 7th/6th gen Intel® Core™ i7/i5/i3, Pentium® & Celeron® processor, resistive touch screen, PCI slot and 100 to 240 VAC

#### **Optional Accessories**

Wi-Fi kit	
881211970A0E	VESA & wall mount kit
E981604011	ATC10 (VESA arm clamp type)
E981604012	ATW10 (VESA arm wall mount)
E221177116	Stand kit

## **Optional EOS Installation**

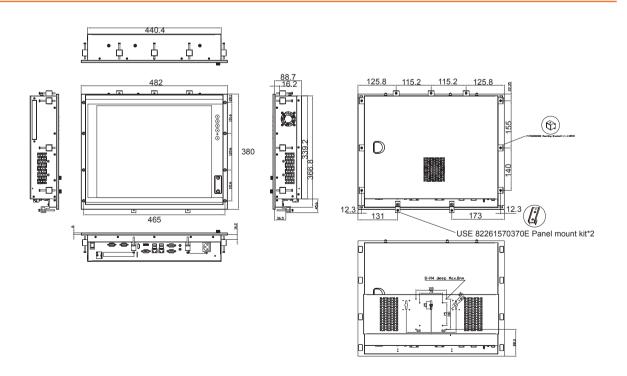
Windows® 10 IoT Enterprise

#### **Optional OS Installation**

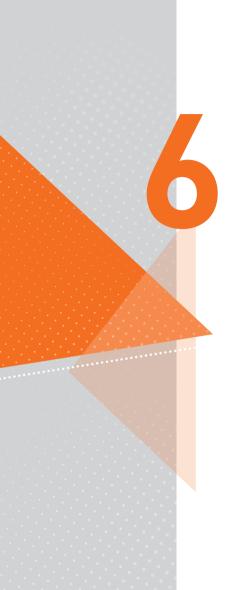
Windows® 10



#### ▲ Less screw design



<sup>\*</sup> Other configuration by request \* Specification and certifications may vary based on different requirements



# **Industrial Touch Monitors**

The P6000 product series offers flexible options of resistive or projective capacitive touch screens for ease and practicality of use. The P6000 products are ideal solutions for use in industrial automation and control systems, building automation, machinery manufacturing environments, self-service kiosks, and other HMI applications.

Selection Guid	е	374
P6157W-V2	15.6" WXGA TFT Widescreen Industrial LCD Monitor	375
P6187W-V2	18.5" WXGA TFT Widescreen Industrial LCD Monitor	377
P6217W	21.5" FHD TFT Widescreen Industrial LCD Monitor	379

# Industrial Panel PCs

# **Industrial Touch Monitors**

Selection Guide







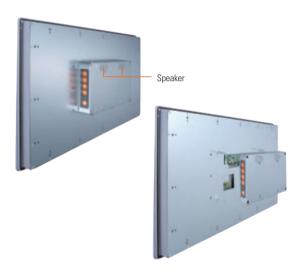
Features Wodels	P6157W-V2	P6187W-V2	P6217W
Front Bezel	Flat, NEMA 4/12 (IP65)-compliant	Flat, NEMA 4/12 (IP65)-compliant	Flat, NEMA 4/12 (IP65)-compliant
Display Type	15.6" WXGA TFT	18.5" WXGA TFT	21.5" FHD TFT
Max. Colors	16.7M	16.7M	16.7M
Active Area (mm)	344.232 x 193.536	409.8 x 230.4	476.64 x 268.11
Max. Resolution	1366 x 768	1366 x 768	1920 x 1080
Display Mode	VGA 640 x 480 (60/72/75 Hz) SVGA 800 x 600 (56/60/75 Hz) XGA 1024 x 768 (60/70/75 Hz) SXGA 1280 x 1024 (60/70/75 Hz) WXGA 1366 x 768 (60 Hz)	VGA 640 x 350 (70 Hz) VGA 720 x 400 (70 Hz) VGA 640 x 480 (60/72/75 Hz) SVGA 800 x 600 (60/72/75 Hz) XGA 1024 x 768 (60/70/75 Hz) WXGA 1366 x 768 (60 Hz)	VGA 640 x 350 (70 Hz) VGA 720 x 400 (70 Hz) VGA 640 x 480 (60/72/75 Hz) SVGA 800 x 600 (60/72/75 Hz) XGA 1024 x 768 (60/70/75 Hz) WXGA 1366 x 768 (60 Hz) FHD 1920 x 1080 (60 Hz)
Pixel Pitch (H x V, mm)	0.252 x 0.252	0.3 x 0.3	0.24 x 0.24
Backlight	LED	LED	LED
Backlight MTBF (hrs)	50,000	50,000	50,000
Viewing Angle (H/V)	170°/160°	170°/160°	178°/178°
Response Time	8ms	5ms	18ms
Contrast Ratio	500 (TYP)	1000 (TYP)	3000 (TYP)
Brightness (cd/m²)	400 nits	450 nits	250 nits
Display Control	OSD	OSD	OSD
I/O Connectors	1 x DC power input 1 x RS-232 or USB for touch 1 x VGA 1 x HDMI 1 x DVI-D 1 x Line-in	1 x DC power input 1 x RS-232 or USB for touch 1 x VGA 1 x HDMI 1 x DVI-D 1 x Line-in	1 x DC power input 1 x RS-232 or USB for touch 1 x VGA 1 x HDMI 1 x DVI-D 1 x Line-in
Touchscreen	Projective capacitive multi-touch or 5-wire resistive touch	Capacitive multi-touch	Capacitive type 10-point projected capacitive multi-touch
Power Consumption	19W	20W	26W
Power Adapter	Screw-type external AC/DC power adapter	Screw-type external AC/DC power adapter	Screw-type external AC/DC power adapter
Dimensions (W x D x H)	397 x 247 x 54 mm (15.63" x 9.72" x 2.13")	460 x 57 x 285 mm (18.11" x 2.44" x 11.22")	547.59 x 53 x 339.05 mm (21.56" x 2.09" x 13.34")
Weight (net/gross)	4.5 kg (9.92 lb)/6.5 kg (14.33 lb)	6.0 kg (12.22 lb)/7.35 kg (16.20 lb)	6.42 kg (14.15 lb)/7.78 kg (17.15 lb)
Operating Temperature	0°C to +55°C (+32°F to +131°F)	0°C to +55°C (+32°F to +131°F)	0°C to +45°C (+32°F to +113°F)
Mounting	Panel mount/wall mount/ VESA mount	Panel mount/wall mount/VESA arm	Panel mount/wall mount/VESA arm
Certifications	CE	CE	CE

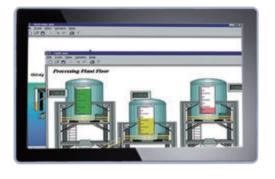
# P6157W-V2

#### 15.6" WXGATFT Widescreen Industrial LCD Monitor

## **Features**

- 15.6" WXGA TFT 400 nits LCD with projective capacitive multi-touch or resistive touch
- NEMA 4/12 (IP65) compliant flat panel monitor
- Supports panel mount, wall mount and VESA mount
- Full range screw-type (locked) AC-in or 24V DC-in (optional)
- VGA, HDMI and DVI with multi-signal inputs







- 1. USB for touch
- 4. DVI-D 5. HDMI
- 2. Audio (Line in) 3. VGA
- 6. Power input Terminal block or Screw type

#### Introduction

The P6157W-V2 is a slim-type industrial LCD monitor with flat front bezel design, which adopts 15.6-inch 300 nits full HD LCD display and supports multi-signal interfaces including DVI, VGA and HDMI. Featuring IP65 (NEMA 4)-rated front bezel, screw-type adaptor plug design, and 12/24V DC-in , the 15.6-inch P6157W-V2 is designed to fit for all kinds of industrial environments. Moreover, the P6157W-V2 supports panel mount, wall mount or VESA FPMPMI (Video Electronics Standards Association Flat Panel Monitor Physical Mounting Interface) mounting. With the compact mechanism design, the P6157W-V2 can be deployed easily in any space-limited place. It is especially suitable for POI/POS, HMI and all kinds of heavy-duty industrial fields.

Front Bezel	NEMA 4/12 (IP65)-compliant, flat front bezel	
Mounting	Panel mount, wall mount and VESA arm FPMPMI mounting (video electronics standards association Flat Panel monitor physical mounting interface)	
LCD Panel	Display	15.6" WXGA TFT LCD
	Max. Resolution	1366 x 768
	Max. Colors	16.7 M
	Active Area (mm)	344.232 x 193.536
	Pixel Pitch (mm)	0.252 x 0.252
	Response Time	8 ms
	Backlight	LED
	Backlight MTBF	50,000 hrs
	Viewing Angle (H/V)	170°/160°
	Contrast Ratio	500 (TYP.)
	Brightness (cd/m²)	400 nits
Display Control	OSD (on screen displa	y)
Display Mode	VGA 640 x 350 (70 Hz), VGA 640 x 480 (60/72/75 Hz), VGA 720 x 400 (70 Hz), SVGA 800 x 600 (60/72/75 Hz), XGA 1024 x 768 (60/72/75 Hz), WXGA 1366 x 768 (60 Hz)	
Input Signal	VGA HDMI DVI-D Touchscreen: USB inte	erface

I/O Connectors	1 x USB for touch
	1 x Audio (Line-in)
	1 x VGA
	1 x DVI-D
	1 x HDMI
	1 x DVI
	1 x Power input with Terminal block(DC Version) or Screw
	type connector(AC version)
Audio	2 x Speaker
Power Supply	DC version: 24VDC
	AC version: 100 - 240VAC-DC, 36W power adapter
Power Consumption	19W
Touchscreen	Projective capacitive multi-touch or 5-wire resistive touch
Dimensions	396.8mm (15.62") (W) x 247.1mm (9.73") (D) x 54mm (2.13") (H)
Packing Dimensions	505 mm (19.88") (W) x 166 mm (6.53") (D) x 440 mm (17.32") (H)
Weight (net/gross)	3.9 kg (8.598 lb)/5.88 kg (12.963 lb)
Operating temperature	0°C to +50°C (+32°F to +122°F)
Relative humidity	20% to 90% @ +40°C, non-condensing
Certifications	CE

#### **Packing List**

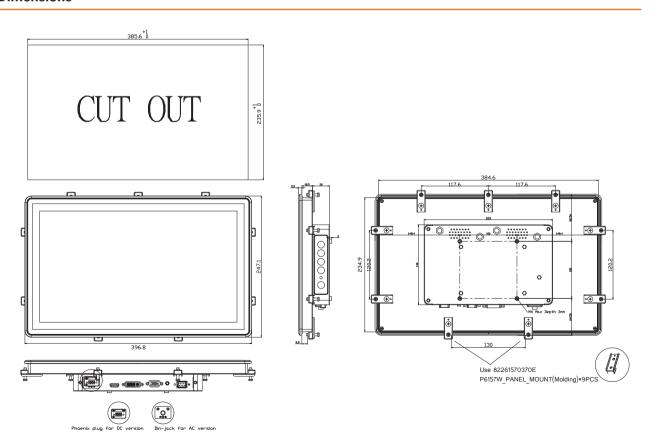
- 1 x P6157W-V2 unit
- 1 x VGA cable
- 1 x USB cable (for resistive/capacitive touch screen only)
- 1 x Audio cable
- 1 x Adapter (AC version only)
- 1 x Power cord (AC version only)
- 1 x 3-PIN Terminal block (DC version only)

#### **Ordering Information**

P6157W-V2	
P6157WPR-AC-U-US-V2 (P/N: E226157126)	15.6" Industrial Resistive Touch Screen, AC Version
P6157WPC-AC-U-US- EU-V2 (P/N: E226157119)	15.6" Industrial Monitor with Capacitive Touch Screen, AC Version
P6157WPR-24VDC-U-V2 (P/N: E226157125)	15.6" Industrial Monitor with Resistive Touch Screen, 24VDC Version
P6157WPC-24VDC-U-V2 (P/N: E226157121)	15.6" Industrial Monitor with Capacitive Touch Screen, 24VDC Version
* 0:1	

#### **Optional Accessories**

5946L203800E	HDMI cable
59461713400E	DVI-D cable
881261570A0E	Panel mount kit
881231770A0E	Wall mount kit
E221177116	Desktop stand for 15.6" to 21.5"



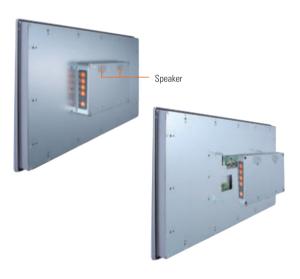
<sup>\*</sup> Other configuration by request
\* Specification and certifications may vary based on different requirements

# P6187W-V2

#### 18.5" WXGATFT Widescreen Industrial LCD Monitor

## **Features**

- 18.5" WXGA TFT 450 nits LCD with projected capacitive touch or resistive touch
- NEMA 4/12 (IP65) compliant flat panel monitor
- Supports panel mount, wall mount and VESA mount
- Full range screw-type (locked) AC-in or 24V DC-in (optional)
- VGA, HDMI and DVI with multi-signal inputs







- 1. USB for touch
- 2. Audio (Line in)
- 3. VGA
- 4. DVI-D
- 5. HDMI
- 6. Power input Terminal block or Screw type

#### Introduction

The P6187W-V2 is a slim-type industrial LCD monitor with flat front bezel design, which adopts 18.5-inch 300 nits full HD LCD display and supports multi-signal interfaces including DVI, VGA and HDMI. Featuring IP65 (NEMA 4)-rated front bezel, screw-type adaptor plug design, and 12/24V DC-in , the 18.5-inch P6187W-V2 is designed to fit for all kinds of industrial environments. Moreover, the P6187W-V2 supports panel mount, wall mount or VESA FPMPMI (Video Electronics Standards Association Flat Panel Monitor Physical Mounting Interface) mounting. With the compact mechanism design, the P6187W-V2 can be deployed easily in any space-limited place. It is especially suitable for POI/POS, HMI and all kinds of heavy-duty industrial fields.

Front Bezel	NEMA 4/12 (IP65)-compliant, flat front bezel		
Mounting	Panel mount, wall mount and VESA arm FPMPMI mounting (video electronics standards association Flat Panel monitor physical mounting interface)		
LCD Panel	Display	18.5" WXGA TFT LCD	
	Max. Resolution	1366 x 768	
	Max. Colors	16.7 M	
	Active Area (mm)	409.8 x 230.4	
	Pixel Pitch (mm)	0.3 x 0.3	
	Response Time	5 ms	
	Backlight	LED	
	Backlight MTBF	50,000 hrs	
	Viewing Angle (H/V)	170°/160°	
	Contrast Ratio	1000 (TYP.)	
	Brightness (cd/m²)	450 nits	
Display Control	OSD (on screen display)		
Display Mode	VGA 640 x 350 (70 Hz), VGA 640 x 480 (60/72/75 Hz), VGA 720 x 400 (70 Hz), SVGA 800 x 600 (60/72/75 Hz),		
	XGA 1024 x 768 (60/72/75 Hz), WXGA 1366 x 768 (60 Hz)		
Input Signal	VGA HDMI		
	DVI (only for DVI-D)		
	Touchscreen: USB into	erface	

I/O Connectors	1 x RS-232 or USB for touchscreen version 1 x Audio (Line-in) 1 x VGA 1 x DVI-D 1 x HDMI 1 x DVI 1 x Power input with Terminal block(DC Version) or Screw type connector(AC version)	
Audio	2 x Speaker	
Power Adapter	Screw-type external AC/DC power adapter	
Power Consumption	16W	
Touchscreen	Projected capacitive multi-touch 5-wire flat resistive touch	
Dimensions	460 mm(18.11") (W) x 285 mm (11.22") (D) x 58.45 mm (2.30") (H)	
Packing Dimensions	575 mm (22.63") (W) x 170 mm (6.69") (D) x 460 mm (18.11") (H)	
Weight (net/gross)	4.83 kg (10.63 lb)/6.33 kg (13.93 lb)	
Operating Temperature	0°C to +50°C (+32°F to +122°F)	
Relative Humidity	20% to 90% @ +40°C, non-condensing	
Certifications	CE	

#### **Packing List**

- 1 x P6187W-V2 unit 1 x VGA cable 1 x USB cable (for resistive touch/capacitive touch version only)
- 1 x Audio cable
- 1 x Adapter (AC version only)
- 1 x Power cord (AC version only)
  1 x 3-pin Terminal block (DC version only)

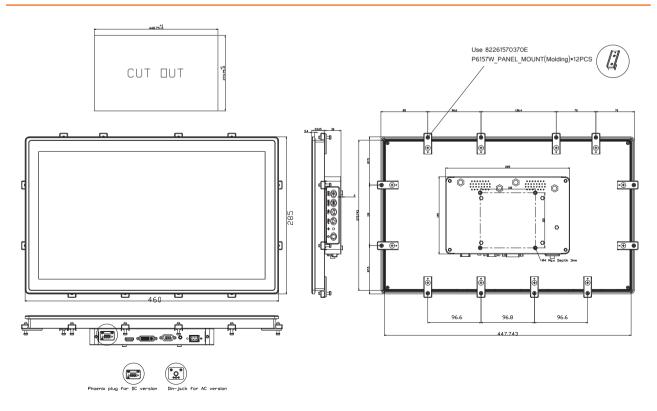
#### **Ordering Information**

P6187W-V2	
P6187WPC-AC-U-US- EU-V2 (P/N: E226187104)	18.5" Industrial Monitor with Capacitive Touch Screen, AC Version
P6187WPC-24VDC-U-V2 (P/N: E226187106)	18.5" Industrial Monitor with Capacitive Touch Screen, 24VDC Version
P6187WPG-24VDC-V2 (P/N: E226187107)	18.5" Industrial Monitor without touch, 24VDC Version
P6187WPR-AC-U-US- EU-V2 (P/N: E226187110)	18.5" Industrial Monitor with Resistive Touch Screen, AC Version
P6187WPR-24VDC-U-V2 (P/N: E226187109)	18.5" Industrial Monitor with Resistive Touch Screen, 24VDC Version
* O.I. C: I	

- \* Other configuration by request \* Specification and certifications may vary based on different requirements

#### **Optional Accessories**

5946L203800E	HDMI cable
59461713400E	DVI-D cable
881261870A0E	Panel mount kit
881231770A0E	Wall mount kit
E221177116	Desktop stand for 15.6" to 21.5"

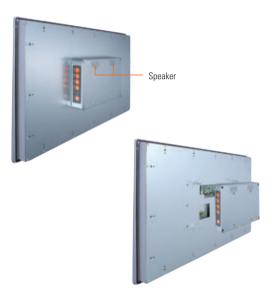


# P6217W

#### 21.5" FHD TFT Widescreen Industrial LCD Monitor

## **Features**

- 21.5" FHD TFT 250 nits with projective capacitive multi-touch or resistive touch
- NEMA 4/12 (IP65) compliant flat panel monitor
- Supports panel mount, wall mount and VESA mount
- Full range screw-type (locked) AC-in or 12V/24V DC-in (optional)
- VGA, HDMI and DVI with multi-signal inputs







- 1. RS232 or USB for touch
- 2. Audio (Line in)
- 3. VGA 4. DVI-D
- 5. HDMI
- 6. Power input Terminal block or Screw type

#### Introduction

The P6217W is a slim-type industrial LCD monitor with flat front bezel design, which adopts 21.5-inch 250 nits full HD LCD display and supports multi-signal interfaces including DVI, VGA, S-Video, Video. Featuring IP65 (NEMA 4)-rated front bezel, screw-type adaptor plug design, and 12/24V DC-in , the 21.5-inch P6217W is designed to fit for all kinds of industrial environments. Moreover, the P6217W supports panel mount, wall mount or VESA FPMPMI (Video Electronics Standards Association Flat Panel Monitor Physical Mounting Interface) mounting. With the compact mechanism design, the P6217W can be deployed easily in any space-limited place. It is especially suitable for POI/POS, HMI and all kinds of heavy-duty industrial fields.

Front Bezel	NEMA 4/12 (IP65)-compliant, flat front bezel		
Mounting	Panel mount, wall mount and VESA arm FPMPMI mounting (video electronics standards association Flat Panel monitor physical mounting interface)		
LCD Panel	Display	21.5" FHD TFT LCD	
	Max. Resolution	1920 x 1080	
	Max. Colors	16.7 M	
	Active Area (mm)	476.64 x 268.11	
	Pixel Pitch (mm)	$0.24 \times 0.24$	
	Response Time	18 ms	
	Backlight	LED	
	Backlight MTBF	50,000 hrs	
	Viewing Angle (H/V)	178°/178°	
	Contrast Ratio	3000 (TYP.)	
	Brightness (cd/m²)	250 nits	
Display Control	OSD (on screen display)		
Display Mode	VGA 640 x 350 (70 Hz), VGA 640 x 480 (60/72/75 Hz), VGA 720 x 400 (70 Hz), SVGA 800 x 600 (60/72/75 Hz), XGA 1024 x 768 (60/72/75 Hz), WXGA 1366 x 768 (60 Hz), FHD 1920 x 1080 (60 Hz)		
Input Signal	VGA HDMI DVI (only for DVI-D) Touchscreen: USB int	erface	

оросиновно		
I/O Connectors	1 x RS-232 or USB for touchscreen version 1 x Audio (Line-in) 1 x VGA 1 x DVI-D 1 x HDMI 1 x DVI 1 x Power input with Terminal block(DC Version) or Screw type connector(AC version)	
Audio	2 x Speaker	
Power Supply	DC version: 24VDC AC version: 100 - 240VAC-DC, 36W power adapter	
Power Consumption	26W	
Touchscreen	Projective capacitive multi-touch or 5-wire resistive touch	
Dimensions	547.59 mm (21.56") (W) x 339.05 mm (13.34") (D) x 53 mm (2.09") (H)	
Packing Dimensions	700 mm (27.56") (W) x 185 mm (7.28") (D) x 510 mm (20.07") (H)	
Weight (net/gross)	6.42 kg (14.15 lb)/7.78 kg (17.15 lb)	
Operating Temperature	0°C to +45°C (+32°F to +113°F)	
Relative Humidity	20% to 90% @ +40°C, non-condensing	
Certifications	CE	

#### **Packing List**

- 1 x P6217W unit 1 x VGA cable
- 1 x USB cable (for resistive/capacitive touch screen only)
- 1 x Audio cable
- 1 x Adapter (AC Version only)
- 1 x Power cord (AC Version only)
- 1 x 3-PIN Terminal block (DC Version only)

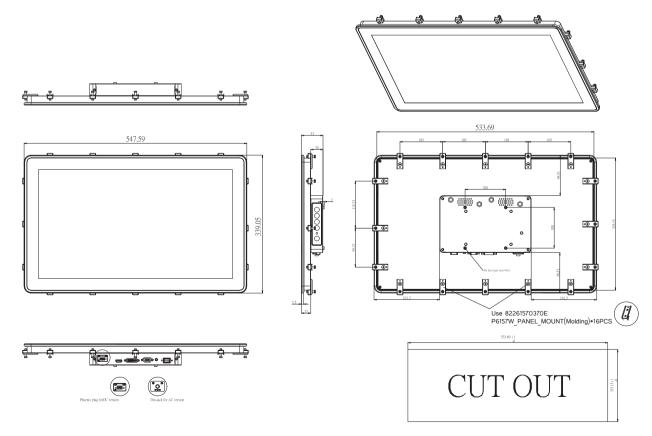
#### **Ordering Information**

21.5" Industrial Monitor with Capacitive Touch Screen, AC Version
21.5" Industrial Monitor without Touch Screen, AC Version
21.5" Industrial Monitor with Resistive Touch Screen, AC Version
21.5" Industrial Monitor with Capacitive Touch Screen, 24VDC Version
21.5" Industrial Monitor without Touch Screen, 24VDC Version
21.5" Industrial Monitor with Resistive Touch Screen, 24VDC Version

<sup>\*</sup> Other configuration by request

#### **Optional Accessories**

5946L203800E	HDMI cable
59461713400E	DVI-D cable
881262170A0E	Panel mount kit
881231770A0E	Wall mount kit
F221177116	Desktop stand for 15.6" to 21.5"



<sup>\*</sup> Specification and certifications may vary based on different requirements



**Fanless Touch Panel Computers** 

Heavy-duty Fanless Touch Panel Computers

**Stainless Touch Panel Computers** 

**Transportation Touch Panel Computers and Monitors** 

**Industrial Touch Panel Computers** 

**Industrial Touch Monitors** 

**Medical Panel Computers** 

Modular Panel PCs

Self-service Kiosk

# **Industrial Panel PCs**

# 7

# **Medical Panel Computers**

The MPC products are specifically designed for medical image processing and medical measuring instruments. The MPC product line is EN 60601-1, CE and FCC class B certified to ensure operational safety in the challenging healthcare environment adopts an IP65-rated front bezel and IPX1-rated enclosure for system protection against dust/liquid spillage.

