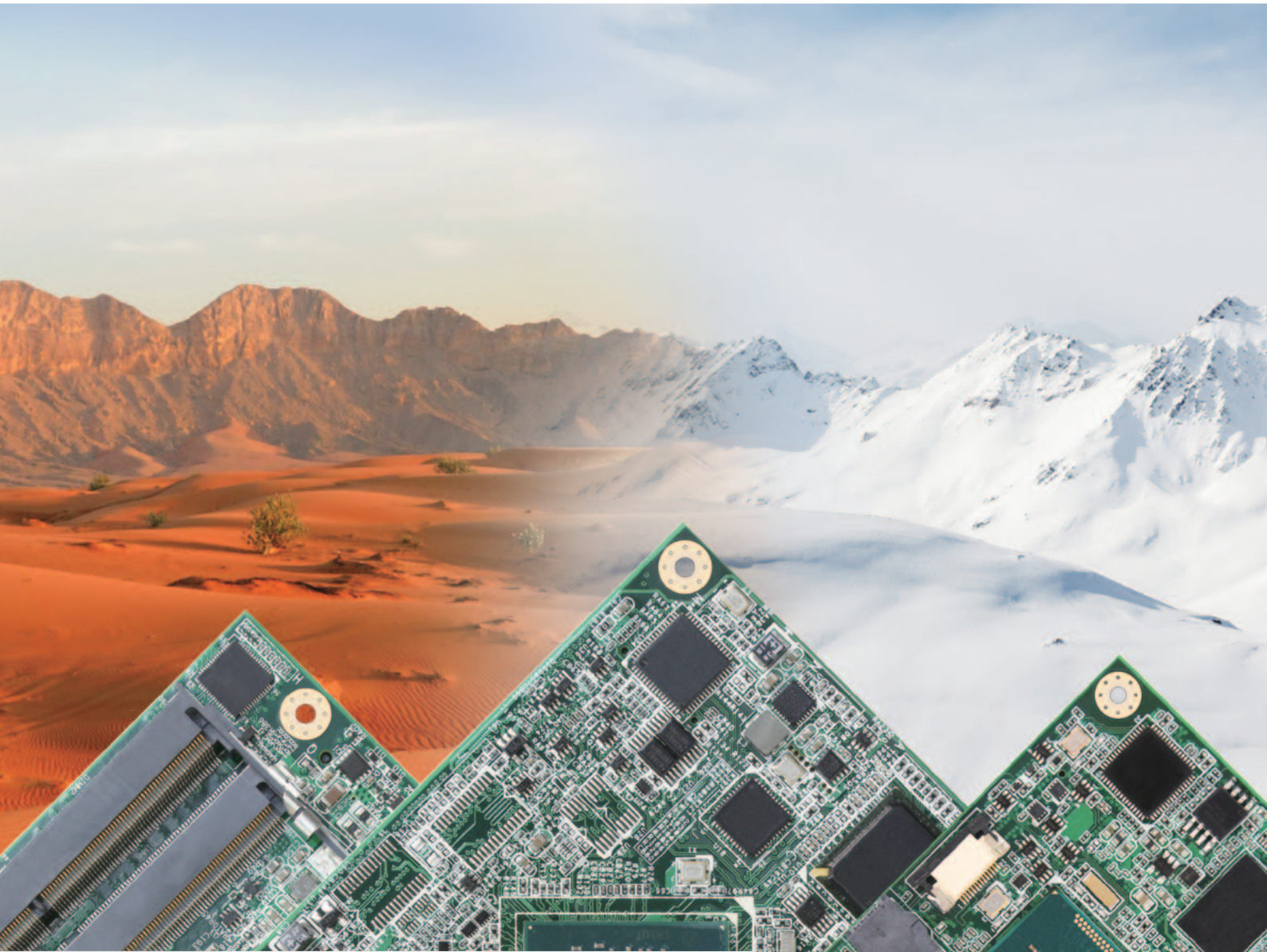




Embedded Computing



Computer-on-modules



Single Board Computers



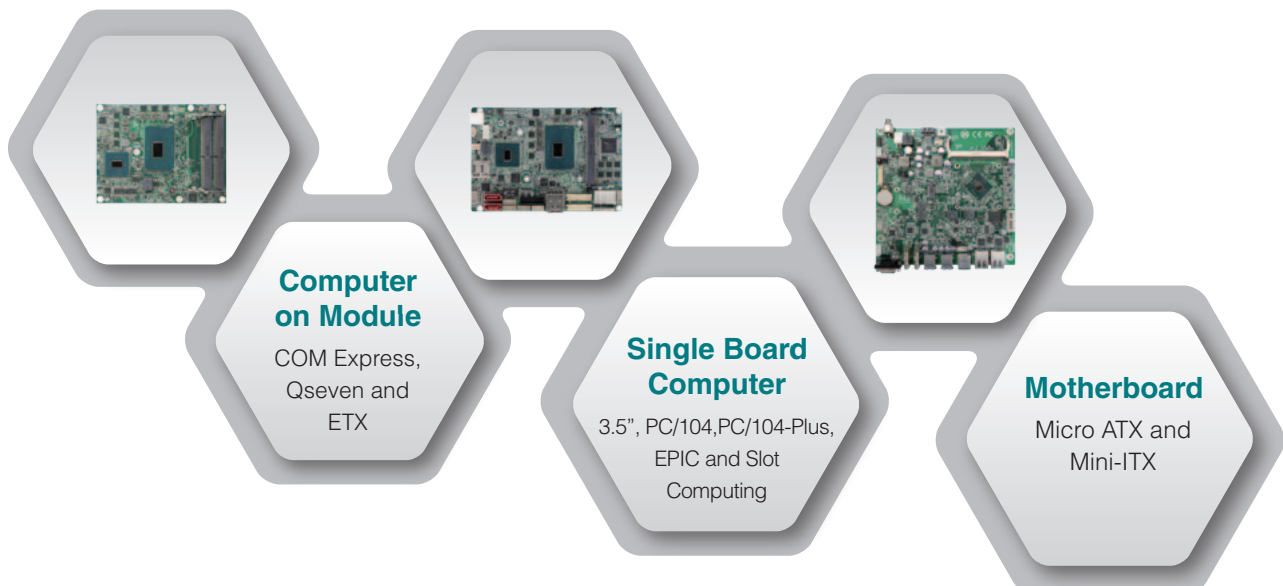
Industrial Motherboards

About ARBOR

ARBOR is a global provider of dedicated industrial IoT computing and mobility solutions. ARBOR offers comprehensive system integration, customer-centric design services, embedded systems, automation products, and global logistics support. We cooperate closely with our partners to develop complete solutions for a wide array of applications across a diverse range of industries. Our mission is to enable an intelligent planet by providing mobility and embedded computing products that make working and living smarter. With ARBOR, there is no limit to how smart your business can be!

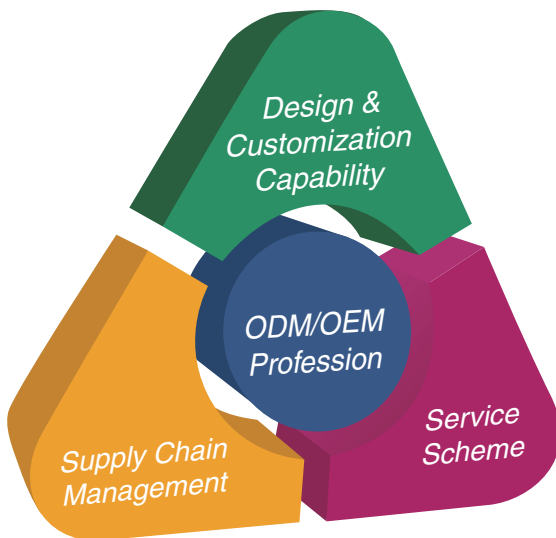
Full Lineup of Embedded Boards

ARBOR features a full range of embedded computing products powered by industry standard materials and form factors. Based on a modular design, ARBOR's board form factors include COM Express Mini/Compact/Basic, Qseven, ETX/XTX, PC/104 & PC/104-Plus, 3.5"/EPIC Compact Size, Slot SBC, Mini-ITX, Micro-ATX and others, covering a wide range of applications. Standard form factors allow customers to seamlessly upgrade without compatibility issues.