Selection Guide		383
MPC103-845	10.1" WXGA TFT Fanless Medical Grade Touch Panel Computer with Intel® Celeron® Processor N3060	385
MPC102-845	10.4" XGA TFT Fanless Medical Grade Touch Panel Computer with Intel® Celeron® Processor N3060	387
MPC152-845	15" XGA TFT Fanless Medical Grade Touch Panel Computer with Intel® Celeron® Processor N3060	389
MPC153-834	15.6" WXGA TFT Fanless Medical Grade Touch Panel Computer with	391

# **Medical Panel Computers**

#### Selection Guide







Features Wodels	MPC103-845	MPC102-845	MPC152-845
CPU Level	Intel® Celeron® N3060 (up to 2.48 GHz)	Intel® Celeron® N3060 (up to 2.48 GHz)	Intel® Celeron® N3060 (up to 2.48 GHz)
Chipset	SoC integrated	SoC integrated	SoC integrated
System Memory	1 x 204-pin DDR3L-1600 SO-DIMM, up to 8GB	1 x 204-pin DDR3L-1600 SO-DIMM, up to 8GB	1 x 204-pin DDR3L-1600 SO-DIMM, up to 8GB
Display	10.1" WXGA TFT, 350 nits	10.4" SVGA TFT, 350 nits	15" XGA TFT, 420 nits
1/0	1 x RS-232 1 x RS-232/422/485 2 x 10/100/1000 Mbps Ethernet 2 x USB 2.0 2 x USB 3.0 1 x Audio (Line-out) 1 x Switch for power on/off 1 x AT/ATX selectable switch	1 x RS-232 1 x RS-232/422/485 2 x 10/100/1000 Mbps Ethernet 2 x USB 2.0 2 x USB 3.0 1 x Audio (Line-out) 1 x Switch for power on/off 1 x AT/ATX selectable switch	1 x RS-232 1 x RS-232/422/485 2 x 10/100/1000 Mbps Ethernet 2 x USB 2.0 2 x USB 3.0 1 x Audio (Line-out) 1 x Switch for power on/off 1 x AT/ATX selectable switch 1 x 8-bit DIO (programmable, DB9)
Storage	1 x 2.5" half slim SSD (AC type only) 1 x mSATA	1 x 2.5" HDD 1 x mSATA	1 x 2.5" HDD 1 x mSATA
DVD-RW	N/A	N/A	N/A
Expansion Interface	2 x PCI Express Mini Card slot	2 x PCI Express Mini Card slot	2 x PCI Express Mini Card slot
Touchscreen	Projected capacitive multi-touch	5-wire flat Resistive Type	5-wire flat Resistive Type
Power Supply	AC version: 100 to 240 VAC-DC, 65W power adapter DC version: 9 to 36 VDC with over current protection fuse	AC version: 100 to 240 VAC-DC, 65W power adapter DC version: 9 to 36 VDC with over current protection fuse	AC version: 100 to 240 VAC-DC, 65W power adapter DC version: 9 to 36 VDC with over current protection fuse
Watchdog Timer	255 levels, 0 to 255 sec.	255 levels, 0 to 255 sec.	255 levels, 0 to 255 sec.
Dimensions (W x D x H)	260.8 x 38 x 194.1 mm (10.27" x 1.5" x 7.65")	292.5 x 45.8 x 235.8 mm (1.52" x 1.8" x 9.28")	387.9 x 54.6 x 307.7 mm (15.27" x 2.14" x 12.11")
Weight (net/gross)	1.08 kg (2.38 lb)/2.18 kg (4.8 lb)	1.8 kg (3.96 lb)/3 kg (6.61 lb)	3.2 kg (7.05 lb)/5.1 kg (11.24 lb)
Operating Temperature	0° to +40°C (+32°F to +104°F)	0° to +40°C (+32°F to +104°F)	0° to +40°C (+32°F to +104°F)
Certifications	EN 60601-1 (ESD contact 8KV, air 15KV), CE and FCC	EN 60601-1 (ESD contact 8KV, air 15KV), CE and FCC	EN 60601-1 (ESD contact 8KV, air 15KV), CE and FCC



Features Wodels	MPC153-834	
CPU Level	Intel® Celeron® J1900 (up to 2.42 GHz)	
Chipset	SoC integrated	
System Memory	1 x 204-pin DDR3L-1066/1333 SO-DIMM, up to 8GB	
Display	15.6" WXGA TFT, 300 nits	
1/0	2 x RS-232/422/485 1 x RS-232/422/485 (with isolated 4KV) 2 x 10/100/1000 Mbps Ethernet 2 x USB 3.0 1 x Audio (Line-out)	
Storage	1 x Half-slim SSD 1 x CFast™ or mSATA	
DVD-RW	N/A	
Expansion Interface	2 x PCI Express Mini Card slot	
Touchscreen	5-wire flat resistive type	
Power Supply	AC version: 100 to 240 VAC-DC, 65W power adapter DC version: 9 to 36 VDC with over current protection fuse	
Watchdog Timer	255 levels, 0 to 255 sec.	
Dimensions (W x D x H)	394.2 x 57 x 257.2 mm (15.53" x 2.25" x 10.13")	
Weight (net/gross)	3.0 kg (6.61 lb)/5.2 kg (11.46 lb)	
Operating Temperature	0°C to +40°C (+32°F to +104°F)	
Certifications	CE, EN 60601-1, FCC classB	

# MPC103-845

10.1" WXGA TFT Fanless Medical Grade Touch Panel Computer with Intel® Celeron® Processor N3060

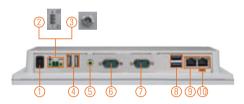
## **Features**

- 10.1" WXGA TFT LCD display with LED backlight
- Fanless design with Intel® Celeron® processor N3060
- 2 GbE LANs. 4 USB and 2 COM
- Plastic and IP65-rated front bezel
- Supports RFID (optional)
- External AT/ATX mode selection switch
- Easy access storage design
- Supports panel mount, wall mount, VESA arm and desktop stand
- Adjustable RS-232/422/485 setting via BIOS
- 4th EN 60601-1 (ESD contact 8kV, air 15kV), CE and FCC





- 1. Power LED 2. HDD LED
- 3. Brightness adjust +/-
- 4. Display on/off 5. Volume adujst
- 6. Mic-in (optional)



- 1. Power switch (ATX)
- 2. Terminal block for DC power input
- 3. Screw connector with AC power adapter
- 4. 2 x USB 2.0
- 5. Audio (Line-out) 6. 1 x RS-232/422/485
- 7 1 x BS-232
- 8. 2 x USB 3.0
- 9. 2 x LAN 10. AT/ATX switch













#### Introduction

The MPC103-845 is a 10.1" fanless medical touch panel computer. It adopts a modern, super sleek and fanless design and has a 10.1" TFT LCD. It is powered by the Intel® Celeron® processor N3060 dual core up to 2.48 GHz. For wireless network connection, the MPC103-845 offers 2 PCI Express Mini Card slots. By just plugging in the WLAN card, customers can have instant access to wireless LAN/GPRS/GSM/4G environments. Besides, it provides two types of power input: DC power with terminal block connector and AC power adapter with screw type connector.

#### Super Slim & Ultra Lightweight Design

With a thickness of 38 mm and weight of 1.08 kg, the MPC103-845 is designed for use in space-constrained environments

#### Certifications

This 10.1-inch medical panel platform complies with 4th version of EN 60601-1 and CE, FCC Class B certifications to ensure medical operation safety.

#### **Aluminum Back Chassis with Excellent Thermal Solution**

With Axiomtek's patent for plastic plus aluminum mechanism design, the MPC103-845 can dissipate the heat easily and keep the system operation stable.

Front Bezel	IP65, NEMA 4 rugged protection, plastic front bezel		
LCD Panel	Display Type	10.1" WXGA TFT LCD with LED backlight	
	Brightness (cd/m²)	350 nits	
	Resolution	1280 x 800	
	Viewing Angel (H/V)	170°/170°	
Main System	CPU	Intel® Celeron® processor N3060 2 cores (up to 2.48 GHz)	
	System Memory	1 x 204-pin DDR3L-1600 SO-DIMM, up to 8GB	
	BIOS	AMI UEFI BIOS	
	Storage	1 x Half-slim SATA SSD (only for MPC103-845-PCT-J) 1 x mSATA	
	Watchdog Timer	255 levels, 0 to 255 sec.	
	Onboard Graphics	Integrated in Intel® GFX	

I/O Connector	1 x RS-232
	1 x RS-232/422/485 (default RS-232)
	1 x Switch for power on/off
	1 x AT/ATX mode selection switch
	2 x USB 2.0
	2 x USB 3.0
	1 x Audio (Line-out)
	2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT)
Expansion Interface	1 x Full-size PCI Express Mini Card slot with mSATA
	1 x Full-size PCI Express Mini Card slot with SIM
Touchscreen	Projected capacitive multi-touch
Power Supply	AC version: 100 to 240 VAC-DC, 65W power adapter
	DC version: 9 to 36 VDC with over current protection fuse
Power Consumption	40.32 W
Dimension	260.8 mm (10.27") (W) x 38 mm (1.50" (D) x
	194.1 mm (7.65") (H)
Packing Dimensions	380 mm (14.96") (W) x 100 mm (3.94") (D)
•	x 280 mm (11.02") (H)
Weight (net/gross)	1.08 kg (2.38 lb)/2.18 kg (4.8 lb)
Operating Temperature	0°C to +40°C (+32°F to +122°F)
Relative Humidity	20% to 90% @ +40°C; non-condensing
Operation Vibration	2G, 5 - 500Hz, random for SSD
Certifications	4th EN 60601-1 (ESD contact 8KV, air 15KV), CE and FCC

#### **Packing List**

- 1 x MPC103-845 1 x Adapter (MPC103-845-J) 1 x Power cord (MPC103-845-J)
- 1 x Phoenix connector (MPC103-845 DC)

#### **Ordering Information**

Standard	
MPC103-845-J (P/N: E228103100)	10.1" WXGA fanless medical touch panel computer with Intel® Celeron® processor N3060, projected capacitive touch screen, AC-DC 65W power adapter (screw type connector) and EMI class B
MPC103-845-DC (P/N: E228103101)	10.1" WXGA fanless medical touch panel computer with Intel® Celeron® processor N3060, projected capacitive touch screen and DC power input (terminal block connector

<sup>\*</sup> Other configuration by request

#### **Optional Accessories**

Wi-Fi + Bluetooth kit	
GOT5103W-845 half slir	n SSD kit SFP for GOT5103W-845-PCT-J
881251030A0E	Panel mount kit
8812B1070A0E	Wall mount kit
881251203A0E	RFID kit
E226171119	Stand Kit

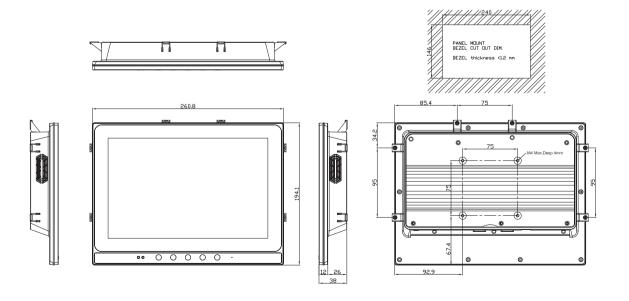
#### **Optional EOS Installation**

WES 7 WE8S (64-bit)

#### **Optional OS Installation**

Windows® 7 Windows® 8.1 (64-bit) Windows® 10





<sup>\*</sup> Specification and certifications may vary based on different requirements

# MPC102-845

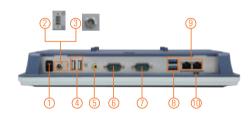
10.4" XGA TFT Fanless Medical Grade Touch Panel Computer with Intel® Celeron® Processor N3060

## **Features**

- 10.4" XGA TFT LCD display with LED backlight
- Fanless design with Intel® Celeron® processor N3060
- 2 GbE LANs. 4 USB and 2 COM
- Plastic and IP65-rated front bezel
- Supports RFID (optional)
- External AT/ATX mode selection switch
- Easy access storage design
- Supports panel mount, wall mount, VESA arm and desktop stand
- 4th EN 60601-1 (ESD contact 8kV, air 15kV), CE and FCC certified







- 1. Power switch (ATX)
- 2. Terminal block for DC power input
- 3. Screw connector with AC power adapter
- 4. 2 x USB 2.0
- 5. Audio (Line-out)
- 6. 1 x RS-232/422/485
- 7. 1 x RS-232
- 8. 2 x USB 3.0 9. 2 x LAN
- 10. AT/ATX selectable switch
- 11. Touch on/off button













#### Introduction

The MPC102-845 is a 10.4" fanless medical touch panel computer. In response to market demand, this medical panel computer is a cost effective solution. It adopts a modern, super sleek and fanless design and is powered by the Intel® Celeron® processor N3060 dual core up to 2.48 GHz. For wireless network connection, the MPC102-845 offers 2 PCI Express Mini Card slots. By just plugging in the WLAN card, customers can have instant access to wireless LAN/GPRS/GSM/4G environments. Besides, it provides two types of power input: DC power with terminal block connector and AC power adapter with screw type connector.

#### Super Slim & Ultra Lightweight Design

With a thickness of 45.8 mm and weight of 1.8 kg, the MPC102-845 is designed for use in space-constrained environments.

#### Certifications

This 10.4-inch medical panel platform complies with 4th version of EN 60601-1 and CE, FCC Class B certifications to ensure medical operation safety.

#### **Aluminum Back Chassis with Excellent Thermal Solution**

With Axiomtek's patent for plastic plus aluminum mechanism design, the MPC102-845 can dissipate the heat easily and keep the system operation stable.

Front Bezel	IP65, NEMA 4 rugged protection, plastic front bezel	
LCD Panel	Display Type	10.4" XGA TFT LCD with LED
		backlight
	Brightness (cd/m²)	350 nits (XGA)
	Resolution	1024 x 768 (XGA)
	Viewing Angel (H/V)	150°/150°
Main System	CPU	Intel® Celeron® processor N3060
		2 cores (up to 2.48 GHz)
	System Memory	1 x 204-pin DDR3L-1600 SO-DIMM, up to 8GB
	BIOS	AMI UEFI BIOS
	Storage	1 x 2.5" SATA HDD (9.5 mm height)
		1 x mSATA
	Watchdog Timer	255 levels, 0 to 255 sec.
	Onboard Graphics	Integrated in Intel® GFX

•	
I/O Connector	1 x RS-232 1 x RS-232/422/485 (default RS-232) 1 x Switch for power on/off 1 x AT/ATX mode selection switch 2 x USB 2.0 2 x USB 3.0
	1 x Audio (Line-out) 2 x 10/100/1000 Mbps Ethernet (Intel® i211-AT)
Expansion Interface	1 x Full-size PCI Express Mini Card slot with mSATA 1 x Full-size PCI Express Mini Card slot with SIM
Touchscreen	Resistive type
Power Supply	AC version: 100 to 240 V AC-DC, 65W power adapter DC version: 9 to 36 VDC with over current protection fuse
Power Consumption	32W
Dimension	292.5 mm (11.52") (W) x 45.8 mm (1.80") (D) x 235.8 mm (9.28") (H)
Packing Dimensions	415 mm (16.34") (W) x 100 mm (3.94") (D) x 315 mm (12.4") (H)
Weight (net/gross)	1.8 kg (3.96 lb)/3 kg (6.61 lb)
Operating Temperature	0°C to +40°C (+32°F to +122°F)
Relative Humidity	20% to 90% @ +40°C; non-condensing
Operation Vibration	2G, 5 - 500Hz, random for SSD
Certifications	4th EN 60601-1 (ESD contact 8KV, air 15KV), CE and FCC

#### **Packing List**

- 1 x MPC102-845
- 1 x Adapter (MPC102-845-J)
- 1 x Power cord (MPC102-845-J) 1 x Phoenix connector (MPC102-845 DC)

#### **Ordering Information**

Standard	
MPC102-845-DC (P/N: E228102104)	10.4" XGA fanless medical touch panel computer with Intel® Celeron® processor N3060, 5-wire resistive touch screen and DC power input (terminal block connector)
MPC102-845-J (P/N: E22810210)	10.4" XGA fanless medical touch panel computer with Intel® Celeron® processor N3060, 5-wire resistive touch screen, AC-DC 65W power adapter (screw type connector) and EMI class B

<sup>\*</sup> Other configuration by request

#### **Optional Accessories**

Wi-Fi + Bluetooth kit	
881281021A0E	Panel mount kit
881251001A0E	Wall mount kit
E226171119	Stand kit
881251203A0E	RFID kit

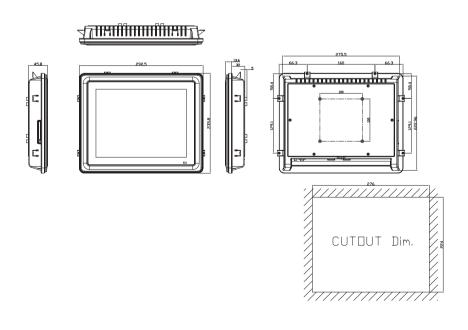
#### **Optional EOS Installation**

WES 7 WE8S (64-bit)

#### **Optional OS Installation**

Windows® 7 Windows® 8.1 (64-bit) Windows® 10





<sup>\*</sup> Specification and certifications may vary based on different requirements

# MPC152-845

15" XGA TFT Fanless Medical Grade Touch Panel Computer with Intel® Celeron® Processor N3060

## **Features**

- 15" XGA TFT LCD display with LED backlight
- Fanless design with Intel® Celeron® processor N3060
- 2 GbE LANs. 4 USB and 2 COM
- Plastic and IP65-rated front bezel
- Supports RFID (optional)
- External AT/ATX mode selection switch
- Easy access storage design
- Supports panel mount, wall mount, VESA arm and desktop stand
- Adjustable RS-232/422/485 setting via BIOS
- 4th EN 60601-1 (ESD contact 8kV, air 15kV), CE and FCC















#### Introduction

The MPC152-845 is a 15" fanless medical touch panel computer. In response to market demand, this medical panel computer is a cost effective solution. It adopts a modern, super sleek and fanless design and is equipped with a 15" TFT LCD. It is powered by the Intel® Celeron® processor N3060 dual core up to 2.48 GHz. For wireless network connection, the MPC152-845 offers 2 PCI Express Mini Card slots. By just plugging in the mini card WLAN card, customers can have instant access to wireless LAN/GPRS/ GSM/4G environments. Besides, it provides two types of power input: DC power with terminal block connector and AC power adapter with screw type connector.

#### Super Slim & Ultra Lightweight Design

With a thickness of 54.6 mm and weight of 3.2 kg, the MPC152-845 is designed for use in space-constrained environments.

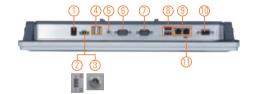
#### Certifications

This 15-inch medical panel platform complies with 4th version of EN 60601-1 and CE, FCC Class B certifications to ensure medical operation safety.

#### **Aluminum Back Chassis with Excellent Thermal Solution**

With Axiomtek's patent for plastic plus aluminum mechanism design, the MPC152-845 can dissipate the heat easily and keep the system operation stable.





- 1. Power switch (ATX)
- 2. Terminal block for DC power input
- 3. Screw connector with AC power adapter
- 4. 2 x USB 2.0
- 5. 1 x Audio (Line-out)
- 6. 1 x RS-232/422/485
- 7. 1 x RS-232
- 8. 2 x USB 3.0 9. 2 x LAN
- 10.8 x DIO (programmable, DB9)
- 11. AT/ATX selectable switch
- 12. Touch LED indicator
- 13. Touch on/off button
- 14. HDD & Power LED indicator

rugged protection, plastic front bezel
15" XGA TFT LCD with LED backlight
(m²) 420 nits (XGA)
1024 x 768 (XGA)
(H/V) 160°/160°
Intel® Celeron® processor N3060 2 cores (up to 2.48 GHz)
y 1 x 204-pin DDR3L-1600 SO-DIMM, up to 8GB
AMI UEFI BIOS
1 x 2.5" SATA HDD (9.5 mm height)
1 x mSATA
er 255 levels, 0 to 255 sec.
ics Integrated in Intel® GFX

I/O Connector	1 x RS-232 1 x RS-232/422/485 2 x 10/100/1000 Mbps Ethernet 2 x USB 2.0 2 x USB 3.0 1 x Audio (Line-out) 1 x Switch for power on/off
	1 x AT/ATX selectable switch 1 x 8-bit DIO (programmable, DB9)
Expansion Interface	1 x Full-size PCI Express Mini Card slot with mSATA 1 x Full-size PCI Express Mini Card slot with SIM
Touchscreen	Resistive type
Power Supply	AC version: 100 to 240 V AC-DC, 65W power adapter DC version: 9 to 36 VDC with over current protection fuse
Power Consumption	32 W
Dimension	387.9 mm (15.27") (W) x 54.6 mm (2.14") (D) x 307.7 mm (12.11") (H)
Packing Dimensions	510 mm (20.08") (W) x 105 mm (4.13") (D) x 385 mm (15.16") (H)
Weight (net/gross)	3.2 kg (7.05 lb)/5.1 kg (11.24 lb)
Operating Temperature	0°C to +40°C (+32°F to +122°F)
Relative Humidity	20% to 90% @ +40°C; non-condensing
Operation Vibration	2G, 5 - 500Hz, random for SSD
Certifications	4th EN 60601-1 (ESD contact 8KV, air 15KV), CE and FCC

#### **Packing List**

- 1 x MPC152-845

- 1 x Adapter (MPC152-845-J) 1 x Power cord (MPC152-845-J) 1 x Phoenix connector (MPC152-845 DC)

#### **Ordering Information**

Standard	
MPC152-845-J (P/N: E228152105)	15" XGA fanless medical touch panel computer with Intel® Celeron® processor N3060, 5-wire resistive touch screen, AC-DC 65W power adapter (screw type connector) and EMI class B
MPC152-845-DC (P/N: E228152106)	15" XGA fanless medical touch panel computer with Intel® Celeron® processor N3060, 5-wire resistive touch screen and DC power input (terminal block connector)

<sup>\*</sup> Other configuration by request

#### **Optional Accessories**

Wi-Fi + Bluetooth kit	
881251520A0E	Panel mount kit
881251521A0E	Wall mount kit
E226171119	Stand kit
881251203A0E	RFID kit

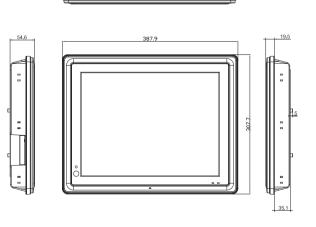
#### **Optional EOS Installation**

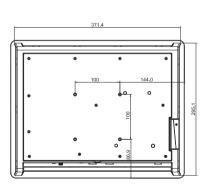
WES 7
WE8S (64-bit)

#### **Optional OS Installation**

Windows® 7	
Windows® 8.1 (64-bit)	
Windows® 10	







<sup>\*</sup> Specification and certifications may vary based on different requirements

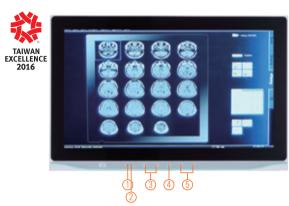
# MPC153-834

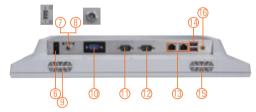
15.6" WXGA TFT Fanless Medical Grade Touch Panel Computer with Intel® Celeron® Processor J1900

## **Features**

- 15.6" WXGA TFT LCD display with LED backlight
- 5-wire flat resistive touch for optional
- Fanless design with Intel® Celeron® processor J1900 4 cores (up to 2.42 GHz)
- EN 60601-1/CE/FCC class B certified
- Half-slim SSD & CFast™ or mSATA
- Antimicrobial plastic enclosure
- IP65 front bezel and IPX1 full enclosure design
- Supports wall mount, VESA arm and desktop stand
- Supports smart card reader (optional)







- 1. Power LED
- 2. HDD LED
- 3. Brightness adjust +/-
- 4. Display on/off
- 5. Volume adjust
- 6. Power switch (ATX)
- 7. Terminal block for DC power input 12. 1 x RS-232/422/485
- 8. Screw connector with AC power 13. 2 x LAN 14. 2 x USB 3.0 adapter
- 9. Speaker 15. Speaker
- 10. Isolated COM 11. 1 x RS-232/422/485
- 16. 1 x Audio (Line-out)















#### Introduction

The MPC153-834 is a 15.6" fanless medical grade touch panel computer. In response to market demand, this medical touch panel computer is a cost effective solution. It adopts a modern, sleek and fanless design and is powered by the Intel® Celeron® processor J1900 4 cores up to 2.42 GHz (Bay Trail). For wireless network connection, the MPC153-834 offers 2 PCI Express Mini Card slots. By just plugging in a WLAN card, customers can have instant access to wireless LAN/GPRS/GSM/4G environments. Besides, it provides two types of power input: DC power input (9 to 36VDC) with terminal block connector and AC medical power adapter with screw type connector.

#### Slim & Lightweight Design

The 15.6-inch medical panel PC is slim and lightweight, perfect for limited space installation.

#### **Built-in Internal WLAN Antenna**

The MPC153-834 has 2 PCI Express Mini Card slots and a built-in WLAN antenna for wireless network connections. By simply plugging in the wireless LAN card, customers can use the medical computer in wireless LAN/GPRS/GPS/4G environment.

#### **Support Front Membrane Keys**

The MPC153-834 has 5 membrane keys on the front panel which allows users to adjust the LCD on/off, LCD brightness and volume setting easily.

#### Certifications

This 15.6-inch fanless medical panel platform complies with EN 60601-1, CE, FCC Class B certifications to ensure medical operation safety.

Front Bezel	IP65 front bezel	
LCD Panel	Display Type	15.6" WXGA TFT LCD display with LED backlight
	Brightness (cd/m²)	300 nits
	Resolution	1366 x 768
Main System	CPU	Intel® Celeron® processor J1900 4 cores
	System Memory	1 x 204-pin DDR3L-1066/1333 SO-DIMM, up to 8GB
	BIOS	AMI UEFI BIOS
	Storage	1 x Half-slim SSD 1 x CFast™ or mSATA
	Watchdog Timer	255 levels, 0 to 255 sec.
	Onboard Graphics	Integrated Intel® GFX

<u> </u>	
I/O Connector	2 x RS-232/422/485 (default RS-232)
	1 x RS-232 with isolated 4kV
	2 x 10/100/1000 Mbps Ethernet (Intel® i210-IT)
	2 x USB 3.0
	1 x Audio (Line-out)
Expansion Interface	1 x Full-size PCI Express Mini Card with mSATA
	1 x Full-size PCI Express Mini Card with SIM
Touchscreen	5-wire flat resistive touch
Power Supply	AC version: medical grade 100 to 240 V AC-DC, 60W power
	adapter
	DC version: 9 to 36 VDC with terminal block
Dimensions	394.2 mm (15.53") (W) x 57 mm (2.25") (D) x 257.2 mm
	(10.13") (H)
Packing Dimensions	508 mm (20.00") x 106 mm (4.17") x 383mm (15.08")
Weight (net/gross)	3.0 kg (6.61 lb)/5.2 kg (11.46 lb)
Operating Temperature	0°C to +40°C (32°F to +104°F, with RAM thermal kit)
Relative Humidity	20% to 90% @ +40°C; non-condensing
Operation Vibration	2G, 10 - 500Hz, random for CFast™
Certifications	CE, FCC class B and EN60601-1
* \A/T.\A/ida Tamparatur	All M/T aumorated areducate boug to be ported by Aviomately

#### **Packing List**

- 1 x MPC153-834
- 1 x Adapter (MPC153-834-J)
- 1 x Power cord (MPC153-834-J)

#### **Ordering Information**

Standard	
MPC153-834-FR-J (P/N: E228153102)	15.6" WXGA fanless medical touch panel computer with Intel® Celeron® processor J1900, 5-wire flat resistive
	touch screen, AC-DC 60 W power adapter (screw type connector), EMI class B and EN 60601-1 certified

<sup>\*</sup> Other configuration by request

#### **Optional Accessories**

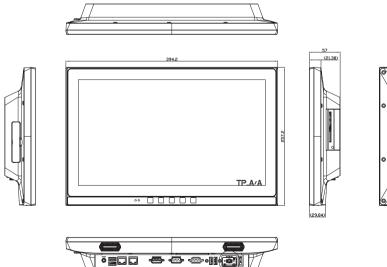
Wi-Fi + Bluetooth kit		
Smart card reader kit		

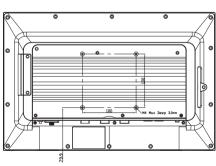
#### **Optional EOS Installation**

WES7			
WE8S			

#### **Optional OS Installation**

/indows® 7	
/indows® 8.1	





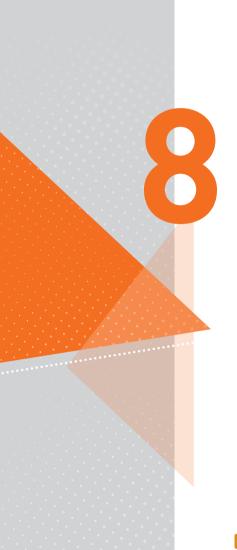




<sup>\*</sup> W.T.: Wide Temperature. All W.T. supported products have to be sorted by Axiomtek.

\* The DC power source to be used with MPC153-834 must be galvanically isolated according to IEC60601-1 safety of medical devices!

<sup>\*</sup> Specification and certifications may vary based on different requirements



# Modular Panel PCs

Axiomtek's ITC series of modular panel PCs with built-in the Intel® Smart Display Module (Intel® SDM) are designed to simplify installation, upgrade and maintenance. These modular PCs are ideal for light-weight applications including light industry, digital signage, POS/Kiosk, etc.

	Selection Guide		394
NEW	ITC150WM	15.6" FHD TFTLCD Modular Panel PC with Intel® Smart Display Module (SDM) CPU Card	395
NEW	ITC210WM	21.5" FHD TFTLCD Slim Bezel Modular Panel PC with Intel® Smart Display Module (SDM) CPU Card	397

# Industrial Panel PCs

# Interactive Touch Computers

## Selection Guide







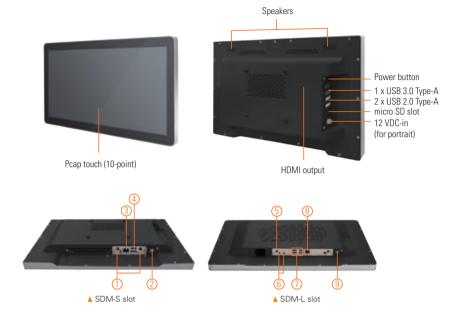
Features Wodels	ITC150WM	ITC210WM		
SDM Module	SDM300S: Intel® SDM Small (SDM-S, 60 x 100 mm) SDM500L: Intel® SDM Large (SDM-L, 175 x 100 mm)	SDM300S: Intel® SDM Small (SDM-S, 60 x 100 mm) SDM500L: Intel® SDM Large (SDM-L, 175 x 100 mm)		
CPU Level	SDM300S: Intel® Pentium® N4200 1.1GHz processor or Intel® Celeron® N3350 1.1GHz processor SDM500L: Intel® Celeron® 4305UE 2.0GHz processor or Intel® Core™ processor (optional)	SDM300S: Intel® Pentium® N4200 1.1GHz processor or Intel® Celeron® N3350 1.1GHz processor SDM500L: Intel® Celeron® 4305UE 2.0GHz processor or Intel® Core™ processor (optional)		
Chipset	SoC Integrated	SoC Integrated		
System Memory	SDM300S: Onboard LPDDR4 2400 MHz 4GB (8GB optional) SDM500L: $2\times260$ -pin DDR4-2400 SO-DIMM slot, up to 64GB	SDM300S: Onboard LPDDR4 2400 MHz 4GB (8GB optional) SDM500L: 2 x 260-pin DDR4-2400 SO-DIMM slot, up to 64GB		
Display	15.6" FHD TFT LCD 300 nits 16:9 radio 1920 x 1080 pixels	21.5" FHD TFT LCD 250 nits 16:9 radio 1920 x 1080 pixels		
SDM-S I/O	1 x GbE LAN 2 x USB 3.0 Type A 2 x SMA antenna reserved hole	1 x GbE LAN 2 x USB 3.0 Type A 2 x SMA antenna reserved hole		
SDM-L I/O	1 x Power button with LED 1 x GbE LAN 4 x USB 3.0 Type A 1 x Audio output 1 x Micphone input	1 x Power button with LED 1 x GbE LAN 4 x USB 3.0 Type A 1 x Audio output 1 x Micphone input		
I/O	1 x HDMI  1 x USB 3.0 Type A  2 x USB 2.0 Type A  1 x microSD card slot (push-push type)  2 x 12 VDC-in barrel (screw-lock type)  1 x Power button with LED	1 x HDMI 1 x USB 3.0 Type A 2 x USB 2.0 Type A 1 x microSD card slot (push-push type) 2 x 12 VDC-in barrel (screw-lock type) 1 x Power button with LED		
Storage	SDM300-S: 1 x eMMC 64GB onboard SDM500-L: 1 x M.2 Key M 2242 slot 1 x M.2 Key B 2280 slot	SDM300-S: 1 x eMMC 64GB onboard SDM500-L: 1 x M.2 Key M 2242 slot 1 x M.2 Key B 2280 slot		
Expansion Interface	SDM300S:1 x M.2 Key E 2230 slot (for the Wi-Fi) SDM500L: 1 x M.2 Key E 2230 slot (for the Wi-Fi)	SDM300S:1 x M.2 Key E 2230 slot (for the Wi-Fi) SDM500L: 1 x M.2 Key E 2230 slot (for the Wi-Fi)		
Touchscreen	Projected capacitive multi-touch	Projected capacitive multi-touch		
Operating System	Windows® 10	Windows® 10		
Power Supply	96W (12V/8A) AC to DC power adapter	96W (12V/8A) AC to DC power adapter		
Power Consumption	Average 45W	Average 50W		
Watchdog Timer	255 levels, 1 to 255 sec./min.	255 levels, 1 to 255 sec./min.		
Dimensions (W x D x H)	386 x 40 x 241 mm (15.1" x 1.6" x 9.5")	531 x 48.5 x 317 mm (20.9" x 1.9" x 12.5")		
Weight (net/gross)	3.2 kg (7.04lb)/5.4kg (11.9 lb)	7.5 kg (16.53 lb)/10.5kg (23.2 lb)		
Operating Temperature	0°C to +40°C (+32°F to +104°F)	0°C to +40°C (+32°F to +104°F)		
Certifications	CE, FCC Class A	CE, FCC Class A		



15.6" FHDTFTLCD Slim Bezel Modular Panel PC with Intel® Smart Display Module (SDM) **CPU Card** 

## **Features**

- 15.6" full HD TFTLCD
- Aspect ratio: 16:9; brightness: 300 nits
- Slim bezel shape under 40 mm thickness
- Projected capacity touch supported, 10-point touch
- Swappable Intel® SDM CPU card design
- Metal frame structure for various applications
- Supports add-on modules and mounting kits (optional)



- 1. 2 x SMA antenna reserved hole
- 2. 12 VDC-in
- 3. LAN
- 4. 2 x USB 3.0 Type-A 5. 2 x SMA antenna reserved hole
- 6. Mic-in/Line-out 7. USB 3.0
- 8. LAN
- 9.12 VDC-in

Front Bezel	Metallic front bezel, IP54		
LCD Panel	Display Type	15.6" FHD TFT-LCD	
	Brightness (cd/m²)	300 nits	
	Resolution	1920 (H) x 1080 (V)	
	Aspect Ratio	16:9	
Main System	Intel® SDM Small (S	SDM-S, 60 x 100 mm)	
	Intel® SDM Large (S	SDM-L, 175 x 100 mm)	
I/O Connector	SDM500L	1 x Power button with L ED	
(Depends on SDM I/O)		1 x GbE LAN	
		4 x USB 3.0 Type A	
		1 x Audio output	
		1 x Microphone input	
		2 x SMA antenna reserved hole	
	SDM300S	1 x GbE LAN	
		2 x USB 3.0 Type A	
		2 x SMA antenna reserved hole	
Touchscreen	Projected capacitive multi-touch		
Stereo Speaker	2 x S.P.L. 96dB, 1.5W, 4 ohm		
Power Supply	84W (12V@7A) AC to DC power adapter		
Power Consumption	Average 45W		
Dimension	386 mm (15.1") (W) x 40 mm (1.6") (D) x 241 mm (9.5") (H)		
Packing Dimensions	380 mm (14.96") (W) x 100 mm (3.94") (D)x 280 mm (11.02") (H)		
Weight (net/gross)	1.15 kg (2.42 lb)/5.4kg (11.9 lb)		
Operating Temperature	0°C to +40°C (+32°F	to +104°F)	
Operating Humidity	20% - 80%, non-condensing		
Certifications	CE, FCC Class A		

CPU	Quad-core Intel®	Quad-core Intel® Pentium® N4200 1.1GHz processor or		
	Dual-core Intel®	Celeron® N3350 1.1GHz processor		
System Memory	Onboard LPDDR4	2400 MHz 4GB (8GB optional)		
BIOS	AMI UEFI BIOS			
Storage	1 x eMMC 64GB onboard			
Watchdog Timer	255 levels, 0 to 255 sec.			
Onboard Graphics	Intel® HD Graphics 505/500 (depends on CPU card)			
I/O Connector	Rear Side	1 x GbE LAN		
		2 x USB 3.0 Type A		
		2 x SMA antenna reserved hole		
Expansion Interface	1 x M.2 Key E 2230 slot (for the Wi-Fi)			

CPU Card Selection:	SDM500-L		
CPU		Intel® Celeron® 4305UE 2.0GHz processor or Intel® Core™ processor (optional)	
System Memory	2 x 260-pin DDR4	-2400 SO-DIMM slot, up to 64GB	
BIOS	AMI UEFI BIOS		
Storage	,	1 x M.2 Key M 2242 slot 1 x M.2 Key B 2280 slot	
Watchdog Timer	255 levels, 0 to 2	255 levels, 0 to 255 sec.	
Onboard Graphics	Intel® UHD Grap	hics 620/610 (depends on CPU card)	
I/O Connector	Rear Side	1 x Power button with L ED 1 x GbE LAN 4 x USB 3.0 Type A 1 x Audio output 1 x Micphone input	
Expansion Interface	1 x M.2 Kev F 223	1 x M.2 Key F 2230 slot (for the Wi-Fi)	

#### **Packing List**

1 x ITC150WM with SDM module 1 x Adaptor

#### **Ordering Information**

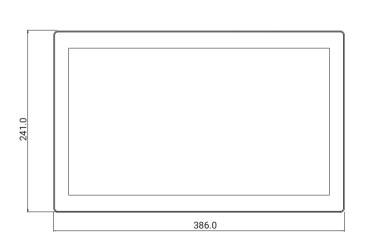
Standard	
ITC150WM- SDM300S-N4200 (P/N: E22T150102)	15.6 FHD with PCAP touch slim bezel panel with SDM300S Intel® Pentium® N4200 processor, onboard DDR4 4G & EMMC 64GB, 1 LAN, 3 USB 3.0, 2 USB 2.0, 2 Speaker, 2 DC Jack, onboard DDR4 4G & EMMC 64GB, 1 LAN, 3 USB 3.0, 2 USB 2.0, 2 Speaker, 2 DC Jack
ITC150WM- SDM500L- 8265U (P/N: E22T150101)	15.6 FHD with PCAP touch slim bezel panel with SDM500L Intel® Core™ i5 8265U processor, 2 SO-DIMM, 2 M.2 SSD, 1 LAN, 5 USB 3.0, 2 USB 2.0, 2 Speaker, 1 Mic-in, 1 Line-out, 2 DC Jack *Other SDM module base on inquire

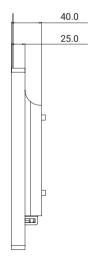
#### **Optional Accessories**

M.2 SSD M.2 2280-B-M 64	1~256GB (SDM500L)
DDR4 SO-DIMM: 4GB~32G	iB .
822T1500050E	Mounting kit
8812T1500A0E	Wi-Fi kit
59903000000E	AC power cord EU, L=1830 mm
59902000000E	AC power cord US, L=1830 mm

#### **Optional OS Installation**

Windows®	10 ful	l 64-bit	
Windows®	10 lo	Γ64-bit	



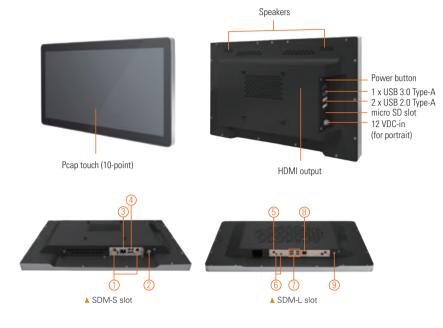




#### 21.5" FHD TFTLCD Slim Bezel Modular Panel PC with Intel® Smart Display Module (SDM) **CPU Card**

## **Features**

- 21.5" full HD TFTLCD
- Aspect ratio: 16:9; brightness: 250 nits
- Slim bezel shape under 48.5 mm thickness
- Projected capacity touch supported, 10-point touch
- Swappable Intel® SDM CPU card design
- Metal frame structure for various applications
- Supports add-on modules and mounting kits (optional)



- 1. 2 x SMA antenna reserved hole
- 2. 12 VDC-in
- 3. 1 x LAN
- 4. 4 x USB 3.0 Type-A 5. 2 x SMA antenna reserved hole
- 8. LAN
- 6. Mic-in/Line-out 7. USB 3.0
- - 9.12 VDC-in

#### **Specifications**

Front Bezel	IP54, metallic front b	nezel
LCD Panel	Display Type	21.5" FHD TFTLCD
	Brightness (cd/m²)	250 nits
	Resolution	1920 (H) x 1080 (V)
	Aspect Ratio	16:9
Main System	Intel® SDM Small (S	SDM-S, 60 x 100 mm)
	Intel® SDM Large (S	SDM-L, 175 x 100 mm)
I/O Connector	SDM500L	1 x Power button with LED
		1 x GbE LAN
		2 x USB 3.0 Type A
		1 x Audio output
		1 x Microphone input
	SDM300S	1 x GbE LAN
		2 x USB 3.0 Type A
		2 x SMA antenna reserved hole
Touchscreen	Projected capacitive multi-touch	
Stereo Speaker	2 x S.P.L. 96dB, 1.5W	/, 4 ohm
Power Supply	84W ( 12V@7A )AC	to DC power adapter
Power Consumption	Average 50W	
Dimensions	531mm (20.9") (W) x	48.5 mm (1.9") (D) x 317mm (12.5") (H)
Weight (net/gross)	2.2 kg (4.0 lb)/6.7kg	(14 lb)
Operating Temperature	0°C to +40°C (+32°F	to +104°F)
Operating Humidity	20% - 80%, non-con	densing
Certifications	CE, FCC Class A, and	I CB