We Make Business Easy

Flexible, On-Time & Innovative

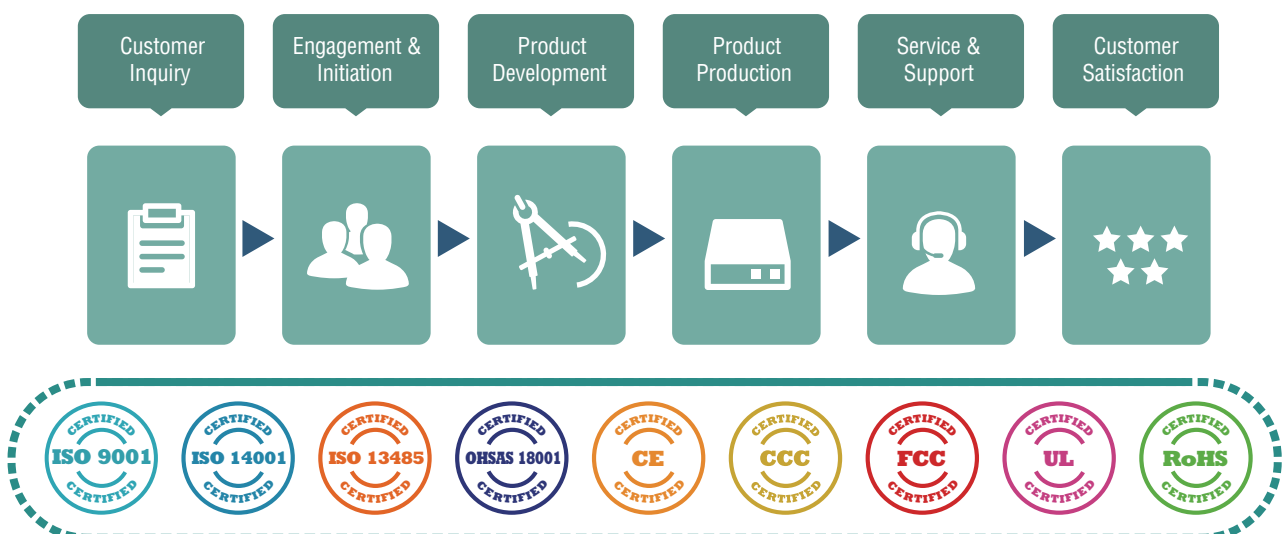


Design and Manufacturing Services

ARBOR Design & Manufacturing Services (ADMS) aims to help customers get the most out of their technology investments through customized design, manufacturing, quality assurance, logistics, and after-sales support. We leverage the industry's best practices, including early planning, prototype delivery and customer services, to provide customers systematic, customized and time-to-market product development. With our responsive workflow, experienced R&D technologies, and integrated service, ARBOR delivers high-quality and speedy OEM/ODM services to maximize your business success.

Manufacturing and Quality Assurance

With full ISO compliance, ARBOR is committed to delivering high-quality products that following international standards and well-defined production processes. As an experienced IPC manufacturer and solution provider, all of ARBOR's products are certified to specific regulations according to different market requirements. This enables us to provide the flexibility to satisfy the varying needs of global customers anywhere in the world.



Trusted Embedded Computing Platform

ARBOR offers advanced embedded technology and a dedicated service team to help you get the best ROI



Full-service OEM/ODM Solutions

Our dedicated RD/BIOS service team provides customization support from initial prototype design all the way through development, manufacturing, assembly, logistics, and after sales services.



Wide Temperature Design & Validation

ARBOR COM Express modules can be operated in an extended temperature range of -40°C to $+85^{\circ}\text{C}$, and have passed stringent vibration tests. The exclusive use of high quality components and highly effective thermal solutions ensure that the modules are rugged enough for use in harsh environments.



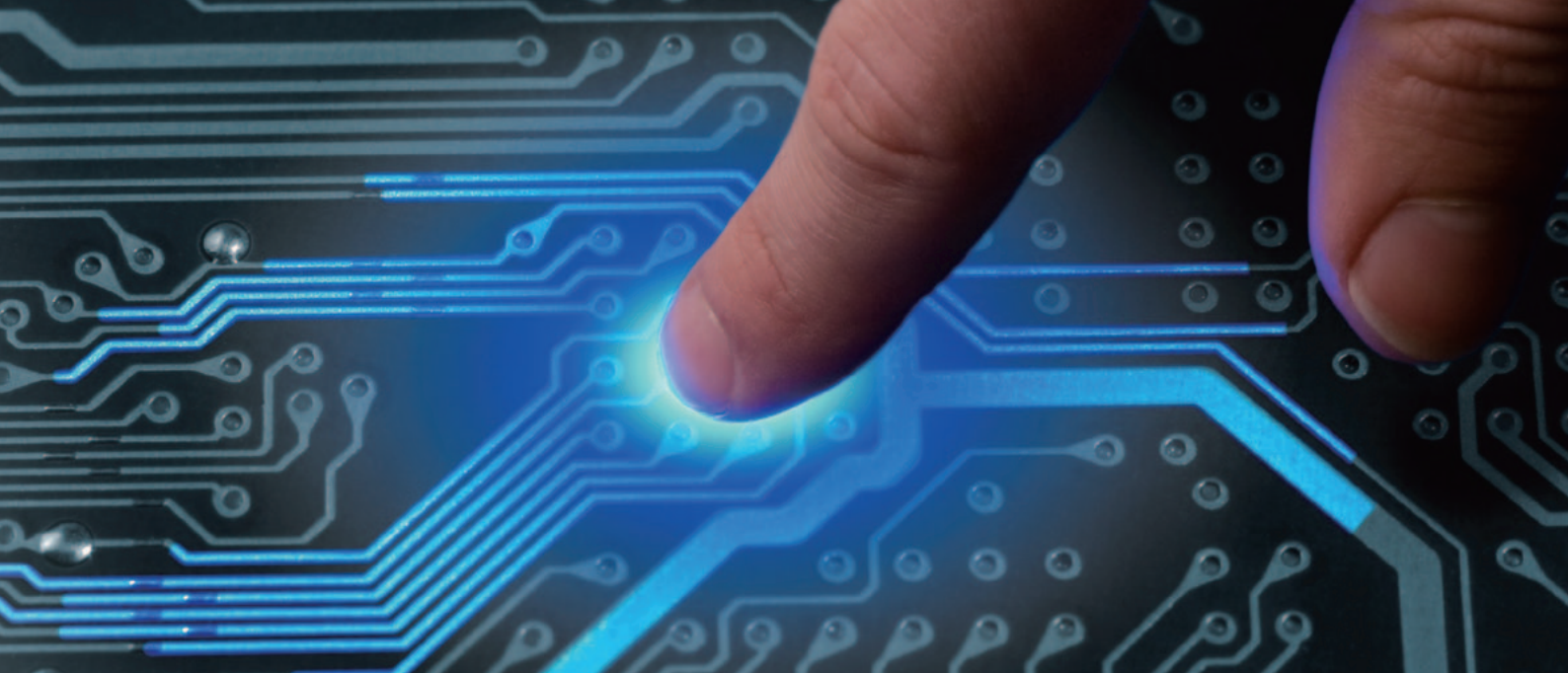
In-house Technologies and Expertise

ARBOR has extensive expertise in power MCU design for automation control. Its BIOS Anti-Crash Technology (ACT) enables embedded systems to recover BIOS code from a secondary on-board flash memory and restart in case of a system BIOS failure.



Conformal Coating Service

To provide maximum PCB operational lifespan and functionality, ARBOR offers automated conformal coating services to protect components and circuitry from dust, fungus, moisture and salt spray.



15 Years Longevity Commitment

Most of ARBOR board products carry a life cycle commitment of 15 years from first production. ARBOR will notify customers in advance of component revisions or End-of-Life scheduling, and provide options in qualifying updated components and modules.



Strategic Partner Ecosystem

ARBOR extends our technology and business capability through a powerful alliance ecosystem of industry-leading companies including Intel®, AMD®, Microsoft, as well as the leading standards development organizations, such as PICMG & SGeT.



Quality Assurance

ARBOR's products are certified to comply with applicable regulatory bodies for their application to determine the quality of products, as well as ensure operational safety in embedded applications.



Medical Regulation Compliance

ARBOR is ISO 13485 and ISO 14971 certified, filling the requirements for implementing a comprehensive quality management system (QMS) for the design and manufacture of medical devices.

Embedded Hardware & Software Design Competency

Accelerating your embedded development with lower risk



Hardware Services

ARBOR offers a full lineup of embedded boards in different form factors to fulfill different industrial chassis. In addition to supporting the strong mechanical & thermal solution, our reliable components feature industrial-grade chipsets, and have passed stringent validation testing to an operating temperature range of up to -40°C to 85°C. ARBOR also has extensive expertise in power MCU design.



Software Services

- Embedded BIOS/bootloaders
- Embedded OS/licenses
- Embedded tools
- Trusted Platform Module (TPM)
- SHA1
- BIOS Anti-Crash Technology (ACT)



Validation & Testing

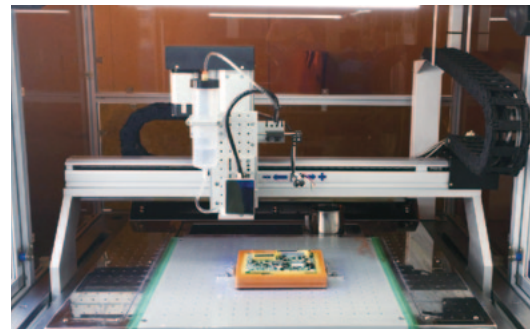
ARBOR provides rigorous product verification to ensure its ruggedness and performance to meet customers' requirements.