CPU	Quad-core Intel®	Quad-core Intel® Pentium® N4200 1.1GHz processor or	
	Dual-core Intel®	Celeron® N3350 1.1GHz processor	
	(depends on CPU	(depends on CPU Card)	
System Memory	Onboard LPDDR4	Onboard LPDDR4 2400 MHz 4GB (8GB optional)	
BIOS	AMI UEFI BIOS	AMI UEFI BIOS	
Storage	1 x eMMC 64GB onboard		
Watchdog Timer	255 levels, 0 to 2	255 levels, 0 to 255 sec.	
Onboard Graphics	Intel® HD Graph	Intel® HD Graphics 505/500 (depends on CPU card)	
I/O Connector	Rear Side	1 x GbE LAN	
		2 x USB 3.0 Type A	
		2 x SMA antenna reserved hole	
Expansion Interface	1 x M.2 Key E 2230 slot (for the Wi-Fi/4G LTE)		

#### CPU Card Selection: SDM500-L

CPU	Quad-core Intel® i5-8365UE 1.6GHz processor or Dual-core Intel® Celeron® 4305UE 2.0GHz processor (depends on CPU card)	
System Memory	2 x 260-pin DDR4-2400	SO-DIMM slot, up to 64GB
BIOS	AMI UEFI BIOS	
Storage	1 x M.2 Key B 2280 slot	
Watchdog Timer	255 levels, 0 to 255 sec.	
Onboard Graphics	Intel® UHD Graphics 620/610 (depends on CPU card)	
I/O Connector	Rear Side	1 x Power button with LED 1 x GbE LAN 2 x USB 3.0 Type A 1 x Audio output 1 x Microphone input
Expansion Interface	1 x M.2 Key E 2230 slot (for the Wi-Fi/4G LTE)	

#### **Ordering Information**

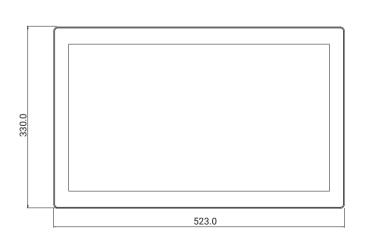
Standard	
ITC210WM	21.5" FHD TFT-LCD slim bezel modular panel PC without Intel® SDM CPU card
ITC210WM-300S	21.5" FHD TFT-LCD slim bezel modular panel PC with SDM300S (Intel® Pentium® N4200 or Celeron® N3350 processor)
ITC210WM-500L	21.5" FHD TFT-LCD slim bezel modular panel PC with SDM500L (Intel® i5-8365UE or Celeron® 4305UE processor)

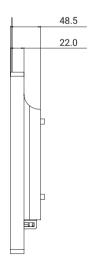
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Optional	
Add-on Module	5MP webcam
Mounting Kit	Wall mount kit
M.2 SSD	FLEXXONs ACHIEVER M.2 2280-B-M 64GB (P/N: E9C2P00642)
DDR4 SO-DIMM	Innodisk 4GB DDR4-2400 260pin SO-DIMM (P/N: E9C1913G01) Innodisk 8GB DDR4-2400 260pin SO-DIMM (P/N: E9C1914G03)
Power Cord	AC power cord UE, L=1830 mm (P/N: 59903000000E) AC power cord US, L=1830 mm (P/N: 59902000000E)

#### **Optional OS Installation**

Windows® 10	full 64-bit	
Windows® 10	IoT 64-bit	







# Self-service Kiosk

Axiomtek REGATA Kiosk with slim steel chassis provides a stylish solution for interactive kiosk applications, such as restaurant self-ordering, cinema selfticketing, and hotel self-check-in. Designed with space-saving counter top type, the interactive kiosk has front-side I/O and recessed cable routing ensuring easy maintenance. Based on Intel® Smart Display Module (Intel® SDM), the high expandable REGATA Kiosk supports a wide variety of peripherals, including thermal printer, 2D barcode scanner, NFC/RFID reader, and payment modules.



15.6" Self-Service Kiosk with Intel® Smart Display Module (SDM) (REGATA Kiosk) CPU Card, Direct Bonding PCAP, 2D Barcode Scanner, Thermal Printer and NFC

400

# **Industrial** Panel PCs

# SSK315 (REGATA Kiosk)

15.6" Self-Service Kiosk with Intel® Smart Display Module (SDM) CPU Card, Direct Bonding PCAP, 2D Barcode Scanner, Thermal Printer and NFC

## **Features**

- 15.6" optical bonding LCD with wide viewing angle; 400 nits of brightness
- Supports Intel® Smart Display Module Small (Intel® SDM-S) and Intel® Smart Display Module Large (Intel® SDM-L) with Intel® Core™ i5/i3 and Intel® Celeron® processor (Whiskey Lake)
- Push button design for easy maintenance
- Supports floor stand and counter-top stand
- Dual illuminating status LEDs
- Modular design
- All-in-one seamless design









#### **Specifications**

Front Bezel	IP54, metallic front bezel		
LCD Panel	Display Type	15.6 " FHD TFT LCD	
	Brightness (cd/m²)	400 nits	
	Resolution	1920 (H) x 1080 (V)	
	Aspect Ratio	16:9	
Main System		SDM-S, 60 x 100 mm) SDM-L, 175 x 100 mm)	
I/O Connector	Rear Side	1 x Power button with LED 1 x HDMI output 1 x USB 3.0 Type A 2 x USB 2.0 Type A 1 x microSD card slot (push-push type) 2 x 12 VDC-in barrel (screw-lock type)	
Touchscreen	10-point projected capacitive touch with direct bonding		
LED Light Bar	2 LED light bars, support 256 color		
Stereo Speaker	2 x S.P.L. 96dB, 1.5W, 4 ohm		
Power Supply	150W (24V@A) AC to DC open-frame		
Power Consumption	Average 90W		
Dimensions	405 mm (15.94") (W) x	405 mm (15.94") (W) x 288 mm (11.34") (D) x 509 mm (20.04") (H)	
Weight (net/gross)	20 kg (44.1 lb)/23 kg	20 kg (44.1 lb)/23 kg (50.7 lb)	
Operating Temperature	0°C to +40°C (+32°F	0°C to +40°C (+32°F to +104°F)	
Operating Humidity	20% - 80%, non-con	20% - 80%, non-condensing	
Certifications	CE, FCC Class A	CE, FCC Class A	

#### CPU Card Selection: SDM300-S

CPU	Quad-core Intel® Pentium® N4200 1.1GHz processor or Dual-core Intel® Celeron® N3350 1.1GHz processor (depends on CPU Card)	
System Memory	Onboard LPDDR4 2400 MHz 4GB (8GB optional)	
BIOS	AMI UEFI BIOS	
Storage	1 x eMMC 64GB onboard	
Watchdog Timer	255 levels, 0 to 255 sec.	
Onboard Graphics	Intel® HD Graphics 505/500 (depends on CPU card)	
I/O Connector	Rear Side 1 x GbE LAN	
	(depends on SDM I/O) 2 x USB 3.0 Type A	
	2 x SMA antenna reserved hole	
Expansion Interface	1 x M.2 Key E 2230 slot (for the Wi-Fi/4G LTE)	

CPU	Quad-core Intel® Core	Quad-core Intel® Core™ i5-8365UE 1.6GHz processor or		
		Dual-core Intel® Celeron® 4305UE 2.0GHz processor		
	(depends on CPU card)	·		
System Memory	2 x 260-pin DDR4-2400	SO-DIMM slot, up to 64GB		
BIOS	AMI UEFI BIOS			
Storage	1 x M.2 Key B 2280 slot	1		
Watchdog Timer	255 levels, 0 to 255 sec	255 levels, 0 to 255 sec.		
Onboard Graphics	Intel® UHD Graphics 6	Intel® UHD Graphics 620/610 (depends on CPU card)		
I/O Connector	Rear Side	1 x Power button with LED		
	(depends on SDM I/O)	1 x HDMI output		
		1 x GbE LAN		
		2 x USB 3.0 Type A		
		1 x USB 3.0 Type C		
		1 x Audio output		
		1 x Microphone input		
Expansion Interface	1 x M.2 Key E 2230 slot	1 x M.2 Key E 2230 slot (for the Wi-Fi/4G LTE)		

#### **Ordering Information**

Standard	
SSK315-SDM500L-8265U	15.6 FHD with PCAP touch slim bezel panel with SDM-L Intel® Core™ i5 8265U processor, 4GB memory, 64GB M.2 SSD, thermal printer, 2D barcode scanner, NFC, 1 LAN, 4 USB 3.0, 2 Speaker, 1 Mic-in, 1 Line-Out, 1 DC Jack
SSK315-SDM500L-8145U	15.6 FHD with PCAP touch slim bezel panel with SDM-L Intel® Core™ i3 8145U processor, 4GB memory, 64GB M.2 SSD, thermal printer, 2D barcode scanner, NFC, 1 LAN, 4 USB 3.0, 2 speaker, 1 Mic-in, 1 Line-Out, 1 DC Jack
SSK315-SDM500L-4305UE	15.6 FHD with PCAP touch slim bezel panel with SDM-L Intel® Celeron® 4305UE processor, 4GB memory, 64GB M.2 SSD, thermal printer, 2D barcode scanner, NFC, 1 LAN, 4 USB 3.0, 2 speaker, 1 Mic-in, 1 Line-Out,1 DC Jack
SSK315-SDM300S-N4200	15.6 FHD with PCAP touch slim bezel panel with SDM-S Intel® Pentium® N4200 processor, onboard DDR4 4G & EMMC 64GB, 1 LAN, 2 USB 3.0, 2 speaker, thermal printer, 2D barcode scanner, NFC, 1 LAN, 1 DC Jack

# NOTES

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Selection Guide

# **SMB Network Appliances**

Axiomtek's SMB (small and medium business) network appliance platforms with 1U/2U rackmount form factor, enclosure management capability, flexible configurations and various combinations of Ethernet modules (1G/10G/25G/40G/Copper/Fiber/Bypass), are suitable for different environments and applications. Axiomtek's SMB series provides not only high computing performance and reliable hardware platforms, but also system development kits for software integration.

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NEW	NA870	2U Rackmount Network Appliance Platform with Dual LGA4189 Socket Intel® Xeon® Scalable Processors, Intel® C621A (Ice Lake-SP) and up to 66 LAN	408
	NA860	2U Rackmount Network Appliance Platform with Dual LGA3647 Socket Intel® Xeon® Scalable Processors, Intel® C621 (Purley) and up to 66 LAN	409
	NA861	1U Rackmount Network Appliance Platform with LGA3647 Socket Intel® Xeon® Scalable Processor, Intel® C621 (Purley) and up to 34 LAN	410
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	NA580	1U Rackmount Network Appliance Platform with LGA1151 Socket Intel® Xeon® E3/Core™ Processor and 8 LAN	415
	NA362R	1U Rackmount Network Appliance Platform with Intel® Atom® Processor C3558/C3758 and up to 10 LAN	416
	NA363R	1U Rackmount Network Appliance Platform with Intel® Atom® Processor C3558/C3758 and up to 14 LAN	417
	NA345R	1U Rackmount Network Appliance Platform with Intel® Celeron® N3350/J3455 Processor up to 6 LAN	418

## **SMB** Network Appliances

Selection Guide



			1		
Features \ Mod	lels	NA870	NA860	NA861	NA720
Form Factor		2U, 19" rackmount	2U, 19" rackmount	1U, 19" rackmount	1U, 19" rackmount
	Processor	Dual LGA4189 Intel® Xeon® Scalable processors	Dual LGA3647 Intel® Xeon® Scalable processors	LGA3647 Intel® Xeon® Scalable processors	Intel® Xeon® processor D-1527 Intel® Pentium® processor D1508
Platform	Chipset	Intel® C621A/C627A	Intel® C621	Intel® C621	SoC Integrated
	Acceleration Technology	Intel® QAT (C627A)	N/A	N/A	N/A
BIOS		AMI SPI Flash BIOS	AMI SPI Flash BIOS	AMI SPI Flash BIOS	AMI SPI Flash BIOS
	Technology	DDR4-3200	DDR4-2400	DDR4-2400	DDR4-2400
	Max. Capacity	1280GB	384GB	192GB	128GB
Memory	Socket	20 x 288-pin R-DIMM	12 x 288-pin R-DIMM	6 x 288-pin R-DIMM	4 x 288-pin R-DIMM/U-DIMM
	ECC Support	Non-ECC/ECC	Non-ECC/ECC	Non-ECC/ECC	Non-ECC/ECC
	Ethernet (default)	2 x 10/100/1000 Mbps	2 x 10/100/1000 Mbps	2 x 10/100/1000 Mbps	8 x 10/100/1000 Mbps (Intel® i210 2 x 10 GbE SFP+
	Ethernet (max.)	66 x 10/100/1000 Mbps	66 x 10/100/1000 Mbps	34 x 10/100/1000 Mbps	24 x 10/100/1000 Mbps
Network Interface	LAN Bypass	Upon LAN module	Upon LAN module	Upon LAN module	On board 2 pairs Upon LAN module
	Controllers	Intel® i210	Intel® i210	Intel® i210	Intel® i210
	LAN Module	8 x NIC slots (Dual CPUs) 4 x NIC slots (Single CPU)	8 x NIC slots (Dual CPUs) 4 x NIC slots (Single CPU)	4 x NIC slots	2 x NIC slots
	HDD/SSD	2 x 2.5" HDD (Hot swappable)	2 x 2.5" HDD (Hot swappable)	2 x 2.5" HDD	2 x 2.5" HDD
Storage	M.2 SSD	1 x M.2 2242/2280 Key M slot (PCle) 1 x M.2 2242/2280 Key Mslot (SATA)	N/A	N/A	N/A
	mSATA/CF/CFast	N/A	1 x Full-Size mSATA	1 x Full-Size mSATA	1 x Full-Size mSATA
	Button	Yes	N/A	N/A	N/A
	LED Indicator	Power, HDD, GPIO programmable, Link/Act with transfer rate	Power, HDD, GPIO programmable, Link/Act with transfer rate	Power, HDD, GPIO programmable, Link/Act with transfer rate	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
1/0	USB	2 x USB 3.0	2 x USB 3.0	2 x USB 2.0	2 x USB 3.0
	Console	1 x Console (RJ-type)	1 x Console (RJ-type)	1 x Console (RJ-type)	1 x Console (RJ-type)
	LCM Module	Yes	Yes	Yes	Yes
	Display	1 x VGA	1 x VGA	1 x VGA	1 x VGA (optional)
TPM		2.0	1.2	1.2	1.2
IPMI		Optional	Optional	Optional	Optional
Watchdog		255 stepping for system reset 8 stepping for LAN Bypass	255 stepping for system reset 8 stepping for LAN Bypass	255 stepping for system reset 8 stepping for LAN Bypass	255 stepping for system reset 8 stepping for LAN Bypass
	Power Type	Redundant	Redundant	Single/Redundant (optional)	Single/Redundant (optional)
Power Supply	Watts	1600W	800W	400W	300W 400W (optional)
	Input	100 to 240 Vac	100 to 240 Vac	100 to 240 Vac	100 to 240 Vac
	Connector	Inlet C14	Inlet C14	Inlet C14	Inlet C14
Expansion Inte		2 x PClex16 (optional, 1 slot for each CPU)	1 x PCle x16 (optional) 2 x PClex8 (optional from CPU#1)	1 x PClex16 2 x PClex8 (optional from CPU#1)	1 x PCle x8 (optional)
	Operating Temperature	0°C to +40°C (+32°F to +104°F)	0°C to +40°C (+32°F to +104°F)	0°C to +40°C (+32°F to +104°F)	0°C to +45°C (+32°F to +113°F)
Environment	Storage Temperature	-20°C to +70°C (-4°F to +158°F)	-20°C to +70°C (-4°F to +158°F)	-20°C to +70°C (-4°F to +158°F)	-20°C to +70°C (-4°F to +158°F)
	Humidity Construction	10% to 95% RH, non-condensing Steel	10% to 95% RH, non-condensing Steel	10% to 95% RH, non-condensing Steel	10% to 95% RH, non-condensing Steel
Mechanical	Dimensions (W x H x D)	88 x 430 x 663 mm (3.46" x 16.93" x 26.10")	88 x 430 x 562 mm (3.46" x 16.93" x 22")	44 x 430 x 561 mm (1.73" x 16.93" x 22")	44 x 430 x 390 mm (1.73" x 16.93" x 15.34")
	Weight (net/gross)	12 kg (26.4 lb)/20 kg (44 lb)	12 kg (26.4 lb)/20 kg (44 lb)	8 kg (17.6 lb)/12 kg (26.4 lb)	5.5 kg (12.13 lb)/7.5 kg (16.53 lb)
OS Support		Linux Kernel	Linux Kernel	Linux Kernel	Linux Kernel
Certifications		CE/FCC Class A	CE/FCC Class A	CE/FCC Class A	CE/FCC Class A











Features \ Mod	els	NA592	NA591	NA590	NA580
Form Factor		1U, 19" rackmount	1U, 19" rackmount	1U, 19" rackmount	1U, 19" rackmount
	Processor	LGA1200 Intel® Xeon® W-1200/ Intel® Core™	LGA1151 Intel® Xeon® E-2200/ Intel® Core™	LGA1151 socket 8th/9th gen Intel® Core™/Xeon® E-2200	LGA1151 Intel® Xeon® E3/ Intel® Core™
Platform	Chipset	Intel® W480/Q470	Intel® C246	Intel® C246/H310	Intel® C236/H110
	Acceleration Technology	N/A	N/A	N/A	N/A
BIOS		AMI SPI Flash BIOS	AMI SPI Flash BIOS	AMI SPI Flash BIOS	AMI SPI Flash BIOS
	Technology	DDR4-2666	DDR4-2666	DDR4-2666	DDR4-2400
	Max. Capacity	128GB	128GB	64GB (H310) 128G (C246)	64GB
Memory	Socket	4 x 288-pin U-DIMM	4 x 288-pin U-DIMM	4 x 288-pin U-DIMM (H310) 2 x 288-pin U-DIMM (C246)	2 x 288-pin U-DIMM (H310) 4 x 288-pin U-DIMM (C246)
	ECC Support	Non-ECC/ECC	Non-ECC/ECC	Non-ECC	Non-ECC/ECC
	Ethernet (default)	8 x 10/100/1000 Mbps (W480)	2 x 10/100/1000 Mbps	6 x 10/100/1000 Mbps (H310) 8 x 10/100/1000 Mbps (C246)	6 x 10/100/1000 Mbps (H110) 8 x 10/100/1000 Mbps (C236)
Natarada	Ethernet (max.)	26 x 10/100/1000 Mbps	34 x 10/100/1000 Mbps	14 x 10/100/1000 Mbps (H310) 26 x 10/100/1000 Mbps (C246)	18 x 10/100/1000 Mbps
Network Interface	LAN Bypass	2 pairs	Upon LAN module	LAN Bypass function through latch relay (two pairs)	2 pairs
	Controllers	Intel® i350	Intel® i210	Intel® i210	Intel® i210
	LAN Module	2 x NIC slot	4 x NIC slot	2 x NIC slot (2 slot for C246 only)	1 x NIC slot
	HDD/SSD	2 x 2.5" HDD	2 x 2.5" HDD	2 x 2.5" HDD or 1 x 3.5" HDD (3.5" optional for single PSU)	2 x 2.5" HDD or 1 x 3.5" HDD (3.5" optional for single PSU)
Storage	M.2 SSD	1 x M.2 B-Key 2242	N/A	1 x M.2 2280 (C246 only)	N/A
	mSATA/CF/CFast	N/A	1 x Full-Size mSATA	1 x Full-Size mSATA	1 x CFast™ 1 x Full-Size mSATA
	Button	Yes	N/A	N/A	N/A
	LED Indicator	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with	Power, HDD, GPIO programmable, Link/Act with	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with
I/O		transfer rate	transfer rate	transfer rate	transfer rate
	USB Console	2 x USB 3.0	2 x USB 2.0	2 x USB 3.0	2 x USB 3.0
	LCM Module	1 x Console (RJ-type) Yes	1 x Console (RJ-type) Yes	1 x Console (RJ-type) Yes	1 x Console (RJ-type) Yes
	Display	1 x VGA (optional)	1 x VGA (optional)	1 x VGA (optional)	1 x VGA (optional)
TPM	Біоріцу	2.0	1.2	1.2	1.2
IPMI		Optional	Optional	Optional	Optional
Watchdog		255 stepping for system reset 8 stepping for LAN Bypass	255 stepping for system reset 8 stepping for LAN Bypass	255 stepping for system reset 8 stepping for LAN Bypass	255 stepping for system reset 8 stepping for LAN Bypass
	Power Type Watts	Single/Redundant (optional) 400W	Single/Redundant (optional) 400W	Single/Redundant (optional) 300W/400W (optional)	Single/Redundant (optional) 300W/400W (optional)
Power Supply	Input	100 to 240 Vac	100 to 240 Vac	100 to 240 Vac	100 to 240 Vac
	Connector	Inlet C14	Inlet C14	Inlet C14	Inlet C14
Expansion Inte	erface	1 x M.2 Key E 2230 slot (optional) 1 x PCle x8 (optional)	1 x PCle x4 (optional)	1 x M.2 Key M 2280 slot (C246 optional) 1 x PCle x8 (C246 optional)	N/A
Environment	Operating Temperature	0°C to +45°C (+32°F to +113°F)	0°C to +45°C (+32°F to +113°F)	0°C to +45°C (+32°F to +113°F) (300W ATX power supply) 0°C to +40°C (+32°F to +104°F) (400W 1U redundant power supply)	0°C to +45°C (+32°F to +113°F) (300W ATX power supply) 0°C to +40°C (+32°F to +104°F) (400W 1U redundant power supply)
	Storage Temperature	-20°C to +70°C (-4°F to +158°F)	-20°C to +70°C (-4°F to +158°F)	-20°C to +70°C (-4°F to +158°F)	-20°C to +70°C (-4°F to +158°F)
	Humidity	10% - 95% RH, non-condensing	10% - 95% RH, non-condensing	10% to 95% RH, non-condensing	10% - 95% RH, non-condensing
	Construction	Steel	Steel	Steel	Steel
Mechanical	Dimensions (W x H x D)	44 x 430 x 450 mm (1.73" x 16.93" x 17.7")	44 x 430 x 500 mm (1.73" x 16.92" x 19.69")	44 x 430 x 450 mm (1.73" x 16.93" x 17.7")	44 x 430 x 450 mm (1.73" x 16.93" x 17.7")
	Weight (net/gross)	6 kg (13.2 lb)/10 kg (22 lb)	8.32 kg (18.34 lb)/12.76 kg (28.13 lb)	6 kg (13.2 lb)/10 kg (22 lb)	6 kg (13.2 lb)/10 kg (22 lb)
OS Support		Linux Kernel	Linux	Linux	Linux
Certifications		CE/FCC Class A	CE/FCC Class A	CE/FCC Class A	CE/FCC Class A