- EMI/EMC validation
- Vibration, shock and drop tests
- Humidity and temperature tests
- Thermal analysis
- Performance & compatibility tests

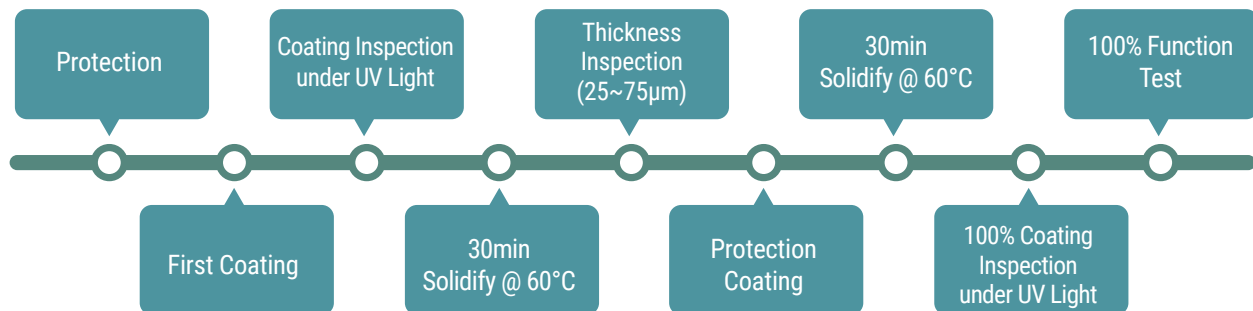


Automated Conformal Coating Services

ARBOR provides the automated conformal coating service, with an acrylic coating being applied to the whole surface of the board except contact pins, to protect the components & circuitry against dust, fungus, moisture and salt spray. Conformal coating also prevents short circuits and corrosion of metal between conductors.



Coating Flow Chart



Supported Form Factors

CPU on Module	
Qseven	70 x 70 mm
COM Express Mini	84 x 55 mm
COM Express Compact	95 x 95 mm
COM Express Basic	125 x 95 mm
ETX	114 x 95 mm

Single Board Computer	
PC/104	96 x 90 mm
3.5"	146 x 102 mm
EPIC	165 x 115 mm
Slot Computing	338 x 122 / 185 x 122mm
Industrial Motherboard	
Mini-ITX	170 x 170 mm
Micro-ATX	244 x 244 mm

Building a Trustworthy, long-term Service

Increasing the value of applications at
every level of evolution

Extended Product Lifecycle

Unlike commercial motherboards with a typical lifespan of 12 to 18 months, motherboards in embedded computing applications, where design processes can last as long as two years, 3-5 year life cycles are a must. To deliver long-life products, ARBOR selects key components that offer long-life availability, and have adopted Product Lifecycle Management (PLM) systems to manage product design, collaboration, and manufacturing processes effectively.

Parts do go End-of-Life, but ARBOR manages that process by making sure component revision and EOL notifications are made at least 180-days before occurring, helping customers facilitate smooth transitions. Most of ARBOR board products carry a life cycle commitment of 15 years from first production. ARBOR will notify customers in advance of component revisions or End-of-Life scheduling, and provide options in qualifying updated components and modules.



25 years of embedded experience



Up to 15 years longevity commitment from
first production



EOL notifications are made within 180 days
before occurring



Ecosystem Partners

To deliver up-to-date technologies and solutions to our clients, ARBOR extends our technology and business capability through a powerful alliance ecosystem of industry-leading companies and organizations. Together, we provide our customers the top notch services to streamline their projects.



IoT Solutions
Alliance



Full Experience of Industry Standards

ARBOR holds the most required ISO certification and industry standards to ensure our products and manufacturing capabilities meet the worldwide regulations and standards compliance. Our customers have no need to worry about getting documents for their product development. With our internal and external test laboratories, this allows manufacturers to circulate industrial products freely within the internal market of the USA, Europe and China.

Certified Quality Assurance

- ISO 9001:2008
- ISO 14001
- CE
- FCC

Medical Regulation Compliance

- IEC60601-1, EN60601-1, EN60601-1-2
- UL60601-1
- ISO 13485
- ISO 14971



Computer on Modules

Building your embedded projects
easier and faster!

Computer on Module perfectly meets your custom application requirements while helping you reach your goals for time-to-market, saving money, design flexibility and risk minimization. With a versatile portfolio of low-power CPU available from Intel®, AMD® and VIA supporting fanless operation, your embedded system will enjoy the benefits of high CPU performance per watt. ARBOR's Computer on Module supports different form factor includes COM Express, Qseven and ETX System on Module to meet every type of demands in your applications.



PICMG Standard Compliant

As an active member of PICMG, ARBOR's COM Express comes with the latest module specifications and pinout definitions.



High Efficient Thermal Solution

ARBOR uses specially CNC-machined aluminum heat-spreaders to contact hot spots in order to efficiently distribute the heat to the outside heat sink.



Conformal Coating Services

Upon customer request, this optional service that protects the components & circuitry against dust, fungus, moisture and salt spray.

Supported Form Factors



COM Express



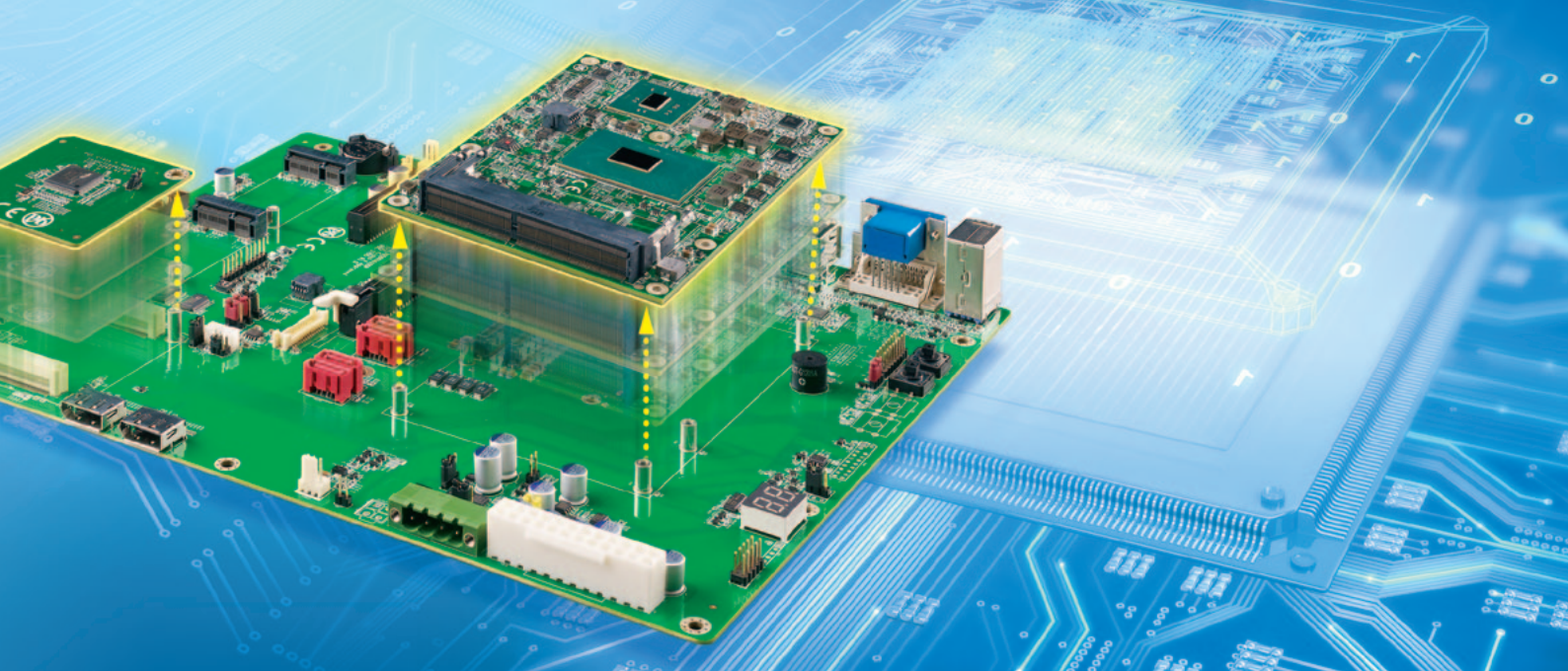
ETX



Qseven



Carrier Board



Quick, Easy Way to Start Your Own Embedded Projects

COM Express Type 6 Starter Kit

Kit Contents

- COM Express Type 6 CPU module of your choice
- RAM module
- ATX size reference carrier board
- Selected hardware and software components.
- All required accessories
- Quick installation guide

Get starter kit here



Target Applications



Medical Equipment

- Ultrasounds
- X-rays



Industrial Automation

- Industrial imaging
- HMI

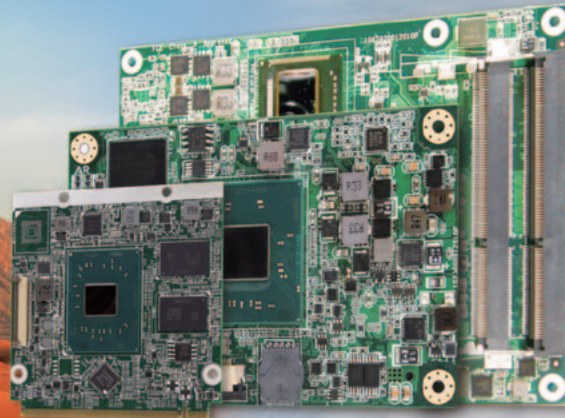


Harsh Environment Applications

- Heavy duty industry
- Field works, military

Single Board Computers

Meet industrial grade design and quality



ARBOR Single Board Computer (SBC) series ranging from 3.5", PC/104, PC/104-Plus and EPIC, to a wide range of full-size and half-size Slot Computing boards. ARBOR's SBCs are designed around the powerful core logic embodied within the chipsets from Intel® and AMD®. Highly integrated designs allow them to fit the minimal /critical space requirements of most embedded applications.

Moreover, ARBOR's slot based SBCs are all based on open PICMG standards. All of these slot-based SBCs are ideally suited for applications in compact and rugged enclosures suited for mission-critical applications.



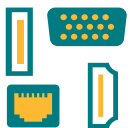
Reliable and Rugged Designs

- Wide temperature design option
- Industrial-grade components
- Conformal coating services



Ready-to-use Platforms

- X86 architecture, Intel® & AMD®
- PICMG, SGeT standards compliance



Extensive I/O Interfaces

- Expandable by PCI Express, Mini PCI Express and M.2 slots
- I/O extension options



Conformal Coating Services

To protect the components & circuitry against dust, fungus, moisture and salt spray.

Supported Form Factors



PC/104



3.5" Compact



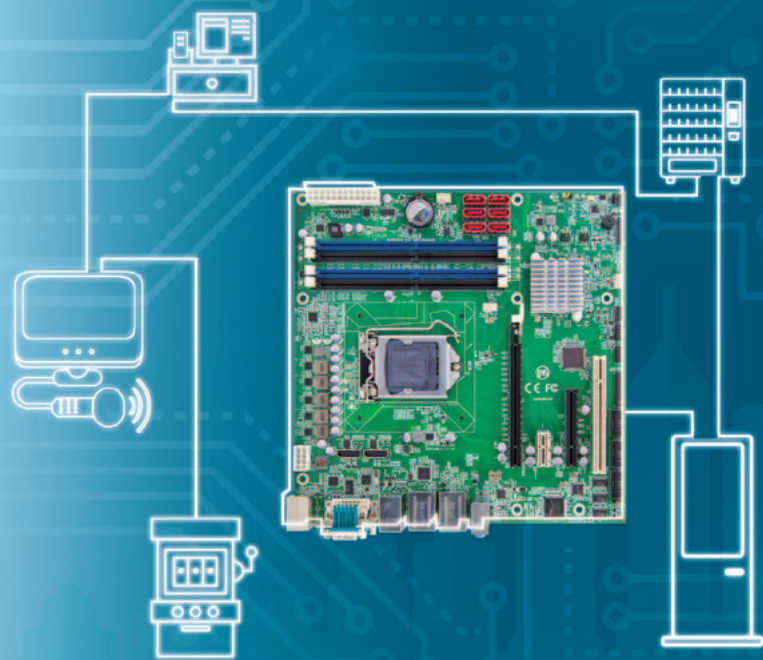
EPIC



Slot Computing

Industrial Motherboards

Minimal configuration and maintenance required



ARBOR offers plenty of industrial motherboard series in different form factors including Micro ATX and Mini-ITX. All industrial motherboards are designed with Intel® chipsets based on demand from system integrators, and ideal alternatives to platforms needing industrial features such as longevity, reliability and manageability, including many controller, server and gaming machine applications.



Customization & Configuration

- One-stop SW/HW integration
- Extensive I/O expansion



Reliability & Longevity

- Fanless Thermal Solution System
- Long term availability 10+ years
- Extended temp. of -20~70°C option
- Wide-Range DC Input



Ready for Vertical Markets

- Standards form factors for easy integration
- Industrial design for the complete product life cycle

Supported Form Factors



Mini-ITX



Micro-ATX

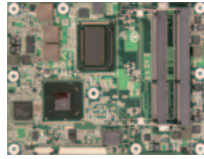
Selection Guide

Wide-Temperature CPU Modules



Model	QSM-662E	NAO-660E	COM-880E	COM-870E
Form Factor	Qseven® R1.2	COM Express® Mini Type 10	COM Express® Basic Type 6	COM Express® Basic Type 6
Dimension	70 x 70 mm	84 x 55 mm	125 x 95 mm	125 x 95 mm
Processor	Intel® Atom™ Processor E3800 family E3825 1.33GHz E3845 1.91GHz	Intel® Atom™ Processor E3800 family E3825 1.33GHz E3845 1.91GHz	3 rd Gen. Intel® Core™ Processor i7-3517UE 1.7GHz i7-3612QE 2.1GHz	Intel® Celeron® Processor 827E 1.4GHz
Chipset	N/A	N/A	QM77	HM65
Memory	Soldered onboard 2GB DDR3L SDRAM	Soldered onboard 2GB DDR3L SDRAM	2 x DDR3 SO-DIMM Sockets	2 x DDR3 SO-DIMM Sockets
Video Output	Analog RGB (via RSV Pin), 1 x DDI port	1 x DDI port	Analog RGB, 3 x DDI ports	Analog RGB, 3 x DDI ports
LVDS	Dual Channels 24-bit	Single Channel 24-bit	Dual Channels 24-bit	Dual Channels 24-bit
Audio	HD link	HD link	HD link	HD link
Ethernet	1 x GbE	1 x GbE	1 x GbE	1 x GbE
Mass Storage	2 x SATA300, eMMC 4.5 (OEM request)	2 x SATA300	2 x SATA300, 2 x SATA600	2 x SATA300, 2 x SATA600
RS-232	N/A	2 x RX/TX	N/A	N/A
RS-232/422/485	N/A	N/A	N/A	N/A
USB 2.0	8	8	8	8
USB 3.0	N/A	1	4	N/A
Digital I/O	N/A	N/A	8-bit Programmable	8-bit Programmable
Expansion Bus	3 x PCIe x1, SDIO, I2C	3 x PCIe x1, SDIO, LPC, I2C	7 x PCIe x1 1 x PClex16 Gen3, LPC	7 x PCIe x1 1 x PClex16 Gen3, LPC
Power Input	DC 5V, 5VSB	DC 12V / 5V Auto Detect	DC 12V, 5VSB	DC 12V, 5VSB
Operating Temperature	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)

All WT boards are BTO request

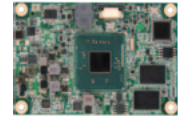
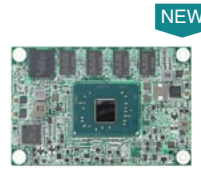


Model	COM-873E	EmQ-i2401	EmQ-i240A	EmQ-i2200
Form Factor	COM Express® Basic Type 2	Qseven® R2.0	Qseven® R2.1	Qseven® R2.0
Dimension	125 x 95 mm	70 x 70 mm	70 x 70 mm	70 x 70 mm
Processor	2 nd Gen. Intel® Core™ i7-2610UE 1.5GHz, Celeron® 827E 1.4GHz	Intel Celeron® Processor N3350 2.4GHz / Intel Pentium® Processor N4200 2.5GHz	Intel Celeron® Processor N3350 2.4GHz / Intel Pentium® Processor N4200 2.5GHz	Intel® Celeron Processor N3160
Chipset	QM67/ HM65	N/A	N/A	N/A
Memory	2 x DDR3 SO-DIMM Sockets	Soldered onboard 4GB DDR3L SDRAM	Soldered onboard 8GB LPDDR4 SDRAM	Soldered onboard 4GB DDR3L SDRAM
Video Output	Analog RGB, 1 x DDI*	1 x DDI port	1 x DDI port	1 x DisplayPort / HDMI selectable port
LVDS	Dual Channels 24-bit	Dual Channels 24-bit	Dual Channels 24-bit	Dual Channels 24-bit
Audio	HD link	HD link	HD link	HD link
Ethernet	1 x GbE	1 x GbE	1 x GbE	1 x GbE
Mass Storage	2 x SATA300, 2 x SATA600	2 x SATA600, eMMC (OEM Request)	2 x SATA eMMC 5.0 (OEM Request)	2 x SATA600, eMMC (OEM Request)
RS-232	N/A	N/A	N/A	1 x RX/TX
RS-232/422/485	N/A	N/A	N/A	N/A
USB 2.0	8	4	6	4
USB 3.0	N/A	N/A	2	2
Digital I/O	8-bit Programmable	N/A	N/A	N/A
Expansion Bus	5 x PCIe x1, 1 x PCIe x16, LPC, 4 x PCI	4 x PCIe x1, SDIO, I2C	4 x PCIe x1, I2C, SDIO	3 x PCIe x1, SDIO, I2C
Power Input	DC 12V, 5VSB	DC 5V, 5VSB	DC 5V, 5VSB	DC 5V
Operating Temperature	-40 ~ 85°C (-40 ~ 185°F)	-40~85°C (-40 ~ 185°F)	-20~ 85°C (-4~185°F)	-20~70°C (-4 ~ 158°F)