## **SMB** Network Appliances

Selection Guide







Features \ Mod	els	NA362R	NA363R	NA345R
Form Factor		1U, 19" rackmount	1U, 19" rackmount	1U, 19" Rackmount
	Processor	Intel® Atom® C3558/C3758	Intel® Atom® processor C3558/C3758	Intel® Celeron® N3350/J3455 processor (Apollo Lake)
Platform	Chipset	SoC integrated	SoC integrated	SoC integrated
	Acceleration Technology	Intel® QAT	Intel® QAT	N/A
BIOS		AMI SPI Flash BIOS	AMI SPI Flash BIOS	AMI SPI Flash BIOS
	Technology	DDR4-2400	DDR4-2400	DDR3L-1866
Managani	Max. Capacity	128GB	128GB	8GB
Memory	Socket	4 x 288-pin R-DIMM/U-DIMM	4 x 288-pin R-DIMM/U-DIMM	1 x 204-pin SO-DIMM
	ECC Support	Non-ECC/ECC	Non-ECC/ECC	Non-ECC/ECC
	Ethernet (default)	6 x 10/100/1000 Mbps 2 x 10G SFP+ or 4 x 10G SFP+	6 x 10/100/1000 Mbps	6 x 10/100/1000 Mbps
Network	Ethernet (max.)	6 x 10/100/1000 Mbps 4 x 10G SFP+	6 x 10/100/1000 Mbps	6 x 10/100/1000 Mbps
Interface	LAN Bypass	1 pair	1 pair 2 pair (optional)	1 pair (Optional)
	Controllers	Intel® i210	Intel® i210	Intel® i211
	LAN Module	N/A	1 x NIC Slot (C3758 optional)	N/A
Storage	HDD/SSD	2 x 2.5" HDD 1 x 3.5" HDD (optional)	2 x 2.5" HDD 1 x 3.5" HDD (optional)	1 x 2.5" HDD 1 x 3.5" HDD (optional)
Otorage	M.2 SSD	N/A	N/A	N/A
	mSATA/CF/Cfast	1 x Full-Size mSATA	1 x Full-Size mSATA	1 x Full-Size mSATA
	Button	Yes	Yes	Yes
	LED Indicator	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate	Power, HDD, GPIO programmable, LAN Bypass Link/Act with transfer rate
1/0	USB	2 x USB 2.0	2 x USB 3.0	2 x USB 3.0
	Console	1 x Console (RJ-type)	1 x Console (RJ-type)	1 x Console (RJ-type)
	LCM Module	Yes	Yes	N/A
	Display	N/A (optional for VGA module)	N/A (optional for VGA module)	1 x HDMI 1 x VGA (Optional)
TPM		Yes	Yes	Yes
IPMI		N/A	N/A	N/A
Watchdog		255 stepping for system reset 8 stepping for LAN Bypass	255 stepping for system reset 8 stepping for LAN Bypass	255 stepping for system reset 8 stepping for LAN Bypass
	Power Type	Open frame	Open frame	Open frame
Power Supply	Watts	120W	120W	65W
	Input	100 to 240Vac	100 to 240Vac	100 to 240Vac
Expansion Inte	Connector	Inlet C14  1 x Full-size Mini-PCle slot (SATA/USB) 1 x Full-size Mini-PCle slot (PCle/USB)	Inlet C14  1 x Full-size Mini-PCle slot (PCle or mSATA/USB)  1 x Full-size Mini-PCle slot (PCle or mSATA/USB)	Inlet C14
	Operating Temperature	0°C to +45°C (+32°F to +113°F)	0°C to +45°C (+32°F to +113°F)	0°C to +45°C (+32°F to +113°F)
Environment	Storage Temperature	-20°C to +70°C (-4°F to +158°F)	-20°C to +70°C (-4°F to +158°F)	-20°C to +70°C (-4°F to +158°F)
	Humidity	10% - 95% RH, non-condensing	10% - 95% RH, non-condensing	10% - 95% RH, non-condensing
	Construction	Steel	Steel	Steel
Mechanical	Dimensions (W x H x D)	44 x 430 x 250 mm (1.73" x 16.93" x 9.84")	44 x 430 x 250 mm (1.73" x 16.93" x 9.84")	44 x 430 x 250 mm (1.73" x 16.93" x 9.84")
	Weight (net/gross)	3.5 kg (7 lb)/4.5 kg (9 lb)	3.5 kg (7 lb)/4.5 kg (9 lb)	7 kg (15.43 lb)/8 kg (17.64 lb)
OS Support		Yocto, Linux	Yocto, Linux	Win 10, Yocto, Linux
Certifications		CE/FCC Class B	CE/FCC Class A	CE/FCC Class B



2U Rackmount Network Appliance Platform with Dual LGA4189 Socket Intel® Xeon® Scalable Processors, Intel® C621A (Ice Lake-SP) and up to 66 LAN

### **Features**

- Dual LGA4189 socket Intel® Xeon® Scalable processors (Ice Lake-SP)
- 12 DDR4-2400 R-DIMM for up to 384GB of memory
- Max. up to 66 LAN ports
- 8 expandable LAN modules supporting 1GbE/10GbE/ 25GbE/40GbE/Fiber/Copper/Bypass
- Supports 2U redundant power supply
- Supports IPMI (onboard) for optional
- High computing power for SDN, NGFW, IDS, IPS and UTM applications













### **Specifications**

System	
CPU	Dual LGA4189 socket Intel® Xeon® Scalable processors (Ice Lake-SP)
Chipset	Intel® C621A
Memory	12 x DDR4-2400 R-DIMM, up to 384GB non-buffer non-ECC/ECC memory
BIOS	AMI SPI Flash BIOS
Storage	2 x 2.5" SATA HDD hot swappable 1 x M.2 Key M 2242/2280 (PCle) 1 x M.2 Key M 2242/2280 (SATA)
Network Interface	2 x GbE RJ-45 (Intel® i210) Single CPU: 4 x LAN module (optional), max. up to 34 LAN ports Dual CPU: 8 x LAN module (optional), max. up to 66 LAN ports
1/0	1 x Console (RJ-type) 2 x USB 3.0 2 x RJ-45 1 x VGA
TPM	Onboard TPM 2.0
IPMI	Onboard BMC AST2500, IPMI 2.0 for optional
Other Features	LAN Bypass function through latch relay (depends on LAN modules)
Expansion Interface	2 x PCle x16 through AX96709 riser card (optional)
Watchdog Timer	255 stepping for system reset 8 stepping for LAN Bypass
Power Supply	1600W 2U redundant power supply
OS Compatibility	Linux

#### **Mechanical/Environmental**

Form Factor	2U rackmount
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
Operating Temperature	0°C to +40°C (+32°F to +104°F)
Humidity	10% to 95% RH, non-condensing
Chassis Material	Steel
Dimensions	88 mm (3.46")(H) x 430 mm (16.92")(W) x 663mm (26.10")(D)
Weight (net/gross)	12 kg (26.4 lb)/20 kg (44 lb)
Certifications	CE/FCC Class A





### **Ordering Information**

Standard			
NA870-R2GI-C621-US (P/N: E26E870100)	2U rackmount appliance with dual LGA4189 socket Intel® Xeon® Scalable processors and 2 GbE LAN		
Optional			

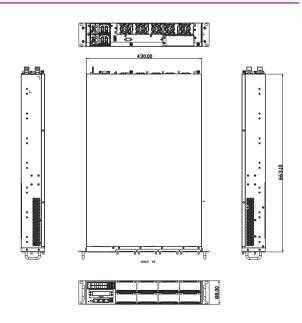
DB9F-RJ-45 1.8M console cable for Cisco

\* Specifications and certifications may vary based on different requirements.

### **Packing List**

5916E552000E

1 x SATA cable 1 x Power cord



2U Rackmount Network Appliance Platform with Dual LGA3647 Socket Intel® Xeon® Scalable Processors, Intel® C621 (Purley) and up to 66 LAN

### **Features**

- Dual LGA3647 socket Intel® Xeon® Scalable processors
- 12 DDR4-2400 R-DIMM for up to 384GB of memory
- Max. up to 66 LAN ports
- 8 expandable LAN modules supporting 1GbE/10GbE/ 25GbE/40GbE/Fiber/Copper/Bypass
- Supports 2U redundant power supply
- Supports IPMI (onboard) for optional
- Supports onboard TPM
- High computing power for SDN, NGFW, IDS, IPS and UTM applications

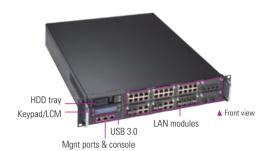


### **Specifications**

System	
CPU	Dual LGA3647 socket Intel® Xeon® Scalable processors (Cascade Lake/Skylake)
Chipset	Intel® C621
Memory	12 x DDR4-2400 R-DIMM, up to 384GB non-buffer non-ECC/ECC memory
BIOS	AMI SPI Flash BIOS
Storage	2 x 2.5" SATA HDD hot swappable 1 x mSATA
Network Interface	2 x GbE RJ-45 (Intel® i210) Single CPU: 4 x LAN module (optional), max. up to 34 LAN ports Dual CPU: 8 x LAN module (optional), max. up to 66 LAN ports
1/0	1 x Console (RJ-type) 2 x USB 3.0 2 x RJ-45 1 x VGA
TPM	Onboard TPM 2.0
IPMI	Onboard BMC AST2500, IPMI 2.0 for optional
Other Features	LAN Bypass function through latch relay (depends on LAN modules)
Expansion Interface	2 x PCle x8 through AX96709 riser card (optional)
Watchdog Timer	255 stepping for system reset 8 stepping for LAN Bypass
Power Supply	800W 2U redundant power supply
OS Compatibility	Linux

### Mechanical/Environmental

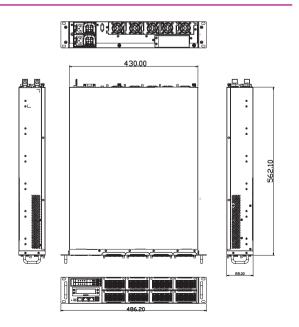
Form Factor	2U rackmount
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
Operating Temperature	0°C to +40°C (+32°F to +104°F)
Humidity	10% to 95% RH, non-condensing
Chassis Material	Steel
Dimensions	88 mm (3.46") (H) x 430 mm (16.92") (W) x 562 mm (22.12") (D)
Weight (net/gross)	12 kg (26.4 lb)/20 kg (44 lb)
Certifications	CE/FCC Class A





### dering Information

Standard	
NA860-R2GI-C621-US (P/N: E26E860100)	2U rackmount appliance with dual LGA3647 socket Intel® Xeon® Scalable processors and 2 GbE LAN
Optional	
5916E552000E	DB9F-RJ-45 1.8M console cable for Cisco
* Specifications and certi	fications may vary based on different requirements.
Packing List	



1U Rackmount Network Appliance Platform with LGA3647 Socket Intel® Xeon® Scalable Processor (Cascade Lake/Skylake), Intel® C621 (Purley) and up to 34 LAN

### **Features**

- LGA3647 socket Intel® Xeon® Scalable processor
- 6 DDR4-2400 R-DIMM for up to 192GB of memory
- Max. up to 34 LAN ports
- 4 expandable LAN modules supporting 1GbE/10GbE/25GbE/40GbE/Fiber/Copper/Bypass
- Supports 1U redundant power supply
- Supports IPMI for optional
- Supports onboard TPM
- High computing power for SDN, NGFW, IDS, IPS and UTM applications















### **Specifications**

System	
CPU	LGA3647 socket Intel® Xeon® Scalable processors (Cascade Lake/Skylake)
Chipset	Intel® C621
Memory	6 x DDR4-2400 R-DIMM, up to 192GB non-buffer non-ECC/ECC memory
BIOS	AMI SPI Flash BIOS
Storage	2 x 2.5" SATA HDD 1 x Full-size mSATA
Network Interface	2 x GbE RJ-45 (Intel® i210) Single CPU: 4 x LAN module (optional), max. up to 34 LAN ports
1/0	1 x Console (RJ-type) 2 x USB 2.0 2 x RJ-45 1 x VGA
TPM	Onboard TPM 2.0
IPMI	Onboard BMC AST2500, IPMI 2.0 for optional
Other Features	LAN Bypass function through latch relay (depends on LAN modules)
Expansion Interface	N/A
Watchdog Timer	255 stepping for system reset 8 stepping for LAN Bypass
Power Supply	400W 1U redundant power supply
OS Compatibility	Linux

### Mechanical/ Environmental

Form Factor	1U rackmount
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
Operating Temperature	0°C to +40°C (+32°F to +104°F)
Humidity	10% to 95% RH, non-condensing
Chassis Material	Steel
Dimensions	44 mm (1.73") (H) x 430 mm (16.92") (W) x 561 mm (22") (D)
Weight (net/gross)	8 kg (17.6 lb)/12 kg (26.4 lb)
Certifications	CE/FCC Class A





### **Ordering Information**

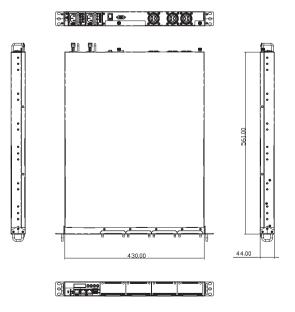
Standard	
NA861-R2GI-US with Redn power (P/N: E26E861100)	1U rackmount appliance with Intel® Xeon® Scalable processor, 2 GbE LAN and redundant power
NA861-R2GI-US with Single power (P/N: E26E861101)	1U rackmount appliance with single Intel® Xeon® Scalable processor, 2 GbE LAN and single power

### **Optional**

5916E552000E	DB9F-RJ-45 1.8M console cable for Cisco
* Specifications and certific	cations may vary based on different requirements

### **Packing List**

1 x SATA cable 1 x Power cord



1U Rackmount Network Appliance Platform with Intel® Xeon® Processor D-1527/ Pentium® Processor D1508 and up to 26 LAN

### **Features**

- Intel® Xeon® processor D-1527/Pentium® processor D1508 onboard (Broadwell-DE)
- Four DDR4-2400 R-DIMM/U-DIMM, up to 128GB memory
- Max. up to 24 LAN ports and 2 SFP+ ports
- Two expandable LAN modules supporting 1GbE/10GbE/ Fiber/Copper/Bypass (optional)
- Supports 1U redundant power supply for optional
- Supports IPMI for optional
- Suitable for enterprise firewall, network bandwidth controller and UTM applications













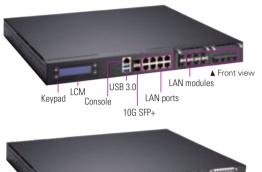


### **Specifications**

System	
CPU	Intel® Xeon® processor D-1527 (Broadwell-DE) Intel® Pentium® processor D1508 (default)
Chipset	SoC Integrated
Memory	4 x DDR4-2400 R-DIMM/U-DIMM, up to 128GB non-buffer non-ECC/ECC memory
BIOS	AMI SPI Flash BIOS
Storage	2 x 2.5" SATA HDD 1 x Full-size mSATA
Network Interface	8 x GbE R-J45 (Intel® i210) 2 x 10 GbE SFP+ 2 x LAN module (optional), max. up to 26 LAN ports
1/0	1 x Console (RJ-type) 2 x USB 3.0 8 x RJ-45 + 2 x SFP+
TPM	Onboard TPM 2.0
IPMI	Onboard BMC AST2500, IPMI 2.0 for optional
Other Features	LAN Bypass function through latch relay (two pairs)
Expansion Slot	1 x PCle x8 (optional)
Watchdog Timer	255 stepping for system reset 8 stepping for LAN Bypass
Power Supply	300 W ATX power supply 400 W 1U redundant power supply (optional)
OS Compatibility	Linux

### Mechanical/Environmental

Form Factor	1U rackmount
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
Operating Temp.	0°C to +45°C (+32°F to +113°F)
Humidity	10% to 95% RH, non-condensing
Chassis Material	Steel
Dimensions	44 mm (1.73") (H) x 430 mm (16.93") (W) x 390 mm (15.34") (D)
Weight	8.5 kg (18.74 lb)/9.8 kg (21.61 lb)
Certificates	CE/FCC Class A





### **Ordering Information**

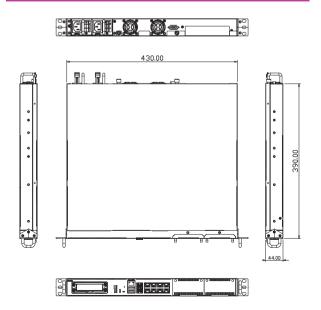
Standard	
NA720-RAMI-US (P/N: E26E7201000	1U rackmount network appliance with Intel® Pentium® processor D1508, 8 GbE LANs, 2 10 GbE SFP+ and 2-pair LAN Bypass

### **Optional**

5916E552000E	DB9F-RJ-45 1.8M console cable for Cisco
* Specifications and certific	cations may vary contingent on options.

### **Packing List**

1 x SATA cable	
1 x Power cord	





1U Rackmount Network Appliance Platform with LGA1200 Socket Intel® Core™/Xeon® W-1200 Processor, Intel® W480/Q470 and up to 26 LAN

### **Features**

- LGA1200 socket 10th gen Intel® Core™/Xeon® W-1200 processor (Comet Lake)
- 4 DDR4-2666 U-DIMM for up to 128GB of memory
- Max. up to 26 LAN ports
- 2 expandable LAN modules supporting 1GbE/10GbE/ 25GbE/40GbE/Fiber/Copper/Bypass
- Supports 1U redundant power supply for optional
- Supports IPMI for optional
- Suitable for network security, cloud computing and data centers applications

















### **Specifications**

System	
CPU	LGA1200 socket 10th gen Intel® Core™/Xeon® W-1200 processor (Comet Lake)
Chipset	Intel® W480/Q470
Memory	4 x DDR4-2666 U-DIMM, up to 128GB non-buffer non-ECC/ ECC memory
BIOS	AMI SPI Flash BIOS
Storage	2 x 2.5" SATA HDD 1 x M.2 2242 Key M slot (SATA)
Network Interface	8 x GbE RJ-45 (Intel® i350) in default 10 x GbE RJ-45 (by project) 2 x LAN module (optional) via I/O board, max. up to 26 LAN
1/0	1 x Console (RJ-type) 2 x USB 3.0 8 x RJ-45 1 x VGA (optional)
TPM	Onboard TPM 2.0
IPMI	Onboard BMC AST2500, IPMI 2.0 for optional
Other Features	LAN Bypass function through latch relay (two pairs)
Expansion Interface	1 x PCIe x8 through AX96708 riser card (optional)
Watchdog Timer	255 stepping for system reset 8 stepping for LAN Bypass
Power Supply	400W single power supply 400W 1U redundant power supply (optional)
OS Compatibility	Linux

### Mechanical/Environmental

Form Factor	1U rackmount
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
Operating Temperature	0°C to +45°C (+32°F to +113°F) (400W ATX power supply) 0°C to +40°C (+32°F to +104°F) (400W Redundant power supply)
Humidity	10% to 95% RH, non-condensing
Chassis Material	Steel
Dimensions	44 mm (1.73") (H) x 430 mm (16.93") (W) x 450 mm (17.7") (D)
Weight (net/gross)	6 kg (13.2 lb)/10 kg (22 lb)
Certifications	CE/FCC Class A

### **Ordering Information**

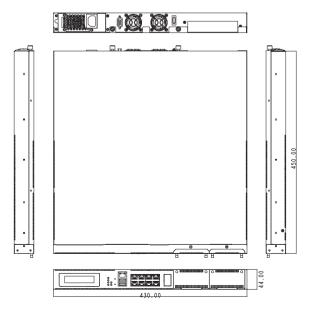
Standard	
NA592-R8GI-w480-US	1U rackmount appliance with LGA1200 socket Intel®
10th w/o IPMI	Core™/Xeon® W-1200 processor, 8 GbE LAN, 2-pair LAN
(P/N: E26E592100)	bypass and 2 expandable LAN modules (optional)

Optional	
5916E552000E	DB9F-RJ-45 1.8M console cable for Cisco

<sup>\*</sup> Specifications and certifications may vary based on different requirements.