All WT boards are BTO request

*Note: Connector on CPU module

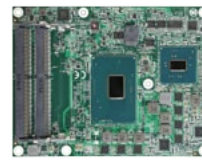
CPU Modules



Model	EmQ-i2301	EmQ-a50M1	EmNANO-i2402	EmNANO-i2300
Form Factor	Qseven® R1.2	Qseven® R1.2	COM Express® Mini Type 10	COM Express® Mini Type 10
Dimension	70 x 70 mm	70 x 70mm	84 x 55 mm	84 x 55 mm
Processor	Intel® Atom™ Processor E3800 family E3825 1.33GHz, E3845 1.91GHz	AMD G-Series Processor G-T40E 1.0GHz	Intel Celeron® Processor N3350 2.4GHz / Intel Pentium® Processor N4200 2.5GHz	Intel® Atom™ Processor E3800 family E3825 1.33GHz, E3845 1.91GHz
Chipset	N/A	A50M	N/A	N/A
Memory	Soldered onboard 2GB DDR3L SDRAM, 4GB (OEM request)	Soldered Onboard 2GB DDR3L SDRAM	Soldered onboard 4GB DDR3L SDRAM	Soldered onboard 2GB DDR3L SDRAM
Video Output	Analog RGB (via RSV Pin), 1 x DDI port	Analog RGB (via RSV pin), 1 x DDI port	1 x DDI port	Analog RGB (via RSV pin), 1 x DDI port
LVDS	Dual Channels 24-bit	Dual Channels 18/24-bit	Single Channel 24-bit	Single Channel 24-bit
Audio	HD link	HD link	HD link	HD link
Ethernet	1 x GbE	1 x GbE	1 x GbE	1 x GbE
Mass Storage	2 x SATA300, eMMC 4.5 (OEM request)	2 x SATA600, 8GB NANDrive (OEM request)	2 x SATA600	2 x SATA300
RS-232	N/A	N/A	1 x RX/TX	2 x RX/TX
RS-232/422/485	N/A	N/A	N/A	N/A
USB 2.0	8	8	8	8
USB 3.0	N/A	N/A	2	1
Digital I/O	N/A	N/A	N/A	N/A
Expansion Bus	3 x PCIe x1, SDIO, I2C	4 x PCIe x1, LPC	4 x PCIe x1, SDIO, I2C	2 x PCIe x1, SDIO, LPC, I2C
Power Input	DC 5V, 5VSB	DC 5V, 5VSB	DC 12V / 5V Auto Detect	DC 12V / 5V Auto Detect
Operating Temperature	-20~70°C (-4 ~ 158°F)	-20~70°C (-4 ~ 158°F)	-20~ 85°C (-4~185°F)	-20~70°C (-4 ~ 158°F)



Model	EmNANO-a56M0	EmETXe-i90U0	EmETXe-i89U0	EmETXe-i88U0
Form Factor	COM Express® Mini Type 10	COM Express® Compact Type 6	COM Express® Compact Type 6	COM Express® Compact Type 6
Dimension	84 x 55 mm	95 x 95 mm	95 x 95 mm	95 x 95 mm
Processor	AMD G-Series Processor GX-210HA 1.0GHz	7 th Gen. Intel® Core™ Processor i7-7600U 3.9GHz i5-7300U 3.5GHz	6 th Gen. Intel® Core™ Processor i7-6600U 2.6GHz i5-6300U 2.3GHz i3-6100U 2.3GHz Celeron® 3955U 2.3GHz	5 th Gen. Intel® Core™ Processor i7-5650U 2.2GHz
Chipset	N/A	N/A	N/A	N/A
Memory	Soldered onboard 2GB DDR3L SDRAM	2 x DDR4 SO-DIMM sockets	2 x DDR4 SO-DIMM Sockets	1 x DDR3L SO-DIMM Sockets
Video Output	Analog RGB (via RSV pin), 1 x DDI port	2 x DDI ports	2 x DDI ports	2 x DDI ports
LVDS	Single Channel 18-bit	Dual Channels 24-bit LVDS	Dual Channels 24-bit	Dual Channels 24-bit
Audio	HD link	HD link	HD link	HD link
Ethernet	1 x GbE	1 x GbE	1 x GbE	1 x GbE
Mass Storage	2 x SATA600	2 x SATA eMMC 5.0 (OEM Request)	2 x SATA600, eMMC 5.0 (OEM Request)	3 x SATA600
RS-232	N/A	2 x RX/TX	2 x RX/TX	N/A
RS-232/422/485	N/A	N/A	N/A	N/A
USB 2.0	8	8	8	8
USB 3.0	2	4	4	2
Digital I/O	8-bit Programmable	8-bit Programmable	8-bit Programmable	8-bit Programmable
Expansion Bus	3 x PCIe x1, LPC	8 x PCIe x1, I2C	8 x PCIe x1, I2C	8 x PCIe x1, LPC
Power Input	DC 12V, 5VSB	DC 5V~20V, 5VSB	DC 5~20V, 5VSB	DC 12V, 5VSB
Operating Temperature	-20~70°C (-4 ~ 158°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)



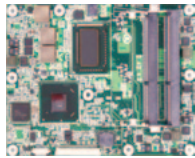
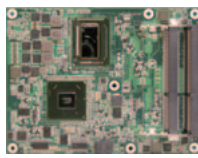
NEW

NEW

Model	EmETXe-i87U2	EmETXe-i2309	EmETXe-a58M0	EmETXe-i90M0	EmETXe-i90M3
Form Factor	COM Express® Compact Type 6	COM Express® Compact Type 6	COM Express® Compact Type 6	COM Express® Compact Type 6	COM Express® Compact Type 6
Dimension	95 x 95 mm	95 x 95 mm	95 x 95 mm	125 x 95 mm	125 x 95 mm
Processor	4 th Gen. Intel® Core™ Processor i7-4650U 1.7GHz	Intel® Atom™ Processor E3845 1.91GHz	AMD G-series Processor GX-412HC 1.6GHz	7 th Gen. Intel® Core™ Processor i7-7820EQ 3.7GHz i5-7442EQ 2.9GHz	7 th Gen. Intel® Core™ i7-7820EQ 2.8GHz i5-7442EQ 2.7GHz
Chipset	N/A	N/A	N/A	QM175	QM175
Memory	1 x DDR3L SO-DIMM Socket	1 x DDR3L SO-DIMM Socket	1 x DDR3L SO-DIMM Socket	2 x DDR4 SO-DIMM Sockets	2 x DDR4 SO-DIMM Sockets
Video Output	2 x DDI ports	Analog RGB, 1 x DDI port	Analog RGB, 2 x DDI port	3 x DDI ports	Analog RGB, 2 x DDI ports
LVDS	Dual Channels 24-bit	Dual Channels 24-bit	N/A	Dual Channels 24-bit LVDS	Dual Channels 24-bit LVDS
Audio	HD link	HD link	HD link	HD link	HD link
Ethernet	1 x GbE (PHY)	1 x GbE	1 x GbE	1 x GbE	1 x GbE
Mass Storage	3 x SATA600	2 x SATA300, eMMC 4.5 (OEM request)	2 x SATA600	4 x SATA600	4 x SATA600
RS-232	N/A	1 x RX/TX	N/A	2 x RX/TX	2 x RX/TX
RS-232/422/485	N/A	N/A	N/A	N/A	N/A
USB 2.0	8	8	7	8	8
USB 3.0	2	1	2	4	4
Digital I/O	8-bit Programmable	N/A	N/A	8-bit Programmable	8-bit Programmable
Expansion Bus	8 x PCIe1, LPC	7 x PCIe1, LPC, SDIO	7x PCIe1, SDIO	8 x PCIe1, 1 x PCIe16, I2C, LPC	8 x PCIe1, 1 x PCIe16, I2C, LPC
Power Input	DC 12V, 5VSB	DC 12V	DC 12V, 5VSB	DC 8.5V-20V, +5VSB	DC 8.5V-20V, +5VSB
Operating Temperature	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	0 ~ 60°C (32 ~ 140°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)



Model	EmETXe-i89M0	EmETXe-i89M3	EmETXe-i87M2	EmETXe-i87M0	EmETXe-i77M2
Form Factor	COM Express® Basic Type 6	COM Express® Basic Type 6	COM Express® Basic Type 6	COM Express® Basic Type 6	COM Express® Basic Type 6
Dimension	125 x 95 mm	125 x 95 mm	125 x 95 mm	125 x 95 mm	125 x 95 mm
Processor	6 th Gen. Intel® Core™ Processor i7-6822EQ 2.8GHz	6 th Gen. Intel® Core™ Processor i7-6822EQ 2.8GHz i5-6442EQ 2.7GHz	5 th Gen. Intel® Core™ Processor i7-5700EQ 2.6GHz	4 th Gen. Intel® Core™ Processor i7-4700EQ 2.4GHz i5-4402E 1.6GHz i3-4102E 1.6GHz i3-4112E 1.8GHz	3 rd Gen. Intel® Core™ i7-3517UE 1.7GHz i7-3612QE 2.1GHz i7-3555LE 2.5GHz
Chipset	QM170	QM170	QM87	QM87	QM77
Memory	2 x DDR4 SO-DIMM Sockets	2 x DDR4 SO-DIMM Sockets	2 x DDR3L ECC SO-DIMM Sockets	2 x DDR3L SO-DIMM Sockets	2 x DDR3 SO-DIMM Sockets
Video Output	3 x DDI ports	Analog RGB, 2 x DDI ports	Analog RGB, 3 x DDI ports	Analog RGB, 3 x DDI ports	Analog RGB, 3 x DDI ports
LVDS	Dual Channels 24-bit	Dual Channels 24-bit LVDS	Dual Channels 24-bit	Dual Channels 24-bit (OEM request)	Dual Channels 24-bit
Audio	HD link	HD link	HD link	HD link	HD link
Ethernet	1 x GbE	1 x GbE	1 x GbE	1 x GbE	1 x GbE
Mass Storage	4 x SATA600	4 x SATA600	2 x SATA300, 2 x SATA600	2 x SATA300, 2 x SATA600	2 x SATA300, 2 x SATA600
RS-232	2 x RX/TX	2 x UART ports (RX/TX only)	N/A	N/A	N/A
RS-232/422/485	N/A	N/A	N/A	N/A	N/A
USB 2.0	8	8	8	8	8
USB 3.0	4	4	4	4	4
Digital I/O	8-bit	8-bit	8-bit Programmable	8-bit Programmable	8-bit Programmable
Expansion Bus	8 x PCIe x1, I2C, 1 x PCIe x16, LPC	8 x PCIe x1, I2C, 1 x PCIe x16, LPC	6 x PCIe x1, 1 x PCIe x16	8 x PCIe x1, 1 x PCIe x16, LPC	7 x PCIe x1, 1 x PCIe x16, LPC
Power Input	DC 5-20V, 5VSB	DC 5-20V, 5VSB	DC 12V, 5VSB	DC 12V, 5VSB	DC 12V, 5VSB
Operating Temperature	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)*	-20~70°C (-4 ~ 158°F)



NEW

Model	EmETX-i67M2 EmETX-i65M2	EmETX-i67M1 EmETX-i65M1	EmETX-i2304	EmETX-a58M1	EmETX-a55E0
Form Factor	COM Express® Basic Type 6	COM Express® Basic Type 2	ETX 3.02	ETX 3.02	ETX 3.02
Dimension	125 x 95 mm	125 x 95 mm	114 x 95 mm	114 x 95 mm	114 x 95 mm
Processor	2nd Gen. Intel® Core™ i7-2610UE 1.5GHz i7-2715QE 2.1GHz Celeron® 827E 1.4GHz	2nd Gen. Intel® Core™ i7-2610UE 1.5GHz, Celeron® 827E 1.4GHz	Intel® Atom Processor E3800 family E3825 1.33GHz E3845 1.91GHz	AMD G-Series Processor GX-212JC 1.2GHz GX-218GL 1.8Ghz	AMD G-Series Processor G-T56N 1.65GHz G-T40N 1.0GHz
Chipset	QM67/HM65	QM67/ HM65	N/A	N/A	A55E
Memory	2 x DDR3 SO-DIMM Sockets	2 x DDR3 SO-DIMM Sockets	1 x DDR3L SO-DIMM Socket	1 x DDR3 SO-DIMM Socket	1 x DDR3 SO-DIMM Socket
Video Output	Analog RGB, 3 x DDI ports	Analog RGB, 1 x DDI port (OEM request)	Analog RGB, 1 x DDI*	Analog RGB / 1x DVI 1 x DDI	Analog RGB 1 x DDI
LVDS	Dual Channels 24-bit	Dual Channels 24-bit	Dual Channels 24-bit	Dual Channels 24-bit	Dual Channels 24-bit
Audio	HD link	HD link	Realtek ALC662	Realtek ALC662	Realtek ALC886
Ethernet	1 x GbE (PHY)	1 x GbE	1 x 10/100Mbps	1 x 10/100Mbps	1 x 10/100Mbps
Mass Storage	2 x SATA300, 2 x SATA600	2 x SATA300, 2 x SATA600	1 x Ultra ATA 2 x SATA300	2 x SATA600	2 x SATA600
RS-232	N/A	N/A	1 x RS-232	1 x RS-232	1 x RS-232
RS-232/422/485	N/A	N/A	1 x RS-232/422/485 (by Carrier Board)	1 x RS-232/422/485 (by Carrier Board)	1 x RS-232/422/485 (by Carrier Board)
USB 2.0	8	8	4	4	4
USB 3.0	N/A	N/A	N/A	N/A	N/A
Digital I/O	8-bit Programmable	8-bit Programmable	N/A	N/A	N/A
Expansion Bus	7 x PCIe x1, 1 x PCIe x16, LPC	5 x PCIe x1, 1 x PCIe x16, LPC, 4 x PCI	4 x PCI & ISA, LPC	4 x PCI (OEM request)	4 x PCI, ISA, LPC
Power Input	DC 12V, 5VSB	DC 12V, 5VSB	DC 5V, 5VSB	DC 5V, 5VSB	DC 5V, 5VSB
Operating Temperature	-20~70°C (-4 ~ 158°F)	-20~70°C (-4 ~ 158°F)	-40 ~ 85°C (-40 ~ 185°F)	0 ~ 60°C (0 ~ 140°F)	-20~70°C (-4 ~ 158°F)

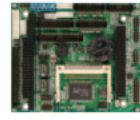
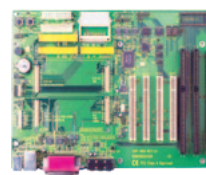
*Connector on CPU module



Model	PBQ-900L	PBQ-3000	PBN-9007	PBC-900J
Form Factor	EPIC form factor Qseven Carrier Board	EPIC form factor Qseven Carrier Board	COM Exp. Mini Type 10 Carrier Board	COM Exp. Basic Type 6 Carrier Board
Dimension	165 x 115 mm	165 x 115 mm	125 x 95 mm	125 x 95 mm
Graphics interface	1 x LVDS connector, 1 x DVI connector	1 x VGA connector, 1 x LVDS connector, 1 x DisplayPort connector	1 x LVDS connector, 1 x DisplayPort connector	1 x VGA connector, 1 x LVDS connector
Audio	Realtek ALC662	Realtek ALC662	Realtek ALC662	Realtek ALC662
Ethernet	2 x RJ-45 connectors	2 x RJ-45 connectors	2 x RJ-45 connectors	2 x LAN connectors
Storage	1 x SATA connector, 1 x NGFF socket	2 x SATA connectors	1 x SATA connector, 1 x CFast socket	1 x SATA connector, 1 x mSATA socket
Serial Port	3 x RS-232, 1 x RS-232/422/485 1 x UART	3 x RS-232, 1 x RS-232/422/485	1 x RS-232, 1 x RS-232/422/485	3 x RS-232, 1 x RS-232/422/485
USB 2.0	1	6	4	2
USB 3.0/2.0	2	N/A	2	2
Digital I/O	8-bit Programmable	8-bit Programmable	8-bit Programmable	16-bit Programmable
Expansion Bus	SMBus, I2C, 1 x NGFF socket	1 x Mini-Card Socket, LPC	1 x Mini-Card Socket, SIM socket	1 x Mini-Card Socket, PCI/104
Power Input	10V ~ 30V	10V ~ 30V	DC 12V	DC 12V
Operating Temperature	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)



NEW



Model	PBE-1700	PBE-1702	PBE-1705-F1	PBE-1000	PBE-1100
Form Factor	ATX form factor COM Exp. Type 2 Evaluation Board	ATX form factor COM Exp. Type 6 Evaluation Board	ATX form factor COM Exp. Type 6 Evaluation Board	ATX form factor ETX Evaluation Board	ETX Carrier Board
Dimension	305 x 244 mm	305 x 244 mm	305 x 244 mm	305 x 210 mm	114 x 95 mm
Graphics interface	1 x VGA connector, 1 x LVDS connector	1 x VGA connector, 1 x DVI connector, 1 x LVDS connector, 2 x DisplayPort connectors	1 x VGA/DVI connector, 1 x LVDS connector, 2 x DisplayPort connectors	1 x VGA connector, 1 x LVDS connector	1 x VGA connector, 1 x LVDS connector
Audio	Realtek ALC888	Realtek ALC888	Realtek ALC886	Mic-in/ Line-in/ Line-out	Mic-in/ Line-in/ Line-out
Ethernet	1 x RJ-45 connector	2 x RJ-45 connectors	1 x RJ-45 connector	1 x RJ-45 connector	2 x LAN connectors
Storage	4 x SATA connectors, 1 x Ultra ATA connector, 1 x FDD connector, 1 x CF II socket	4 x SATA connectors	4 x SATA connectors	2 x Ultra ATA connectors, 1 x FDD connector, 1 x CF II socket	1 x Ultra ATA connector, 1 x FDD connector, 1 x CF II socket
Serial Port	2 x RS-232	2 x RS-232	6 x RS-232	3 x RS-232, 1 x RS-232/422/485	3 x RS-232, 1 x RS-232/422/485
USB 2.0	6	2	2	5	4
USB 3.0/2.0	N/A	N/A	4	N/A	N/A
Digital I/O	8-bit Programmable	8-bit Programmable	8-bit Programmable	16-bit DIO 8-in/ 8-out	16-bit DIO 8-in/ 8-out
Expansion Bus	2 x PCIe x1 slots, 1 x ExpressCard socket	2 x PCIe x1 slots, 1 x PCIe x4 slot, 1 x PClex16 slot, 2 x Mini-Card sockets	2 x PCIe x1 slots, 1 x PCIe x4 slot, 1 x PClex16 slot, 2 x Mini-Card sockets	4 x PCI slots, 3 x ISA slots	PC-104-Plus
Power Input	AT/ ATX	ATX	DC 5-20V / ATX	AT/ ATX	DC 12V, 5V
Operating Temperature	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)