### **Packing List**

1 x SATA cable 1 x Power cord



1U Rackmount Network Appliance Platform with LGA1151 Socket Intel® Xeon® E-2200/Core™ Processor, Intel® C246 and up to 34 LAN

### **Features**

- LGA1151 socket 9th/8th Intel® Core™ i7/i5/i3 & Xeon® E-2200 processor (Coffee Lake/Coffee Lake Refresh)
- 4 DDR4-2666 U-DIMM, up to 128GB memory
- Max. up to 34 GbE LAN ports
- 4 expandable LAN modules supporting 1GbE/10GbE/ 25GbE/40GbE/Fiber/Copper/Bypass for optional
- Supports 1U redundant power supply for optional
- Supports IPMI/TPM for optional
- Suitable for network security, cloud computing and data centers applications















### **Specifications**

System	
CPU	LGA1151 socket 9th/8th Intel® Core™ i7/i5/i3 & Xeon® E-2200 processor (Coffee Lake/Coffee Lake refresh)
Chipset	Intel® C246
Memory	4 x DDR4-2666 U-DIMM, up to 128GB non-buffer
	non-ECC/ECC memory
BIOS	AMI SPI Flash BIOS
Storage	2 x 2.5" SATA HDD
	1 x Full-size mSATA
	1 x M.2 2280 Key M slot (SATA)
	1 x 3.5" SATA HDD (optional for 400W ATX power supply only)
Network Interface	2 x GbE RJ-45 (Intel® i210)
	4 x LAN module (optional), max. up to 34 LAN ports
1/0	1 x Console (RJ-type)
	2 x USB 2.0
	2 x RJ-45
	1 x VGA
TPM	Onboard TPM 2.0
IPMI	Onboard BMC AST2500, IPMI 2.0 for optional
Other Features	LAN Bypass function through latch relay (depends on LAN
	modules)
Expansion Interface	1 x PCle x4 (optional)
Watchdog Timer	255 stepping for system reset
	8 stepping for LAN Bypass
Power Supply	400W single power supply
	400W 1U redundant power supply (optional)
OS Compatibility	Linux

#### Mechanical/Environmental

Form Factor	1U rackmount
LED	Power, HDD, GPIO programmable, Link/Act with transfer rate
Operating Temperature	0°C to +45°C (+32°F to +113°F)
Humidity	10% - 95% RH, non-condensing
Chassis Material	Steel
Dimensions	44 mm (1.73") (H) x 430 mm (16.93") (W) x 500 mm (19.69") (D)
Weight (net/gross)	8.32 kg (18.34 lb)/12.76 kg (28.13 lb)
Certifications	CE/FCC Class A





### **Ordering Information**

Standard	
NA591-R2GI-C246-US w/	1U rackmount appliance with LGA1151 socket Intel®
IPMI	Core™/Xeon® E-2200 processor, 2 GbE LAN, and
(P/N: E26E591100)	4 expandable LAN modules(optional), w/IPMI
NA591-R2GI-C246-US w/o	1U rackmount appliance with LGA1151 socket Intel®
IPMI	Core™/Xeon® E-2200 processor, 2 GbE LAN, and
(P/N: E26E591101)	4 expandable LAN modules (optional), w/o IPMI

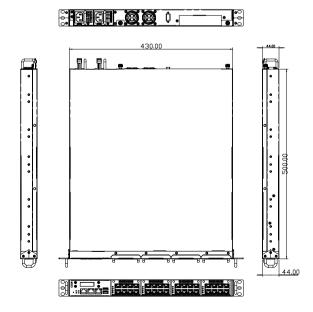
### Optional

5916E552000E DB9F-RJ-45 1.8M console of	able for Cisco
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<sup>\*</sup> Specifications and certifications may vary based on different requirements.

### **Packing List**

- 1 x SATA cable
- 1 x Power cord



1U Rackmount Network Appliance Platform with LGA1151 Socket Intel® Core™/ Xeon® E-2200 Processor, Intel® C246/H310 and up to 26 LAN

### **Features**

- LGA1151 socket 9th/8th Intel® Core™ i7/i5/i3 & Xeon® E-2200 processor (Coffee Lake/Coffee Lake Refresh)
- 4 DDR4-2666 U-DIMM for up to 64GB of memory
- Max. up to 26 LAN ports
- 2 expandable LAN modules supporting 1GbE/10GbE/ 25GbE/40GbE/Fiber/Copper/Bypass
- Supports 1U redundant power supply for optional
- Supports IPMI for optional
- Suitable for network security, cloud computing and data centers applications















### **Specifications**

System	<u> </u>
CPU	LGA1151 socket 9th/8th Intel® Core™ i7/i5/i3 & Xeon®
	E-2200 processor (Coffee Lake/Coffee Lake refresh)
Chipset	C246/H310
Memory	C246: 4 x DDR4-2666 U-DIMM, up to 128GB non-buffer
	non-ECC/ECC memory
	H310: 2 x DDR4-2666 U-DIMM, up to 64GB non-buffer
	non-ECC memory
BIOS	AMI SPI Flash BIOS
Storage	2 x 2.5" SATA HDD
	1 x Full-size mSATA
	1 x M.2 2280 Key B slot (SATA) through AX98621 I/O card
	(C246 optional)
	1 x 3.5" SATA HDD (optional for 400W single power supply)
Network Interface	C246: 8 x GbE RJ45 (Intel® i210)
	10 x GbE RJ-45 (by project)
	2 x LAN module (optional), max. up to 26 LANs
	H310: 6 x GbE RJ-45 (Intel® i210)
	1 x LAN module (optional), max. up to 14 LANs
1/0	1 x Console (RJ-type)
	2 x USB 3.0
	8 x RJ-45
	1 x VGA (pin header)
TPM	Onboard TPM 2.0
IPMI	Onboard BMC AST2500, IPMI 2.0 for optional
Other Features	LAN Bypass function through latch relay (two pairs)
Expansion Interface	1 x PCle x8 through AX96708 riser card (C246 optional)
Watchdog Timer	255 stepping for system reset
	8 stepping for LAN Bypass
Power Supply	300W single power supply
	400W 1U redundant power supply (by project)
OS Compatibility	Linux

#### Mechanical/Environmental

Form Factor	1U rackmount
LED	Power, HDD, GPIO programmable, LAN Bypass
Operating Temperature	0°C to +45°C (+32°F to +113°F)
	(300W single power supply)
	0°C to +40°C (+32°F to +104°F)
	(400W 1U redundant power supply)
Humidity	10% to 95% RH, non-condensing
Chassis Material	Steel
Dimensions	44 mm (1.73") (H) x 430 mm (16.93") (W) x 450 mm (17.7") (D)
Weight (net/gross)	6 kg (13.2 lb)/10 kg (22 lb)
Certifications	CE/FCC Class A





### **Ordering Information**

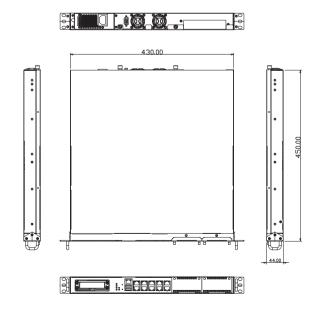
Standard	
NA590-R6GI-H310-US 9th w/o IPMI (P/N: E26E590109)	1U rackmount appliance with LGA1151 socket Intel® Core™ processor, 6 GbE LAN, 2-pair LAN bypass and 1 expandable LAN module (optional)
NA590-R8GI-C246-US 9th w/o IPMI (P/N: E26E590108)	1U rackmount appliance with LGA1151 socket Intel® Core™/Xeon® E-2200 processor, 8 GbE LAN, 2-pair LAN bypass and 2 expandable LAN modules (optional)

### Optional

5916E552000E	DB9F-RJ-45 1.8M console cable for Cisco
* Specifications and certific	cations may vary based on different requirements.

### **Packing List**

1 x SATA cable 1 x Power cord





1U Rackmount Network Appliance Platform with LGA1151 Socket Intel® Xeon® E3/Core™ Processor and 8 LAN

### **Features**

- LGA1151 socket 6th/7th gen Intel® Core™/Xeon® E3 processor (Skylake/Kaby Lake)
- 4 DDR4-2400 U-DIMM for up to 64GB of memory
- Max. up to eighteen 10/100/1000 Mbps Ethernet ports
- Expandable LAN module supporting 1GbE/10GbE/Fiber/ Copper/Bypass
- Supports 1U redundant power supply for optional
- Supports IPMI/TPM module for optional
- Suitable for network security, cloud computing and data centers applications











### **Specifications**

System	
CPU	LGA1151 socket Intel® Xeon® E3/Core™ processor (Skylake/
	Kaby Lake)
Chipset	C236/H110
Memory	C236: 4 x DDR4-2400 U-DIMM, up to 64GB non-buffer
	non-ECC/ECC memory
	H110: 2 x DDR4-2400 U-DIMM, up to 32GB non-buffer
	non-ECC memory
BIOS	AMI SPI Flash BIOS
Storage	2 x 2.5" SATA HDD
	1 x CFast™
	1 x Full-size mSATA
	1 x 3.5" SATA HDD (optional for 300W single power supply only
Network Interface	C236: 8 x GbE RJ-45 (Intel® i210)
	10 x GbE RJ-45 (optional)
	8 x GbE RJ-45 + 2 x GbE SFP (optional)
	H110: 6 x GbE RJ-45 (Intel® i210)
	1 x LAN module (optional), max. up to 18 LANs
1/0	1 x Console (RJ-type)
	2 x USB 3.0
	8 x RJ-45
	1 x VGA (pin header)
TPM	Onboard TPM 2.0
IPMI	Onboard BMC AST2500, IPMI 2.0 for optional
Other Features	LAN Bypass function through latch relay (two pairs)
Expansion Interface	1 x PCle x8 (Intel® C236 only) through AX96708 riser card
	(optional)
Watchdog Timer	255 stepping for system reset
	8 stepping for LAN Bypass
Power Supply	300W single power supply
	400W 1U redundant power supply (by project)
OS Compatibility	Linux
Note: Kaby Lake doesn	't support Cent OS 6.6/6.7/6.8

### Mechanical/Environmental

Form Factor	1U rackmount
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
Operating Temperature	0°C to +45°C (+32°F to +113°F) (300 W ATX power supply) 0°C to +40°C (+32°F to +104°F) (400 W 1U redundant power supply)
Humidity	10% to 95% RH, non-condensing
Chassis Material	Steel
Dimensions	44 mm (1.73") (H) x 430 mm (16.93") (W) x 451mm (17.8") (D)
Weight (net/gross)	6 kg (13.2 lb)/10 kg (22 lb)
Certifications	CE/FCC Class A





### **Ordering Information**

Standard	
NA580-R8GI-C236 (P/N: E26E580100)	1U rackmount appliance with LGA1151 socket Intel® Xeon® E3/Core™ processor, 8 GbE LAN, 2-pair LAN bypass and 1 expandable LAN module (optional)
NA580-R6GI-H110 (P/N: E26E580101)	1U rackmount appliance with LGA1151 socket Intel® Core™ processor, 6 GbE LAN, 2-pair LAN bypass and 1 expandable LAN module (optional)
NA580-R8GI-C236-US with IPMI (P/N: E26E580114)	1U rackmount appliance with LGA1151 socket Intel® Xeon® E3/Core™ processor, 8 GbE LAN, 1 IPMI port, 2-pair LAN bypass and 1 expandable LAN module (optional)

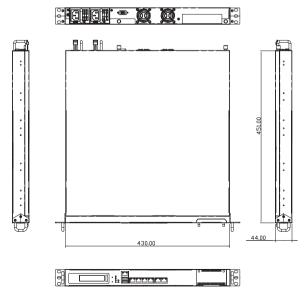
### **Optional**

59 I DE 55 ZUUUE DE 9F - KJ - 45 I . 8 IVI CONSOIE CADIE TOT CISCO	5916E552000E	DB9F-RJ-45 1.8M console cable for Cisco
--	--------------	---

### \* Specifications and certifications may vary based on different requirements.

### **Packing List**

1 x SATA cable 1 x Power cord



### **NA362R**

1U Rackmount Network Appliance Platform with Intel® Atom® Processor C3558/ C3758 and up to 10 LAN

### **Features**

- Intel® Atom® processor C3558/C3758 (Denverton)
- 4 DDR4 R-DIMM/U-DIMM for up to 128GB of memory
- 6 1GbE RJ45 and 4 10GbE SFP+ ports
- Supports Intel® QuickAssist Technology
- Supports Intel® Data Plane Development Kit (Intel® DPDK)
- Suitable for VPN, network bandwidth controller, firewall and **UTM** applications

















### **Specifications**

System	
CPU	Intel® Atom® processor C3558/C3758 (Denverton)
Chipset	SoC integrated
Memory	4 x DDR4 R-DIMM/U-DIMM (not allowed mixing), up to 128GB non-buffer non-ECC/ECC memory
BIOS	AMI SPI Flash BIOS
Storage	2 x 2.5" SATA3 HDD 1 x Full-size Mini-PCle slot
Network Interface	6 x GbE RJ-45 (Intel® i210) 2 x 10GbE SFP+ (C3558)/4 x 10GbE SFP+ (C3758)
1/0	1 x Console (RJ-type) 2 x USB 2.0 6 x RJ-45 + 2 x SFP+ (C3558); 4 x SFP+ (C3758)
TPM	Onboard TPM 1.2/2.0 (optional)
Other Features	LAN Bypass function through latch relay (one pair)
Expansion Interface	N/A
Watchdog Timer	255 stepping for system reset 8 stepping for LAN Bypass
Power Supply	120W open frame
OS Compatibility	Yocto, Linux

### **Mechanical/Environmental**

Form Factor	1U rackmount
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate $$
Operating Temperature	0°C to +45°C (+32°F to +113°F)
Humidity	10% to 95% RH, non-condensing
Chassis Material	Steel
Dimensions	44 mm (1.73") (H) x 430 mm (16.93") (W) x 250 mm (9.84") (D)
Weight (net/gross)	3.5 kg (7 lb)/4.5 kg (9 lb)
Certifications	CE/FCC Class B

### **Ordering Information**

Standard	
NA362R-R8MI-C3558-US (P/N:E26E362103)	1U rackmount network appliance with Intel® Atom® processor C3558, 6 GbE LAN and 2 SFP+ ports
NA362R-RAMI-C3758-US (P/N:E26E362104)	1U rackmount network appliance with Intel® Atom® processor C3758, 6 GbE LAN and 4 SFP+ ports

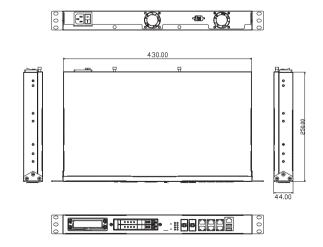
### **Optional**

3 TOLGGZUUUL DDGI -110-43 T.OM CONSOIR CADIR IOI CISCO	916E552000E	DB9F-RJ-45 1.8M console cable for Cisco
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<sup>\*</sup> Specifications and certifications may vary based on different requirements.

### **Packing List**

1 x SATA cable 1 x Power cord



### **NA363R**

1U Rackmount Network Appliance Platform with Intel® Atom® Processor C3558/C3758 and up to 14 LAN

### **Features**

- Intel® Atom® processor C3558/C3758 (Denverton)
- 4 DDR4 R-DIMM/U-DIMM for up to 128GB of memory
- 6 GbE RJ-45 and 1 expandable LAN module support
- Supports Intel® QuickAssist Technology
- Supports Intel® Data Plane Development kit (Intel® DPDK)
- Suitable for VPN, network bandwidth controller, firewall and UTM applications



















### **Specifications**

System	
CPU	Intel® Atom® processor C3558/C3758 (Denverton)
Chipset	SoC integrated
Memory	4 x DDR4 R-DIMM/U-DIMM (not allowed mixing), up to 128GB memory
BIOS	AMI SPI Flash BIOS
Storage	2 x 2.5" SATA3 HDD 1 x Full-size mSATA
Network Interface	6 x GbE RJ-45 (Intel® i210) 1 x LAN module (optional), max. up to 14 LAN
1/0	1 x Console (RJ-type) 2 x USB 2.0 6 x RJ-45 1 x VGA (optional)
TPM	Onboard TPM 2.0 (optional)
Other Features	One pair LAN Bypass function through latch relay Two pairs LAN Bypass (optional)
Expansion Interface	1 x LAN module through AX98614 (C3758 only)
Watchdog Timer	255 stepping for system reset 8 stepping for LAN Bypass
Power Supply	120W open frame
OS Compatibility	Yocto, Linux

#### Mechanical/Environmental

Form Factor	1U rackmount
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
Operating Temperature	0°C to +45°C (+32°F to +113°F)
Humidity	10% - 95% RH, non-condensing
Chassis Material	Steel
Dimensions	44 mm (1.73") (H) x 430 mm (16.93") (W) x 250 mm (9.84") (D)
Weight (net/gross)	3.5 kg (7 lb)/4.5 kg (9 lb)
Certifications	CE/FCC Class A

### **Ordering Information**

Standard	
NA363R-R6GI-C3558-US w/1 LBP (P/N: E26E363100)	1U rackmount network appliance platform with Intel® Atom® processor C3558 and 6 GbE LAN
NA363R-R6GI-C3758-US w/1 LBP (P/N: E26E363101)	1U rackmount network appliance platform with Intel® Atom® processor C3758 and 6 GbE LAN

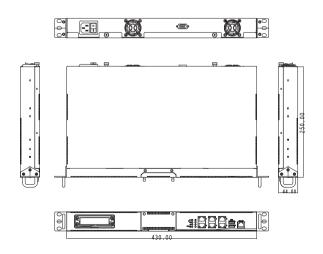
### Optional

5916E552000E DB9F-RJ-45 1.8M console cable for Cisco
--

<sup>\*</sup> Specifications and certifications may vary contingent on options.

### **Packing List**

1 x SATA cable	
1 x Power cord	



### **NA345R**

1U Rackmount Network Appliance Platform with Intel® Celeron® N3350/J3455 Processor up to 6 LAN

### **Features**

- Intel® Celeron® N3350/J3455 processor (Apollo Lake)
- One DDR3L-1866 SO-DIMM, up to 8GB memory
- Six 10/100/1000 Mbps Ethernet ports (Intel® i211)
- Supports one 2.5" SATA3 HDD
- Suitable for VPN, network bandwidth controller and firewall applications

















### **Specifications**

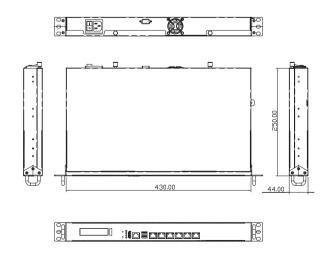
System	
CPU	Intel® Celeron® N3350/J3455 processor (Apollo Lake)
Chipset	SoC Integrated
Memory	1 x DDR3L-1866 SO-DIMM, up to 8GB non-ECC memory
BIOS	AMI SPI flash BIOS
Storage	1 x 2.5" SATA3 HDD
	1 x Full-size mSATA
	1 x 3.5" SATA HDD (optional)
Network Interface	6 x GbE RJ-45 (Intel® i211)
1/0	1 x Console (RJ-type)
	2 x USB 3.0
	6 x RJ-45
	1 x HDMI
TPM	Onboard TPM 1.2 (optional)
Other Features	LAN Bypass function through latch relay (one pair)
	LCM for optional
Expansion Slot	N/A
Watchdog Timer	255 levels for system reset
	7 levels for LAN Bypass
Power Supply	65 W open frame
OS Compatibility	Win 10, Linux (Yocto project)

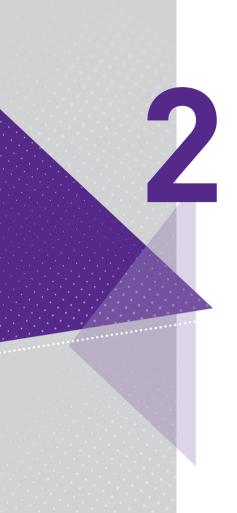
#### Mechanical/Environmental

Form Factor	1U rackmount
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
Operating Temp.	0°C to +45°C (+32°F to +113°F)
Humidity	10% - 95% RH, non-condensing
Chassis Material	Steel
Dimensions	44 mm (1.73") (H) x 430 mm (16.93") (W) x 250 mm (9.84") (D)
Weight (net/gross)	7 kg (15.43 lb)/8 kg (17.64 lb)
Certificates	CE/FCC Class B

### **Ordering Information**

Standard	
NA345R-R6GI-N3350-U w/1 LBP (P/N: E26E345101)	S 1U rackmount appliance with Intel® Celeron® N3350 processor, 6 GbE LANs and 1 LBP
Optional	
5916E552000E	DB9F-RJ-45 1.8M console cable for Cisco
* Specifications and cer	rtifications may vary contingent on options.
Packing List	
Packing List  1 x SATA cable  1 x Power cord	





Axiomtek's SOHO (Small Office and Home Office) network appliance platforms with compact size design, fantastic enclosure management capability, strict electromagnetic compatibility for class B, energy saving and multiple Ethernet ports, are suitable for various environments and applications in space-limited environments. Axiomtek's SOHO series provides not only reasonable performance and reliable hardware platforms, but also system development kits for software integration.