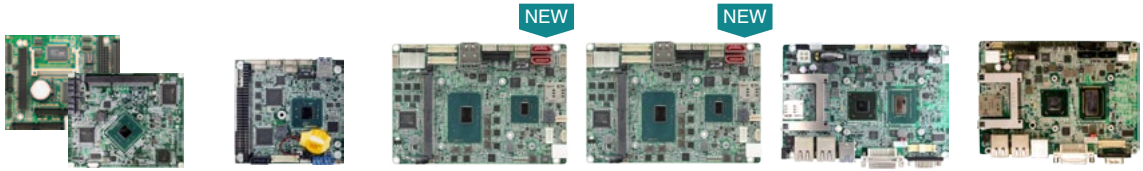
Wide-Temperature Single Board Computers



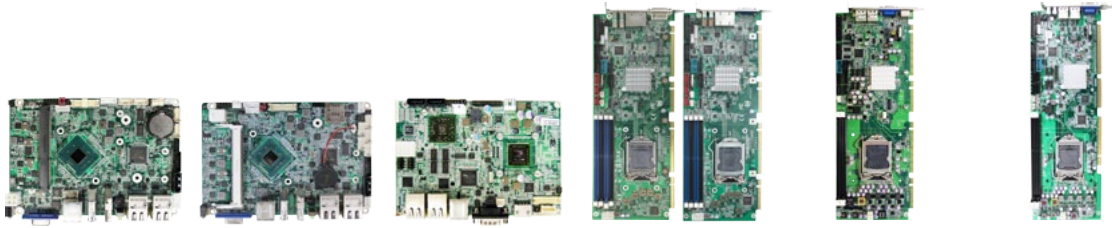
Model	EasyBoard-882E	EasyBoard-872E
Form Factor	3.5"	3.5"
Dimension	146 x 102 mm	146 x 102 mm
Processor	3 rd Gen. Intel® Core™ i7-3517UE 1.7GHz	2 nd Gen. Intel® Celeron® Processor 827E 1.4GHz
Chipsets	QM77	HM65
Memory	1 x DDR3 SO-DIMM Socket	1 x DDR3 SO-DIMM Socket
Graphic interface	DVI-I	DVI-I
LVDS	Dual Channels 24-bit LVDS	Dual Channels 24-bit LVDS
Audio	Realtek® ALC662	Realtek® ALC662
Ethernet port	2 x GbE	2 x GbE
Storage	2 x SATA600, 1 x CFast socket	2 x SATA600, 1 x CFast socket
Serial port	1 x RS-232 1 x RS-232/422/485 selectable	1 x RS-232 (extra 4 x RS-232 via SCDB-1293) 1 x RS-232/422/485 selectable
USB 2.0	4	6
USB 3.0/2.0	2	N/A
Digital I/O	N/A	16-bit Programmable by SCDB-349R
Expansion Bus	1 x Mini-Card Socket, 1 x micro SIM socket	1 x Mini-Card Socket, LPC (Low Pin Count), 1 x SIM socket
Power Input	DC 12V	DC 12V
Operating Temperature	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)

All WT boards are BTO request

Single Board Computers



Model	Em104P-i2313	Em104-i230F	EmCORE-i90M2	EmCORE-i89M2	EmCORE-i77M3	EmCORE-i65M3
Form Factor	ETXP	PC/104	3.5"	3.5"	3.5"	3.5"
Dimension	114 x 95 mm	96 x 90 mm	146 x 102 mm	146 x 102 mm	146 x 102 mm	146 x 102 mm
Processor	Intel® Atom™ Processor E3825 1.33GHz E3845 1.91GHz	Intel® Atom™ Processor E3825 1.33GHz E3845 1.91GHz	7 th Gen. Intel® Quad Core™ Processor i7-7820EQ 3.0Ghz	6 th Gen. Intel® Quad Core™ Processor i5-6442EQ 2.8GHz/ i7-6822EQ 3.4GHz	3 rd Gen. Intel® Core™ i7-3517UE 1.7GHz	2 nd Gen. Intel® Celeron® Processor 827E 1.4GHz
Chipsets	N/A	N/A	QM175	QM170	QM77	HM65
Memory	1 x DDR3L SO-DIMM Socket	1 x DDR3L SO-DIMM Socket	1 x DDR4 SO-DIMM Socket	1 x DDR4 SO-DIMM Socket	1 x DDR3 SO-DIMM Socket	1 x DDR3 SO-DIMM Socket
Graphic interface	Analog RGB	Analog RGB	HDMI DisplayPort	HDMI DisplayPort	DVI-I	DVI-I
LVDS	Dual Channels 24-bit	Dual Channels 24-bit	Dual Channels 24-bit	Dual Channels 24-bit	Dual Channels 24-bit LVDS	Dual Channels 24-bit LVDS
Audio	Realtek® ALC662	Realtek® ALC662	Realtek® ALC662	Realtek® ALC662	Realtek® ALC662	Realtek® ALC662
Ethernet port	1 x 10/100Mbps 1 x GbE	2 x GbE	1 x 10/100Mbps 1 x GbE	1 x 10/100Mbps 1 x GbE	2 x GbE	2 x GbE
Storage	1 x Ultra ATA, 2 x SATA300, 1 x CF II socket	1 x SATA300, 1 x mSATA socket	2 x SATA600 1 x NGFF M.2	2 x SATA600 1 x NGFF M.2	2 x SATA600, 1 x CFast socket	2 x SATA600, 1 x CFast socket
Serial port	3 x RS-232 1 x RS-232/422/485 selectable	2 x RS-232 2 x RS-232/422/485 selectable	4 x RS-232 2 x RS-232/422/485 selectable	4 x RS-232 2 x RS-232/422/485 selectable	1 x RS-232 1 x RS-232/422/485 selectable	1 x RS-232 (extra 4 x RS-232 via SCDB-1293) 1 x RS-232/422/485 selectable
USB 2.0	4	2	2	2	4	6
USB 3.0/2.0	N/A	1	4	4	2	N/A
Digital I/O	16-bit DIO 8-in/8-out	8-bit Programmable	8-bit Programmable	8-bit Programmable	N/A	16-bit Programmable by SCDB-349R
Expansion Bus	PC/104-Plus	PC/104	1 x Mini-Card Socket 1 x SIM socket	1 x Mini-Card Socket 1 x SIM socket	1 x Mini-Card Socket, 1 x micro SIM socket	1 x Mini-Card Socket, LPC (Low Pin Count), 1 x SIM socket
Power Input	DC 12V, 5V	DC 12V, 5V	DC 12V	DC 12V	DC 12V	DC 12V
Operating Temperature	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-40 ~ 85°C (-40 ~ 185°F)	-20 ~ 70°C (-4 ~ 158°F)	-20 ~ 70°C (-4 ~ 158°F)



Model	EmCORE-i2305	EmCORE-i230G	EmCORE-a55E1	HiCORE-i89Q1/Q2	HiCORE-i67Q1/67Q2	HiCORE-i61H2
Form Factor	3.5"	3.5"	3.5"	PICMG 1.3 full size SBC	PICMG 1.3 full size SBC	PICMG 1.0 full size SBC
Dimension	146 x 102 mm	146 x 102 mm	146 x 102 mm	338 x 126 mm	338 x 126 mm	338 x 122 mm
Processor	Intel® Atom™ Processor E3800 family E3825 1.33GHz/ E3845 1.91GHz	Intel® Atom™ Processor E3800 family E3825 1.33GHz/ E3845 1.91GHz	AMD G-Series Processor G-T56N 1.65GHz G-T40N 1.0GHz	6 th Gen. Intel® Core™ i7/i5/i3 Processor (Socket LGA1151)	3 rd /2 nd Gen. Intel® Core™ i7/i5/i3 Processor (Socket LGA1155)	3 rd /2 nd Gen. Intel® Core™ i7/i5/i3 Processor (Socket LGA1155)
Chipsets	N/A	N/A	A55E	Q170	Q67	H61
Memory	1 x DDR3L SO-DIMM Socket	1 x DDR3L SO-DIMM Socket	1 x DDR3 SO-DIMM Socket	4 x DDR4 Long-DIMM Sockets	2 x DDR3 Long-DIMM Sockets	2 x DDR3 Long-DIMM Sockets
Graphic interface	Analog RGB, HDMI	Analog RGB, HDMI	Analog RGB, HDMI	DVI-I (89Q1) Analog RGB (89Q2) DisplayPort	Analog RGB	Analog RGB
LVDS	Dual Channels 24-bit LVDS	Dual Channels 24-bit LVDS	Dual Channels 24-bit LVDS	N/A	N/A	N/A
Audio	Realtek® ALC662	Realtek® ALC662	Realtek® ALC662	Realtek® ALC886	Realtek® ALC886	HD AUDIO Link
Ethernet port	2 x GbE	2 x GbE	2 x GbE	2 x GbE	2 x GbE	2 x GbE
Storage	1 x SATA300, 1 x mSATA , eMMC 4.5 (OEM request, E3800 family only)	1 x SATA300, 1 x CFast socket, eMMC 4.5 (OEM request)	2 x SATA600, 1 x CFast socket	6 x SATA600	2 x SATA600, 4 x SATA300, RAID 0, 1, 5, 10 supported	4 x SATA300
Serial port	1 x RS-232 1 x RS-232/485 selectable	2 x RS-232/485 selectable	5 x RS-232 1 x RS-232/422/485 selectable	1 x RS-232 1 x RS-232/422/485	1 x RS-232 1 x RS-232/422/485 selectable	1 x RS-232 1 x RS-232/422/485 selectable
USB 2.0	4	6	6	8	14	10
USB 3.0/2.0	1	1	N/A	2	N/A	N/A
Digital I/O	8-bit Programmable	8-bit Programmable	8-bit Programmable	8-bit Programmable	8-bit Programmable	8-bit Programmable
Expansion Bus	1 x Mini-Card Socket, 1 x micro-SDXC socket, 2 x I2C ports (OEM request, E3800 family only)	1 x Mini-Card Socket, 1 x micro SDXC socket, 1 x micro SIM socket	1 x Mini-Card Socket, 1 x SIM socket	PCI/ PCIe golden finger	PCI/ PCIe golden finger	PCI/ ISA golden finger
Power Input	DC 12V	DC 12V	DC 12V	DC 12V, 5VSB	DC 12V, 5V	DC 12V, 5V
Operating Temperature	-20 ~ 70°C (-4 ~ 158°F) -40 ~ 85°C (-40 ~ 185°F)*	-40 ~ 85°C (-40 ~ 185°F)	0 ~ 70°C (32 ~ 158°F)	0 ~ 60°C (32 ~ 122°F)	0 ~ 60°C (32 ~ 140°F)	0 ~ 60°C (32 ~ 140°F)

* Wide-Temperature Series.