	Selection Guide		420
NEW	NA347	Fanless Ultra Compact Network Appliance with Intel® Celeron® Processor N3350 and up to 3 LAN	422
	NA346	Fanless Small Form Factor IoT Security Platform with Intel® Celeron® Processor N3350 and up to 4 LAN	423
	NA345	Desktop Network Appliance Platform with Intel® Celeron® N3350/J3455 and up to 4 LAN	424
	NA342	Desktop Network Appliance Platform with Intel® Celeron® Processor J1900 and 4 LAN	425
	NA363	Desktop Network Appliance Platform with Intel® Atom® Processor C3758 and up to 6 LAN	426
	NA362	Desktop Network Appliance Platform with Intel® Atom® Processor C3338/C3558/C3758 and up to 10 LAN	427
	NA361	Desktop Network Appliance Platform with Intel® Atom® Processor C2358 and 6 LAN	428

# Network Appliances

Selection Guide









Models		NA347	NA346	NA345	NA342
Form Factor		Ultra-Compact, Fanless	Ultra-Compact, Fanless	1U Desktop	1U Desktop
	Processor	Intel® Celeron® N3350 (Apollo Lake)	Intel® Celeron® N3350 (Apollo Lake)	Intel® Pentium® N4200 (4-core) Intel® Celeron® N3350 (2-core)	Intel® Celeron® J1900 (4-core)
Platform	Chipset	SoC integrated	SoC integrated	SoC integrated	SoC integrated
	Acceleration Technology	N/A	N/A	N/A	N/A
BIOS		AMI SPI Flash BIOS	AMI SPI Flash BIOS	AMI SPI Flash BIOS	AMI SPI Flash BIOS
	Technology	DDR3L-1866	DDR3L-1866MHz	DDR3L-1866	DDRL-1333
	Max. Capacity	8GB	8GB	8GB	8GB
Memory	Socket	1 x 204-pin SO-DIMM	1 x 204-pin SO-DIMM	1 x 204-pin SO-DIMM	1 x 204-pin SO-DIMM
	ECC Support	Non-ECC	Non-ECC	Non-ECC	Non-ECC
	Ethernet (default)	3 x 10/100/1000 Mbps	4 x 10/100/1000 Mbps	4 x 10/100/1000 Mbps	4 x 10/100/1000 Mbps
Naturali	Ethernet (max.)	3 x 10/100/1000 Mbps	4 x 10/100/1000 Mbps	6 x 10/100/1000 Mbps	6 x 10/100/1000 Mbps
Network Interface	LAN Bypass	1 pair (optional)	1 pair (optional)	1 pair (optional)	1 pair (optional)
interiace	Controllers	Intel® i211	Intel® i211	Intel® i211	Intel® i211
	LAN Module	N/A	N/A	N/A	N/A
	HDD/SSD	N/A	N/A	1 x 2.5" HDD (Max 9.5mm height only)	1 x 2.5" HDD (Max 9.5mm height only)
Storage	M.2 SSD	1 x M.2 2242 slot	N/A	N/A	N/A
	mSATA/CF/CFast	N/A	1 x Half-Size mSATA 1 x Full-Size mSATA	1 x Full-Size mSATA	1 x CompactFlash™
	Button	Power Button with LED	Power Switch	1 x Power Switch	1 x Power Switch
	LED Indicator	N/A	Power, HDD, GPIO programmable, LAN Bypass, Link/ Act with transfer rate	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate	Power, HDD, GPIO programmable LAN Bypass, Link/Act with transfer rate
I/O	USB	2 x USB 3.0	2 x USB 3.0	2 x USB 3.0	1 x USB 2.0 1 x USB 3.0
	Console	1 x Console (RJ-type)	1 x Console (RJ-type)	1 x Console (RJ-type)	1 x Console (RJ-type)
	LCM Module	N/A	N/A	N/A	N/A
	Display	1 x HDMI (optional)	1 x HDMI (optional)	1 x HDMI (optional)	1 x VGA (Pin header)
TPM		N/A	Yes	Yes	Yes
IPMI		N/A	N/A	N/A	N/A
Watchdog		255 stepping for system reset	255 stepping for system reset 8 stepping for LAN Bypass	255 stepping for system reset 8 stepping for LAN Bypass	255 stepping for system reset 8 stepping for LAN Bypass
	Power Type	Adapter	Adapter	Adapter	Adapter
Power	Watts	36W	36W	60W	60W
Supply	Input	100 to 240 Vac	100 to 240 Vac	100 to 240 Vac	100 to 240 Vac
	Connector	DC-Jack w/Screw Type	DC-Jack w/Screw Type	DC-Jack	DC-Jack
Expansion Int	terface	1 x M.2 Key B 2242 1 x Full-size Mini-PCle slot (PCle/USB)	1 x Half-size Mini-PCle slot (SATA/USB) 1 x Half-size Mini-PCle slot (SATA/USB) (PCle optional, co-layout with Eth4) 1 x Nano SIM slot	1 x PCI Express Mini Card slot with USB interface	1 x PCI Express Mini Card slot (USB interface)
	Operating Temperature	0°C to +40°C (+32°F to +104°F)	0°C to +40°C (+32°F to +104°F)	0°C to +40°C (+32°F to +104°F)	0°C to +40°C (+32°F to +104°F)
Environment	Storage Temperature	-20°C to +70°C (-4°F to +158°F)	-20°C to +70°C (-4°F to +158°F)	-20°C to +70°C (-4°F to +158°F)	-20°C to +70°C (-4°F to +158°F)
	Humidity	10% - 95% RH, non-condensing	10% - 95% RH, non-condensing	10% - 95% RH, non-condensing	10% - 95% RH, non-condensing
	Construction	Aluminum	Aluminum	Steel	Steel
Mechanical	Dimensions (W x H x D)	26 x 146 x 118.2 mm (1.24" x 5.57" x 4.65")	33.5 x 146 x 118.2 mm (1.32" x 5.75" x 4.65")	44 x 231.9 x 152 mm (1.73" x 9" x 5.98")	44 x 231.9 x 152 mm (1.73" x 9" x 5.98")
	Weight (net/gross)	0.284 kg (0.63 lb ) / 0.786 kg (1.73 lb)	0.62 kg (1.37 lb)/1.3 kg (2.87 lb)	2.35 kg (5.18 lb)/2.61 kg (5.75 lb)	2.5 kg (5.51 lb)/2.9 kg (6.39 lb)
OS Support		Win 10, Yocto, Linux	Win 10, Yocto, Linux	Win 10, Linux	Win7, WES7, Win8, WE8S, Linux
Certifications		CE/FCC Class B	CE/FCC Class B	CE/FCC Class B	CE/FCC Class B

### Selection Guide







		11110		
Models		NA363	NA362	NA361
Form Factor		1U Desktop	1U Desktop	1U Desktop
	Processor	Intel® Atom® C3758 (Denverton)	Intel® Atom® C3338/C3558/C3758	Intel® Atom® C2358 (2-core) (Rangeley)
Platform	Chipset	SoC integrated	SoC integrated	SoC integrated
	Acceleration Technology	Intel® QAT	Intel® QAT	Intel® QAT
BIOS		AMI SPI Flash BIOS	AMI SPI Flash BIOS	AMI SPI Flash BIOS
	Technology	DDR4-2400	DDR4-2400	DDR3-1600
	Max. Capacity	64GB (U-DIMM) 128GB (R-DIMM)	64GB (U-DIMM) 128GB (R-DIMM)	16GB
Memory	Socket	4 x 288-pin R-DIMM/U-DIMM	2 x 288-pin R-DIMM/U-DIMM (C3338) 4 x 288-pin R-DIMM/U-DIMM (C3558/C3758)	4 x 240-pin U-DIMM
	ECC Support	Non-ECC/ECC	Non-ECC/ECC	Non-ECC/ECC
	Ethernet (default)	6 x 10/100/1000 Mbps	6 x 10/100/1000 Mbps 2 x 10GbE SFP+ (C3558) 4 x 10GbE SFP+ (C3758)	6 x 10/100/1000 Mbps
Network Interface	Ethernet (max.)	6 x 10/100/1000 Mbps	6 x 10/100/1000 Mbps 4 x 10GbE SFP+	6 x 10/100/1000 Mbps
	LAN Bypass	1 pair (optional)	1 pair (optional)	1 pair (optional)
	Controllers	Intel® i210	Intel® i210	Intel® i347 & Intel® i210
	LAN Module	N/A	N/A	N/A
	HDD/SSD	1 x 2.5" HDD	1 x 2.5" HDD	1 x 2.5" HDD
Storage	M.2 SSD	N/A	N/A	N/A
	mSATA/CF/CFast	1 x Full-Size mSATA	1 x Full-Size mSATA	1 x CompactFlash™
	Button	Power Switch	1 x Power Switch 1 x Reset Button	Power Switch
	LED Indicator	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
I/O	USB	2 x USB 2.0	2 x USB 2.0	2 x USB 2.0
	Console	1 x Console (RJ-type)	1 x Console (RJ-type)	1 x Console (RJ-type)
	LCM Module	N/A	N/A	N/A
	Display	N/A	N/A	N/A
TPM		Yes	Yes	Yes
IPMI		N/A	N/A	N/A
Watchdog		255 stepping for system reset 8 stepping for LAN Bypass	255 stepping for system reset 8 stepping for LAN Bypass	255 stepping for system reset 8 stepping for LAN Bypass
	Power Type	Adapter	Adapter	Adapter
Power	Watts	60W	60W/84W	60W
Supply	Input	100 to 240Vac	100 to 240Vac	100 to 240Vac
	Connector	DC-Jack	DC-Jack	DC-Jack
Expansion Int	terface	1 x Full-size Mini-PCle slot (USB+SATA) 1 x Full-size Mini-PCle slot (USB+PCle)	1 x Full-size Mini-PCle slot (USB+SATA) 1 x Full-size Mini-PCle slot (USB+PCle)	1 x PCle Mini Card slot (USB)
	Operating Temperature	0°C to +40°C (+32°F to +104°F)	0°C to +40°C (+32°F to +104°F)	0°C to +40°C (+32°F to +104°F)
Environment	Storage Temperature	-20°C to +70°C (-4°F to +158°F)	-20°C to +70°C (-4°F to +158°F)	-20°C to +70°C (-4°F to +158°F)
	Humidity	10% - 95% RH, non-condensing	10% - 95% RH, non-condensing	10% - 95% RH, non-condensing
	Construction	Steel	Steel	Steel
Mechanical	Dimensions (W x H x D)	44 x 231 x 197 mm (1.73" x 9.09" x 7.76")	44 x 231 x 197 mm (1.73" x 9.09" x 7.76")	44 x 231 x 197 mm (1.73" x 9.09" x 7.76")
	Weight (net/gross)	1.64 kg (3.62 lb)/2.69 kg (5.93 lb)	1.64 kg (3.62 lb)/2.54 kg (5.60 lb) (C3338/C3558) 1.64 kg (3.62 lb)/2.69 kg (5.93 lb) (C3758)	2.35 kg (5.18 lb)/2.61 kg (5.75 lb)
OS Support		Yocto, Linux	Yocto, Linux	Yocto, Linux
Certifications		CE/FCC Class B	CE/FCC Class B	CE/FCC Class B



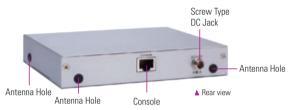
Fanless Ultra Compact Network Appliance with Intel® Celeron® Processor N3350 and up to 3 LAN for Entry Level SD-WAN, VPN and Security Gateway

### **Features**

- Intel® Celeron® processor N3350 (Apollo Lake)
- 1 DDR3L-1866 SO-DIMM for up to 8GB of non-ECC memory
- 3 GbE RJ-45 ports (Intel® i211)
- 1 mini-PCle slot for Wi-Fi or LTE module
- M.2 Key B 2242
- Small form factor with fanless and noiseless design
- Suitable for SD-WAN, VPN and IoT security gateway applications



Power Button













### **Specifications**

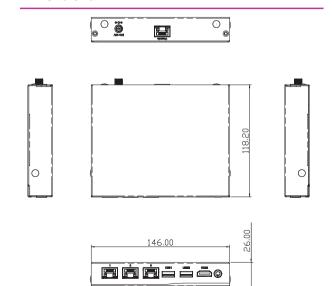
•		
System		
CPU	Intel® Celeron® processor N3350, 2 Core, 1.10 GHz (Apollo Lake)	
Chipset	SoC integrated	
Memory	1 x DDR3L-1866 SO-DIMM, up to 8GB non-ECC memory	
BIOS	AMI SPI Flash BIOS	
Storage	1 x M.2 2242 Key B slot (SATA)	
Network Interface	3 x GbE RJ-45 (Intel® i211)	
1/0	1 x Console (RJ-type) 3 x RJ-45 2 x USB 3.0 1 x HDMI 1 x DC Jack (Screw type) 1 x Power Button with LED	
Other Features	LAN Bypass (optional)	
Expansion Interface	1 x Full-size Mini-PCle slot (PCle/USB signal) 1 x Nano SIM Socket	
Watchdog Timer	255 stepping for system reset	
Power Supply	12V, 3A power adapter	
OS Compatibility	Win 10, Linux (Yocto project)	

### Mechanical/Environmental

· · · · · · · · · · · · · · · · · · ·	
Form Factor	Desktop, small form factor and fanless
Operating Temperature	0°C to +40°C (+32°F to +104°F)
Humidity	10% - 90% RH, non-condensing
Chassis Material	Aluminum
Dimensions	26 mm (1.24") (H) x 146 mm (5.57") (W) x 118.2 mm (4.65") (D)
Weight (net/gross)	0.284 kg (0.63 lb ) / 0.786 kg (1.73 lb)
Certifications	CE/FCC Class B

### **Ordering Information**

Standard		
NA347-D3GI-N3350 (P/N: E26E347100)	SFF fanless network appliance with Intel® Celeron® processor N3350	
(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Processor viscos	
Optional		
5916E552000E	DB9F-RJ-45 1.8M console cable for Cisco	
59902000030E	Power Cord - US	
59903000080E	Power Cord - EU	
59910050000E	Power Cord - JP	
59904000050E	Power Cord - UK	
M.2 2242 SSD		
DDR3L SO-DIMM		
Wireless Module		
Rack mount kit		
Wall mount kit		



Fanless Ultra Compact Network Appliance with Intel® Celeron® Processor N3350 and up to 4 LAN for Entry Level SD-WAN, VPN and Security Gateway

### **Features**

- Small form factor with fanless and noiseless design
- Intel® Celeron® processor N3350 (Apollo Lake)
- 1 DDR3L-1866 SO-DIMM for up to 8GB of memory
- 4 GbE RJ-45 ports (Intel® i211)
- 2 mini-PCle slot for mSATA (optional)
- 1 mini-PCle slot for WiFi or LTE module
- Suitable for IoT security applications
- Microsoft Azure IoT Edge certified













### **Specifications**

Intel® Celeron® processor N3350 (Apollo Lake)
SoC integrated
1 x DDR3L-1866 SO-DIMM, up to 8GB non-ECC memory
AMI SPI Flash BIOS
1 x Full-size mSATA
1 x Half-size mSATA
4 x GbE RJ-45 (Intel® i211)
1 x Console (RJ-type)
4 x RJ-45
2 x USB 3.0
1 x HDMI
Onboard TPM 2.0 (optional)
LAN Bypass (optional)
1 x Half-size mini-PCle slot (SATA+USB)
1 x Full-size mini-PCle slot (SATA/PCle, PCle co-layout with Eth4)
1 x Nano SIM Socket
255 stepping for system reset
1 x 12V, 3A power adapter
Win 10, Linux (Yocto project)

### Mechanical/Environmental

Form Factor	Desktop, small form factor and fanless
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
Operating Temperature	0°C to +40°C (+32°F to +104°F)
Humidity	10% - 90% RH, non-condensing
Chassis Material	Aluminum
Dimensions	33.5 mm (1.32") (H) x 146 mm (5.75") (W) x 118.2 mm (4.65") (D)
Weight (net/gross)	0.62 kg (1.37 lb)/1.3 kg (2.87 lb)
Certifications	CE/FCC Class B

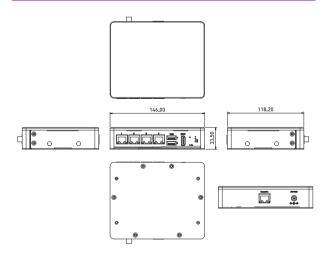




A Rear view

### **Ordering Information**

Standard	
NA346-D4G-N3350-US w/o LBP (P/N: E26E346100)	SFF fanless network appliance with Intel® Celeron® processor N3350 and 4 GbE LAN
Optional	
5916E552000E	DB9F-RJ-45 1.8M console cable for Cisco
59902000030E	Power Cord - US
59903000080E	Power Cord - EU
59910050000E	Power Cord - JP
59904000050E	Power Cord - UK
mSATA SSD	
DDR3L SO-DIMM	
Wireless Module	
Rack mount kit	
* Specifications and certi	fications may vary contingent on options.



Desktop Network Appliance Platform with Intel® Celeron® N3350/J3455 up to 4 LAN for VPN, Network Bandwidth Controller and Firewall

### **Features**

- Intel® Celeron® processor N3350/J3455 (Apollo Lake)
- 1 DDR3L-1866 SO-DIMM for up to 8GB of memory
- 4 GbE RJ-45 ports (Intel® i211)
- 1 mini-PCle slot for mSATA for optional
- 2 mini-PCle slot for WiFi and LTE module
- Suitable for VPN, network bandwidth controller and firewall applications

















### **Specifications**

System			
CPU	Intel® Celeron® processor N3350/J3455 (Apollo Lake)		
Chipset	SoC integrated		
Memory	1 x DDR3L-1866 SO-DIMM, up to 8GB non-ECC memory		
BIOS	AMI SPI Flash BIOS		
Storage	1 x 2.5" SATA3 HDD 1 x Full-size mSATA		
Network Interface	4 x GbE RJ-45 (Intel® i211, 6 ports by request)		
1/0	1 x Console (RJ-type) 2 x USB 3.0 4 x RJ-45 1 x HDMI (optional)		
TPM	Onboard TPM 1.2 (optional)		
Other Features	LAN Bypass function through latch relay (two pairs) for optional		
Expansion Interface	1 x Full-size mini-PCle slot (SATA+USB) 1 x Half-size mini-PCle slot (USB+PCle) 1 x Full-size mini-PCle slot (USB+PCle) 1 x Standard SIM Socket		
Watchdog Timer	255 stepping for system reset 8 stepping for LAN Bypass		
Power Supply	1 x 12V, 5A power adapter		
OS Compatibility	Win 10. Linux		

#### Mechanical/Environmental

Form Factor	1U desktop
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate $$
Operating Temperature	0°C to +40°C (+32°F to +104°F)
Humidity	10% - 95% RH, non-condensing
Chassis Material	Steel
Dimensions	44 mm (1.73") (H) x 231.9 mm (9.00") (W) x 152 mm (5.98") (D)
Weight (net/gross)	2.35 kg (5.18 lb)/2.61 kg (5.75 lb)
Certifications	CE/FCC Class B

### **Ordering Information**

J	
Standard	
NA345-D4GI-N3350-US w/o LBP (P/N: E26E345100)	1U desktop network appliance with Intel® Celeron® processor N3350 and 4 GbE LAN
NA345-D4GI-J3455-US w/o LBP (P/N: E26E345107)	1U desktop network appliance with Intel® Celeron® processor J3455 and 4 GbE LAN

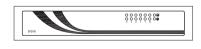
#### **Optional**

5916E552000E	DB9F-RJ-45	1.8M	console	cable	for	Cisco

<sup>\*</sup> Specifications and certifications may vary based on different requirements.

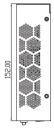
### **Packing List**

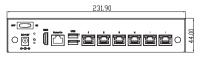
- 1 x DC power adapter 12V/5A
- 1 x Power cord
- 1 x SATA cable











Desktop Network Appliance Platform with Intel® Celeron® Processor J1900 and 4 LAN for VPN, Network Bandwidth Controller and Firewall

### **Features**

- Intel® Celeron® processor J1900 (Bay Trail)
- 1 DDR3L-1333 SO-DIMM for up to 8GB of memory
- 4 GbE RJ-45 ports (Intel® i211)
- Wi-Fi/3G/LTE through PCI Express Mini Card slot for optional
- Suitable for VPN, network bandwidth controller and firewall applications













### **Specifications**

System	
CPU	Intel® Celeron® processor J1900 (Bay Trail)
Chipset	SoC integrated
Memory	1 x DDR3L-1333 SO-DIMM, up to 8GB non-ECC memory
BIOS	AMI SPI Flash BIOS
Storage	1 x 2.5" SATA HDD 1 x CompactFlash™ type-II
Network Interface	4 x RJ-45 (Intel® i211, 6 ports by optional)
1/0	1 x Console (RJ-type) 1 x USB 2.0 1 x USB 3.0 4 x RJ-45
TPM	Onboard TPM 1.2 (optional)
Other Features	LAN Bypass function through latch relay (two pairs) for optional
Expansion Interface	1 x Full-size Mini-PCle slot (USB)
Watchdog Timer	255 stepping for system reset 8 stepping for LAN Bypass
Power Supply	1 x 12V, 5A power adapter
OS Compatibility	Win7, WES7, Win8, WE8S, Linux

#### Mechanical/Environmental

Form Factor	1U desktop
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
Operating Temperature	0°C to +40°C (+32°F to +104°F)
Humidity	10% - 95% RH, non-condensing
Chassis Material	Steel
Dimensions	44 mm (1.73") (H) x 231.9 mm (9.00") (W) x 152 mm (5.98") (D)
Weight (net/gross)	2.5 kg (5.51 lb)/2.9 kg (6.39 lb)
Certifications	CE/FCC Class B

Standard	
NA342-D4GI-1900-B-US w/o LBP (PN: E26E342103)	1U desktop network appliance with Intel® Celeron® processor J1900 and 4 GbE LAN
Optional	
<b>Optional</b> 5916E552000E	DB9F-RJ-45 1.8M console cable
•	DB9F-RJ-45 1.8M console cable
5916E552000E	DB9F-RJ-45 1.8M console cable fications may vary based on different requirements.

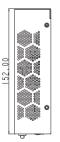
### **Dimensions**

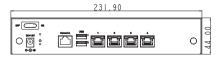
1 x SATA cable











Desktop Network Appliance Platform with Intel® Atom® Processor C3758 and up to 6 LAN for VPN, Network Bandwidth Controller, Firewall and UTM

### **Features**

- Intel® Atom® processor C3758 (Denverton)
- 4 DDR4 R-DIMM for up to 128GB of memory or U-DIMM for up to 64GB of memory
- 6 GbE RJ-45 ports (Intel® i210)
- Wi-Fi/3G/LTE through PCI Express Mini Card slot for optional
- Supports Intel® QuickAssist Technology
- Supports Intel® Data Plane Development Kit (Intel® DPDK)
- Suitable for VPN, network bandwidth controller, firewall and **UTM** applications

















### **Specifications**

System	
CPU	Intel® Atom® processor C3758 (Denverton)
Chipset	SoC integrated
Memory	4 x DDR4 R-DIMM, up to 128GB/4 x DDR4 U-DIMM, up to 64GB non-buffer non-ECC/ECC memory
BIOS	AMI SPI Flash BIOS
Storage	1 x 2.5" SATA3 HDD 1 x Full-size mSATA
Network Interface	6 x GbE RJ-45 (Intel® i210)
1/0	1 x Console (RJ-type) 1 x VGA (from AX93329) 2 x USB 2.0 6 x RJ-45
TPM	Onboard TPM 1.2 (optional)
Other Features	LAN Bypass function through latch relay (two pairs)
Expansion Interface	1 x Full-size Mini-PCle slot (SATA+USB)
Watchdog Timer	255 stepping for system reset 8 stepping for LAN Bypass
Power Supply	1 x 12V, 7A power adapter
OS Compatibility	Yocto, Linux

### Mechanical/Environmental

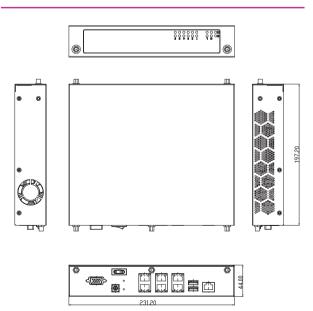
Form Factor	1U desktop
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
Operating Temperature	0°C to +40°C (+32°F to +104°F)
Humidity	10% - 95% RH, non-condensing
Chassis Material	Steel
Dimensions	44 mm (1.73") (H) x 231 mm (9.09") (W) x 197 mm (7.76") (D)
Weight (net/gross)	1.64 kg (3.62 lb)/2.69 kg (5.93 lb)
Certifications	CE/FCC Class B

### Ordering Information

Standard		
NA363-D6GI-C3758-US w/ LBP	1U compact network appliance with Intel® Atom® processor C3758, 4 R-DIMM/U-DIMM and 6 GbE LAN	
Optional		
<b>Optional</b> 5916E552000E	DB9F-RJ-45 1.8M console cable for Cisco	

### **Packing List**

- 1 x DC power adapter or 12V/7A
- 1 x Power cord
- 1 x SATA cable



Desktop Network Appliance Platform with Intel® Atom® Processor C3338/C3558/C3758 and up to 10 LAN for VPN, Network Bandwidth Controller, Firewall and UTM

### **Features**

- Intel® Atom® processor C3338/C3558/C3758 (Denverton)
- 4 DDR4 R-DIMM for up to 128GB of memory or U-DIMM for up to 64GB of memory
- 6 GbE RJ-45 and 4 SFP+ ports (Intel® i210)
- Wi-Fi/3G/LTE through PCI Express Mini Card slot for optional
- Supports Intel® QuickAssist Technology
- Supports Intel® Data Plane Development Kit (Intel® DPDK)
- Suitable for VPN, network bandwidth controller, firewall and UTM applications













### **Specifications**

System	
CPU	Intel® Atom® processor C3338/C3558/C3758 (Denverton)
Chipset	SoC integrated
Memory	4 x DDR4 R-DIMM, up to 128GB/4 x DDR4 U-DIMM, up to 64GB non-buffer non-ECC/ECC memory (Atom® C3558/C3758) 2 x DDR4 R-DIMM, up to 64GB/4 x DDR4 U-DIMM, up to 32GB non-buffer non-ECC/ECC memory (Atom® C3338)
BIOS	AMI SPI Flash BIOS
Storage	1 x 2.5" SATA3 HDD 1 x Full-size mSATA
Network Interface	6 x GbE RJ-45 (Intel® i210) (C3338) 6 x GbE RJ-45 (Intel® i210) and 2 x SFP+ (C3558) 6 x GbE RJ-45 (Intel® i210) and 4 x SFP+ (C3758)
1/0	1 x Console (RJ-type) 2 x USB 2.0 6 x RJ-45 2 x SFP+ or 4 x SFP+
TPM	Onboard TPM 1.2 (optional)
Other Features	LAN Bypass function through latch relay (one pair) for optional
Expansion Interface	1 x Full-size Mini-PCle slot (USB+PCle)
Watchdog Timer	255 stepping for system reset 8 stepping for LAN Bypass
Power Supply	1 x 12V, 5A power adapter (C3338/C3558) 1 x 12V, 7A power adapter (C3758)
OS Compatibility	Yocto, Linux

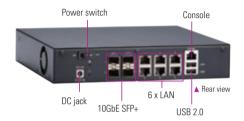
### Mechanical/Environmental

Form Factor	1U desktop
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate $$
Operating Temperature	0°C to +40°C (+32°F to +104°F)
Humidity	10% - 95% RH, non-condensing
Chassis Material	Steel
Dimensions	44 mm (1.73") (H) x 231 mm (9.09") (W) x 197 mm (7.76") (D)
Weight (net/gross)	1.64 kg (3.62 lb)/2.54 kg (5.60 lb) with 12V/5A adapter (C3338/C3558)
	1.64 kg (3.62 lb)/2.69 kg (5.93 lb) with 12V/7A adapter (C3758)
Certifications	CE/FCC Class B

### **Packing List**

- 1 x DC power adapter 12V/5A or 12V/7A
- 1 x Power cord
- 1 x SATA cable





### **Ordering Information**

Standard		
NA362-D6GI-C3338-US w/o LBP (P/N: E26E362102)	1U compact network appliance with Intel® Atom® processor C3338, 2 R-DIMM/U-DIMM and 6 GbE LANs	
NA362-D6GI-C3558-US w/o LBP (P/N: E26E362100)	1U compact network appliance with Intel® Atom® processor C3558, 4 R-DIMM/U-DIMM and 6 GbE LANs	
NA362-D8MI-C3558-US w/o LBP (P/N: E26E362105)	1U compact network appliance with Intel® Atom® processor C3558, 4 R-DIMM/U-DIMM, 6 GbE LANs and 2 10GbE SFP+ ports	
NA362-DAMI-C3758-US w/ LBP (P/N: E26E362101)	1U compact network appliance with Intel® Atom® processor C3758, 4 R-DIMM/U-DIMM, 6 GbE LANs and 4 10GbE SFP+ ports	

### Optional

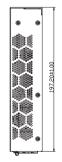
5916E552000E	DB9F-RJ-45 1.8M console cable for Cisco
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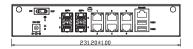
<sup>\*</sup> Specifications and certifications may vary based on different requirements.











Desktop Network Appliance Platform with Intel® Atom® Processor C2358 and 6 LAN for VPN, Network Bandwidth Controller, Firewall and UTM

### **Features**

- Intel® Atom® processor C2358 (Rangeley)
- 2 DDR3-1600 U-DIMM for up to 16GB of memory
- 6 GbE RJ-45 ports (Intel® i354 & Intel® i210)
- Wi-Fi/3G/LTE through PCI Express Mini Card for optional
- Supports Intel® QuickAssist Technology
- Supports Intel® Data Plane Development Kit (Intel® DPDK)
- Suitable for VPN, network bandwidth controller, firewall and **UTM** applications











### **Specifications**

System	
CPU	Intel® Atom® processor C2358 (2-core) (Rangeley)
Chipset	SoC integrated
Memory	2 x DDR3-1600 U-DIMM, up to 16GB non-buffer non-ECC/ ECC memory
BIOS	AMI SPI Flash BIOS
Storage	1 x 2.5" SATA HDD 1 x CompactFlash™ type-II 1 x Full-size mSATA (optional) 1 x CFast™ (optional)
Network Interface	6 x GbE RJ-45 (Intel® i354 & Intel® i210) 4 x GbE RJ-45 + 2 x GbE SFP (optional)
1/0	1 x Console (RJ-type) 2 x USB 2.0 6 x RJ-45
TPM	TPM 1.2 module (optional)
Other Features	LAN Bypass function through latch relay (two pairs) for optional
Expansion Interface	1 x Full-size mini-PCle slot (USB+PCle)
Watchdog Timer	255 stepping for system reset 8 stepping for LAN Bypass
Power Supply	1 x 12V, 5A power adapter
OS Compatibility	Yocto, Linux

#### Mechanical/ Environmental

1U desktop
Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
0°C to +40°C (+32°F to +104°F)
10% - 95% RH, non-condensing
Steel
44 mm (1.73") (H) x 231 mm (9.09") (W) x 197 mm (7.76")
2.35 kg (5.18 lb)/2.61 kg (5.75 lb)
CE/FCC Class B





### **Ordering Information**

Standard	
NA361-D6GI-2358-US (P/N: E26E361100)	1U compact network appliance with Intel® Atom® processor C2358 and 6 GbE LAN
NA361-D6GI-2358-US w/ LBP (P/N: E26E361101)	1U compact network appliance with Intel® Atom® processor C2358, 6 GbE LAN and LAN Bypass

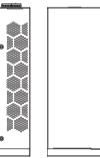
#### **Optional**

5916E552000E	DB9F-RJ-45 1.8M console cable for Cisco
* Specifications and certific	cations may vary based on different requirements.

### **Packing List**

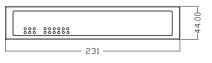
- 1 x DC power adapter 12V/5A
- 1 x Power cord
- 1 x SATA cable

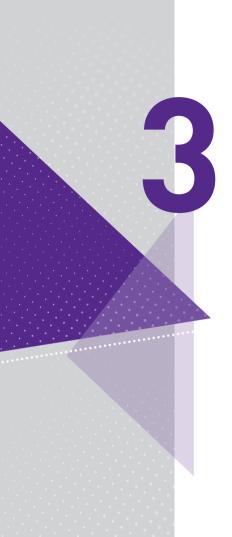












# DIN-rail Network Appliances

Axiomtek's DIN-rail network appliance series is a highly scalable and rugged hardware solution for critical infrastructure in harsh industrial environments. It has a DIN-rail form factor for fast installation, a wide operating temperature range for industrial-grade requirements and abundant I/O interfaces to connect to industrial control systems and equipment.

	Selection Guide		430
NEW	iNA100	DIN-Rail Industrial-grade Network Appliance Platform with Intel® Atom® x5-E3930 Processor and 4 LAN	431
	iNA600	DIN-Rail Industrial-grade Network Appliance with Intel® Core™	432

# Network Appliances

# **Edge Server Platforms**

### Selection Guide







Features \	Models	iNA100	iNA600
Form Factor		DIN-Rail, Wall Mount (optional)	DIN-Rail
Processor		Intel® Atom® x5-E3930 processor (Apollo Lake)	LGA1151 Intel® Xeon® (Coffee Lake)
Chipset		SoC integrated	Intel® C246
BIOS		AMI SPI Flash BIOS	AMI SPI Flash BIOS
	Technology	DDR3L-1866	DDR4-2600
Vlemory	Max Capacity	8GB non-ECC/ECC	32GB non-ECC/ECC
	Socket	1 x 204 pin SO-DIMM	2 x 288 pin U-DIMM
	Switch	N/A	Up to 16 port managed switch
Network nterface	Ethernet	4 x 10/100/1000 Mbps	4 x 10/100/1000 Mbps (1-port share with IPMI) Optional 16 x 10/100/1000 Mbps (L2 managed switch)
Storage		1 x mSATA 1 x 2.5" SSD /HDD	2 x 2.5" SSD 1 x SATA DOM
	Serial	1 x RS-232 1 x RS-232/422/485	1 x RS-232 1 x RS-232/422/485
	USB	2 x USB 3.0	2 x USB 3.0
/0	Management	N/A	N/A
	Display	1 x HDMI	1 x HDMl and 1 x VGA for Win 10 1 x HDMl or 1x VGA for Linux
Expansion Interface		1 x Half-size PCle Mini Card slot with SATA/USB signal 1 x Full-size PCle Mini Card slot with USB signal	1 x Full-size PCle Mini Card slot with USB /PCle signal 2 x PCle slot for riser card expansion
РМІ		N/A	IPMI 2.0
ТРМ		TPM 2.0	TPM 2.0
Fanless		Yes	Yes
Power Supply		12 VDC	24 VDC
Operating Temperature		-20°C to +60°C (-4°F to +140°F)	0°C to +60°C (+32°F to +140°F)
OS Support		Win 10, Linux	Win 10, Linux
Dimensions (H x W x D)		150 x 54 x 120 mm (5.9" x 2.13" x 4.72")	176 x 214 x 265 mm ( 6.93" x8.43" x10.43")
Certifications		CE/FCC class B	CE/FCC



DIN-Rail Industrial-grade Network Appliance Platform with Intel® Atom® x5-E3930 Processor and 4 LAN

### **Features**

- DIN-rail design with fanless and noiseless design
- Intel® Atom® x5-E3930 processor (Apollo Lake)
- One DDR3L-1866 SO-DIMM for up to 8GB of memory
- Four GbE RJ-45 (Intel® i211)
- PCI Express Mini Card slot for wireless module
- Supports 2 COM, 4 GbE LAN, 2 USB 3.0 and 1 HDMI
- Suitable ICS cybersecurity/critical infrastructure protection















### **Specifications**

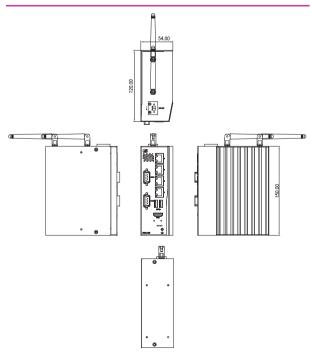
System	
CPU	Intel® Atom® x5-E3930 processor (Apollo Lake)
Chipset	SoC integrated
Memory	1 x DDR3L-1866 SO-DIMM, up to 8GB non-ECC/ECC memory
BIOS	AMI SPI Flash BIOS
Storage	1 x Half-size mSATA (occupied 1 x PCI Express Mini Card slot) 1 x Internal 2.5" SATA drive (9.5 mm height)
Network Interface	4 x GbE RJ-45 (Intel® i211)
1/0	2 x DB9 serial port (COM1 supports RS-232, COM2 supports RS-232/422/485) 4 x RJ-45 2 x USB 3.0 1 x HDMI 2 x Tact switch (1 x reset button, 1 x GPI button)
Other Features	LAN Bypass (one pair)
Expansion Interface	1 x Half-size PCle Mini Card slot with SATA/USB signal 1 x Full-size PCle Mini Card slot with USB signal
TPM	TPM 2.0
Watchdog Timer	255 stepping for system reset
Power Supply	1 x 2-pin terminal block 12V
OS Compatibility	Win 10, Linux (Yocto project)

#### Mechanical/Environmental

Form Factor	DIN-rail, Wall mount (optional)
LED	Power, HDD, GPIO programmable, LAN Bypass, Link/Act with transfer rate
Operating Temperature	-20°C to +60°C (-4°F to +140°F)
Humidity	10% - 95% RH, non-condensing
Chassis Material	Aluminum and steel
Dimensions	150 mm (5.9") (H) x 120 mm (4.72") (D) x 54 mm (2.13) (W)
Weight (net/gross)	1.1kg (2.43 lb)/2.0kg (4.41 lb)
Certifications	FCC class B/CE class B

### **Ordering Information**

Standard	
iNA100-D4GI-E3930-US (P/N: E27B140100)	DIN-rail industrial-grade network appliance platform with Intel® Atom® x5-E3930 processor and 4 GbE LAN
Optional	
2.5" SATA SSD or HDD	
DDR3L SO-DIMM	
mSATA	
Wall mount kits	
Wi-Fi Module	
3G/LTE Module	
12V, 60W adapter	
Power Cord	

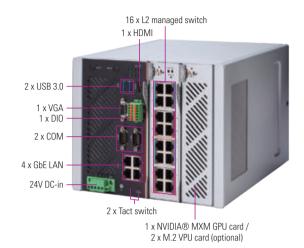


### **iNA600**

DIN-Rail Industrial-grade Network Appliance with Intel® Core™ i9/i7/i5/i3 & Xeon® Processor and Optional 16-port L2 Managed Switch

### **Features**

- Intel® Core™ i9/i7/i5/i3 & Xeon® processor (Coffee Lake)
- 2 DDR4-2666 U-DIMM for up to 32GB of memory
- 16 ports L2 managed switch (8 port PoE for optional)
- Supports IPMI 2.0 remote management
- Module design for flexible and fast provision
- Supports NVIDIA® MXM GPU card (optional)
- Supports Intel® Movidius™ M.2 VPU card (optional)
- For edge Al inference, IIoT security and function virtualization









### Specifications

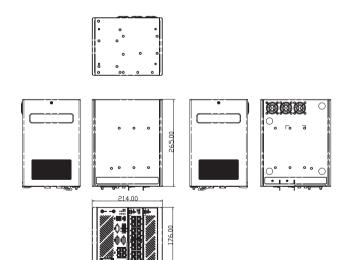
System	
CPU	LGA1151 socket 8th Intel® Core™ i9/i7/i5/i3 & Xeon® (Coffee Lake)
Chipset	Intel® C246
Memory	DDR4-2666 U-DIMM, up to 32GB non-ECC/ECC memory
BIOS	AMI SPI Flash BIOS
Storage	2 x 2.5" SATA 3.0 SSD 1 x SATA DOM
Network Interface	4 x GbE RJ-45 (Intel® i350) (1-port share with IPMI) 1 x LAN module (optional), max. up to 16 LAN ports
1/0	1 x VGA and 1 x HDMI for Win10 (duplicate the display) 1 x VGA or 1 x HDMI for Linux 2 x USB 3.0 2 x COM port COM1 supports RS-232 and COM2 supports RS-232/422/485 2 x Tact switch 2 x Antenna hole 1 x Power input connector 8 x DI0 (4-in/4-out) 4 x RJ-45 16 x RJ-45 (optional)
Expansion Interface	1 x PCle Mini Card slot (USB + PCle interface) 1 x PCle x8 MXM slot for GPU card (optional) 2 x PCle x4 M.2 or mPCle slot for VPU (optional)
TPM	TPM2.0
IPMI	1 x IPMI 2.0 (optional)
Watchdog Timer	255 stepping for system reset
Power Supply	1 x 4-pin terminal block 24V
OS Compatibility	Win 10. Linux

### **Mechanical/Environmental**

DIN-rail	
B x LED (Power, HDD, GPOx6)	
-20°C to +60°C (-4°F to +140°F)	
10% to 95% RH, non-condensing	
Steel	
214 mm (8.42") (W) x 265 mm (10.43") (D) x 176 mm (6.93") (H)	
Bkg (17.64 lb)/10kg (22.05 lb)	
CE	
1	

### Ordering Information

Standard			
(P/N: E27B600100)	DIN-rail industrial-grade network appliance with Intel® Core™ i9/i7/i5/i3 & Xeon® processor and optional 16-port L2 managed switch		





## LAN Modules

Axiomtek provides various LAN modules for network appliances, such as GbE copper module, GbE fiber module, 10GbE copper module, 10GbE fiber module and more.

 NEW AX93357
 Dual-Port 100 Gb/s QSFP28 Ethernet Module
 435

 AX93358
 Dual-Port 100 Gb/s Ethernet [QSFP28] Module with Intel® E810
 436

# Network Appliances

### Add-on Card

	Module	LAN Chipset	Ports	Copper/Fiber (SFP)	LAN Bypass
	AX93316-8GIL	Intel® 82580EB	8	8/0	4
	AX93326-8GIL	Intel® i210	8	8/0	4
	AX93316-8GI	Intel® 82580EB	8	8/0	0
1G	AX93322-8MIL	Intel® 82580EB	8	4/4	2
	AX93322-8FI	Intel® 82580EB	8	0/8	0
	AX93336-4GIL	Intel® i350	4	4/0	2
	AX93336-4GI	Intel® i211	4	4/0	0
	AX93336-4FI	Intel® i350	4	0/4	0
	Module	LAN Chipset	Ports	Copper/Fiber (SFP)	LAN Bypass
	AX93316-8GIL	Intel® XL710	4	0/4	0
10G	AX93326-8GIL	Intel® 82599ES	2	0/2	0
	AX93316-8GI	Intel® 82599ES	2	0/2	1
	AX93322-8MIL	Intel® X540	2	2/0	1
25G	Module	LAN Chipset	Ports	Copper/Fiber (SFP)	LAN Bypass
25G	AX93332-25FI	Intel® XXV710	2	0/2	0
400	Module	LAN Chipset	Ports	Copper/Fiber (SFP)	LAN Bypass
40G	AX93331-2QFI	Intel® XL710	2	0/2	0
	Module	LAN Chipset	Ports	Copper/Fiber (SFP)	LAN Bypass
100G	AX93357	Intel® E810	2	0/2	0
	AX93358	Intel® E810	2	0/2	0

### 100Gbps Modules





- Intel® Ethernet Controller E810
- 2 x 100GbE QSFP28 Cages
- Enhanced DPDK for Network Functions



### NIC Module - AX93358

- Intel® Ethernet Controller E810 2 x 100GbE QSFP28 Cages
- Enhanced DPDK for Network Functions

### **PoE Modules**

### 4-port PoE Module - AX93367



- 4 x PoE RJ45 ports
- Supports max up to 120W
- By Project



### 8-port PoE Module - AX93368

- Intel® Ethernet Controller i350
- IEEE 802.3af/at
- 8 x PoE RJ45 ports
- Supports 30W per port max up to 240W

### **RAID Module**



### AX98626

- ASMEDIA ASM1062R
- Raid function: 0/1
- 2 x 2.5 HDD/SSD bracket



### Dual-Port 100 Gb/s QSFP28 Ethernet Module

### **Features**

- Supports multiple port speeds with a single architecture: 100/50/25/10/1GbE
- Intel® Ethernet Adaptive Virtual Function (Intel® Ethernet AVF)
- Enhanced server virtualization: 256 VFs, 768 VSIs
- Enhanced Data Plane Development Kit (DPDK)
- Suitable for data centers or cloud computing



### **Specifications**

Basic	
Controller	Intel® E810-CAM2
Speed/Connector	2 x QSFP28
Interface	PCI Express 3.0/4.0 x16
Compatibility	NA870

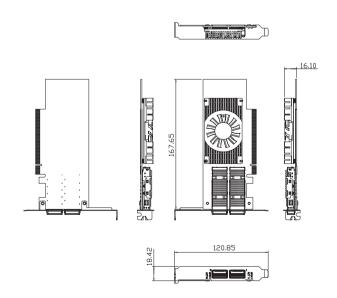
Features		
LAN Bypass	N/A	
Jumbo Frames	Yes	
Virtualization Features	SR-IOV with up to 256 Virtual Functions (VF)	
LFD Definition	Green	

### Mechanical / Environmental

Cooling	Locking heatsink with fan
Operating Temperature	0°C to +40°C (+32°C to +140°C)
Humidity	10% - 90% RH, non-condensing
Dimensions	167.54 mm (W) x 120.05 mm (D) x 18.4 2mm (H)

### **Ordering Information**

Standard	
AX93357 (P/N: E393357100)	Dual-Port 100 Gb/s QSFP28 module with Intel® E810





### Dual-Port 100 Gb/s Ethernet (QSFP28) Module with Intel® E810

### **Features**

- Supports multiple port speeds with a single architecture: 100/50/25/10/1GbE
- Intel® Ethernet Adaptive Virtual Function (Intel® Ethernet AVF)
- Enhanced server virtualization: 256 VFs, 768 VSIs
- Enhanced Data Plane Development Kit (DPDK)
- Suitable for data centers or cloud computing



### **Specifications**

Basic	
Controller	Intel® E810-CAM2
Speed/Connector	2 x QSFP28
Interface	2 x Gen 3 PCle x8 (Double slot width)
Compatibility	NA870

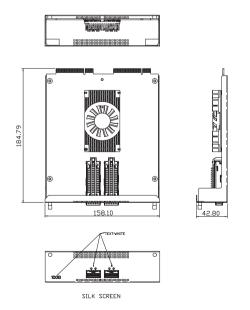
Features			
	LAN Bypass	N/A	
	Jumbo Frames	Yes	
	Virtualization Features	SR-IOV with up to 256 Virtual Functions (VF)	
	LED Definition	Green	

Mechanical	/	Environmental
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Cooling	Locking heatsink with fan
Operating Temperature	0°C to +40°C (+32°C to +140°C)
Humidity	10% - 90% RH, non-condensing
Dimensions	158.10 mm (W) x 184.78 mm (D) x 42.80 mm (H)

### **Ordering Information**

Standard	
AX93358	Dual-Port 100 Gb/s QSFP28 module with Intel E810, double
(P/N: E393358100)	width LAN tray



### NOTES



**Axiomtek** maintains a global network of international subsidiaries and distributors representing the Axiomtek brand in more than 40 countries.

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