Industrial Motherboards



Model	ITX-i89H0	ITX-i2203	ITX-i77M0	ITX-i67M0	ITX-a55E3
Form Factor	Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX	Mini-ITX
Dimension	170 x 170 mm	170 x 170 mm	170 x 170 mm	170 x 170 mm	170 x 170 mm
Processor	Intel® Core™ i3-6100E 2.7GHz / Intel® Xeon® E3-1505L V5 2.0GHz E3-1515M V5 2.8GHz	Intel® Celeron® Processor N3160 1.6GHz	3 rd /2 nd Gen. Intel® Core™ i7/i5/i3 Processor (Socket-G rPGA988)	2 nd Gen. Intel® Core™ i7/i5/i3 Processor (Socket-G rPGA988)	AMD G-Series Processor G-T40N 1.0GHz
Chipsets	CM236	-	QM77	QM67	A55E
Memory	2 x DDR4 ECC SO-DIMM Sockets	1 x DDR3L SO-DIMM Socket	2 x DDR3 SO-DIMM Sockets	2 x DDR3 SO-DIMM Sockets	Soldered Onboard 2GB DDR3 SDRAM
Graphic interface	1 x HDMI 2 x DisplayPort	2 x HDMI	1 x DVI-I connector	1 x DVI-I connector	DVI-I
LVDS	-	Dual Channels 24-bit LVDS	Dual Channels 24-bit LVDS	Dual Channels 24-bit LVDS	Dual Channels 24-bit LVDS
Audio	Realtek® ALC662	Realtek® ALC269	Realtek® ALC886	Realtek® ALC886	Realtek® HD ALC662
Ethernet port	1 x GbE	2 x GbE	2 x GbE	2 x GbE	2 x GbE
Storage	2 x SATA600, 1 x NGFF M-key socket	1 x SATA600, 1 x NGFF B-key socket eMMC 4.5 (OEM Request)	2 x SATA600, 4 x SATA300	2 x SATA600, 4 x SATA300	2 x SATA600, 1 x mSATA socket
Serial port	1 x UART interface (TX, RX, CTS, RTS)	1 x RS-232/422/485 selectable	5 x RS-232 1 x RS-232/422/485 selectable	5 x RS-232 1 x RS-232/422/485 selectable	4 x RS-232 2 x RS-232/422/485 selectable
USB 2.0	4	4	8	12	8
USB 3.0/2.0	6	4	4	N/A	N/A
Digital I/O	-	-	16-bit Programmable	16-bit Programmable	8-bit Programmable
Expansion Bus	1 x PCIe Gen 3.0 x16 slot 1 x NGFF E-key socket 1 x LPC	1 x PCIe1 slot 1 x NGFF E-key socket 1 x micro SIM	1 x PCIe x16 slot, 1 x Mini-Card socket	1 x PCIe x16 slot, 1 x Mini-Card socket	1 x PCI slot, 1 x Mini card socket, 1 x PCIe x1 slot, 1 x SIM card socket
Power Input	DC12V	DC24V	DC12V	DC12V	DC 9 ~ 36V
Operating Temperature	-20 ~ 70°C (-4 ~ 158°F)	-20 ~ 70°C (-4 ~ 158°F)	-20 ~ 70°C (-4 ~ 158°F)	-20 ~ 70°C (-4 ~ 158°F)	-20 ~ 70°C (-4 ~ 158°F)

NEW



Model	MB-i89Q0	MB-i87Q0	MB-i77Q0	MB-i67Q0
Form Factor	Micro-ATX Motherboard	Micro-ATX	Micro-ATX	Micro-ATX
Dimension	244 x 244 mm	244 x 244 mm	244 x 244 mm	244 x 244 mm
Processor	6 th Gen. Intel® Core™ i7/i5/i3 Processor (Socket LGA1151)	4 th Gen. Intel® Core™ i7/ i5/ i3 (Socket LGA1150)	3 rd /2 nd Gen. Intel® Core™ i7/i5/i3 Processor (Socket LGA1155)	3 rd /2 nd Gen. Intel® Core™ i7/i5/i3 Processor (Socket LGA1155)
Chipsets	Q170	Q87	Q77	Q67
Memory	4 x DDR4 Long-DIMM Sockets	4 x DDR3 Long-DIMM Sockets	4 x DDR3 Long-DIMM Sockets	4 x DDR3 Long-DIMM Sockets
Graphic interface	1 x DVI-I port 2 x DisplayPort	1 x DVI-I connector 1 x DisplayPort	Dual DVI connectors	1 x DVI-I connector Analog RGB
LVDS	NA	N/A	Dual Channels 24-bit LVDS	N/A
Audio	Realtek® ALC269	Realtek® ALC662	Realtek® ALC886	Realtek® ALC886
Ethernet port	2 x GbE	2 x GbE	2 x GbE	2 x GbE
Storage	6 x SATA600 RAID 0, 1, 5, 10 supported	6 x SATA600 RAID 0, 1, 5, 10 supported	2 x SATA600, 4 x SATA300	2 x SATA600, 4 x SATA300
Serial port	2 x RS-232	2 x RS-232/422/485 selectable	3 x RS-232 1 x RS-232/422/485 selectable	3 x RS-232 1 x RS-232/422/485 selectable
USB 2.0	10	10	10	14
USB 3.0/2.0	4	4	4	N/A
Digital I/O	N/A	16-bit Digital I/O, 8-in & 8-out	16-bit Digital I/O, 8-in & 8-out	16-bit Programmable
Expansion Bus	1 x PCI slot 1 x PCIe x16 1 x PCIe x4 in x8 slot 1 x PCIe x1 slot	1 x PCI slot, 1 x PCIe x16 slot, 1 x PCIe x4 in x8 slot	1 x PCI slot, 1 x PCIe x16 slot, 1 x PCIe x4 in x8 slot, 1 x PCIe x1 slot	1 x PCI slot, 1 x PCIe x16 slot, 1 x PCIe x4 in x8 slot, 1 x PCIe x1 slot
Power Input	24-pin + 4-pin ATX power connector	24-pin + 4-pin ATX power connector	24-pin + 4-pin ATX power connector	24-pin + 4-pin ATX power connector
Operating Temperature	0 ~ 60°C (32 ~ 140°F)	0 ~ 60°C (32 ~ 140°F)	0 ~ 60°C (32 ~ 140°F)	0 ~ 60°C (32 ~ 140°F)

Headquarters

ARBOR Technology Corp.

10F., No.700, Zhongzheng Rd., Zhonghe Dist., New Taipei City 235, Taiwan

Tel: +886 2 8226 9396

Fax: +886 2 8226 9398

sales@arbor.com.tw

The Americas

ARBOR Solution, Inc.

Tel: +1 408 452 8900

Fax: +1 408 452 8909

info1@arborsolution.com

China

ARBOR Shenzhen

Tel: +86 755 83438567

Fax: +86 755 83438597

infocn@arbor.com.tw

Asia-Pacific

ARBOR Taiwan

Tel: +886 2 82269396

Fax: +886 2 82269398

sales@arbor.com.tw

Europe

ARBOR France

Tel: +33 (0)1 55 63 90 87

Fax: +33 (0)1 81 50 00 29

info@arbor-france.com

ARBOR Nanjing

Tel: +86 25 83694872

Fax: +86 25 83694873-208

infocn@arbor.com.tw

ARBOR Korea

Tel: +82 028555840

Fax: +82 028555841

sales@arbor.com.tw

ARBOR UK

Tel: +44 1908 310100

Fax: +44 1908 310107

sales@arbor-uk.com

ARBOR Shanghai

Tel: +86 21 64287904

Fax: +86 21 64397795-188

infocn@arbor.com.tw

ARBOR Singapore

Tel: +65 6749 9926

Fax: +65 6749 9927

sales.inquiry@arbor.com.tw

ARBOR Italy

Tel: +39 011 19700011

Fax: +39 011 19700015

info@arboritalia.it

ARBOR Beijing

Tel: +86 10 82665810

Fax: +86 10 82665810-819

infocn@arbor.com.tw

ARBOR Australia

Tel: +61 3 8736 0300

Fax: +61 3 8736 0325

info@arboraust.com