




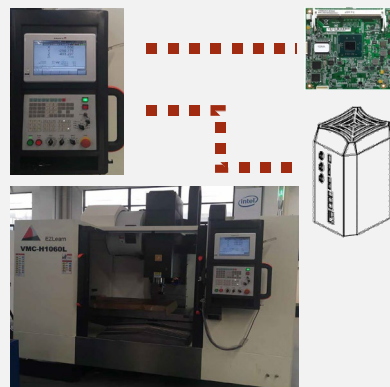
COMe Features	1. Comply with COMe (Type6) specification, customers can add confidentiality and security design on the carrier board, and define the dimensions immediately 2. The best solution for the diversified needs of customers				
COMe Design	1. Short development cycle and small development risk 2. Less R & D funding 3. Rapid hardware recovery		4. Customized structure 5. Easy to upgrade and replace standard definitions		
Model		 NEW			 NEW
	IC6268-HCA	IC6755	IC620-HCA	IC674	IC675
CPU	Intel® 3rdCore™ i7/i5/i3 TDP Max 45W	Intel® 8/9th Core™ i9/i7/i5/i3 TDP Max 65W	Intel® ATOM Celeron J1900 (2.00GHz, 4C4T) TDP Max 10W	Intel® 6/7th Core™ i7/i5/Celeron TDP Max 45W	Intel® 8th Core™ Xeon/i7/i5/Celeron TDP Max 45W
PCH	QM77	C246	Baytrail D	QM175	CM246
Max. Memory	1x DDR3L SO-DIMM up to 4G	2x DDR4 SO-DIMM up to 32G(Support ECC)	2x DDR3L SO-DIMM up to 8G	2x DDR4 SO-DIMM up to 32G	2x DDR4 SO-DIMM up to 32G (Support ECC)
Display	1x VGA, 1x LVDS 2CH 18/24-bit	1x VGA, 1x LVDS 2CH 18/24-bit 2xDDI Port configurable to HDMI1.4/DVI/Display port	1x VGA, 2x DP	1x VGA, 1x LVDS 2CH 18/24-bit 2xDDI Port configurable to HDMI1.4/DVI/Display port	
On-board LAN	Intel® 82579LM	Intel® i219LM	Intel® i210AT	Intel® i219LM	
I/O Interface					
RS232	By carrier board	2 x UART (TX/RX)	By carrier board	2 x UART (TX/RX)	2 x UART (TX/RX)
RS232/485/422	By carrier board	By carrier board	By carrier board	By carrier board	By carrier board
LPT	By carrier board	By carrier board	By carrier board	By carrier board	By carrier board
PS/2	By carrier board	By carrier board	By carrier board	By carrier board	By carrier board
USB2.0	8	8	7	8	8
USB3.x	N/A	4	1	4	4
Audio	By carrier board	By carrier board	By carrier board	By carrier board	By carrier board
GPIO	4In, 4Out	8bit	4In, 4Out	8bit	8bit
Storage					
SATA	2x SATAII, 2x SATAIII, 1x IDE	4	2	4	4
M.2	N/A	N/A	N/A	N/A	N/A
	By carrier board	By carrier board	By carrier board	By carrier board	By carrier board
Extension Slot					
Slot	1x PClex16, 5x PClex1, PCI(V2.3)	1x PClex16 or 2x PClex8 (Gen 3) 8x PClex1 or 2x PClex4 or 4x PClex2 (Gen 3)	4x PClex1	1x PClex16, 8x PClex1	1x PClex16 or 2x PClex8 (Gen 3) 8x PClex1 or 2x PClex4 or 4x PClex2 (Gen 3)
Carrier board	By Customer design	By Customer design	By Customer design	By Customer design	By Customer design
Other	LPC Bus, SM Bus/I2C	LPC Bus/TPM, SM Bus/I2C	LPC Bus/TPM, SM Bus/I2C	LPC Bus, SM Bus/I2C	LPC Bus, SM Bus/I2C
Form Factor	Type 2 : 95mm (W) x 125mm (L)	Type 6 : 95mm (W) x 125mm (L)	Type 6 : 95mm (W) x 95mm (L)	Type 6 : 95mm (W) x 125mm (L)	Type 6 : 95mm (W) x 125mm (L)
Environment	Operating temperatures: -20°C to 60°C Storage temperatures: -20°C to 85°C				
Certifications	Meet CE / FCC Class A	Meet CE / FCC Class B	Meet CE / FCC Class A	Meet CE / FCC Class B	

COMe Target Market

- Compact machine controller
- CNC : Computer Numerical Control
- AFC : Automatic Fare Collection
- Testing Equipment







Compact machine controller








- COM Express™ Type 6, Compact Module + Carrier Board 4 Port LAN Card.
- MXM socket extension for PCI-e x16 PEG I/F.
- Reserve HDBase T solution (Display and USB over CAT 5 cable)
- M.2 storage with PCIe4 interface .
- Supported RTX OS + Acronis EtherCAT master stack







PEAK

PICMG Features	<div>1. Complies with the PICMG1.3 specification and has the characteristics of full backplane support. It provides multiple slots with different interfaces, such as ISA, PCI and PCIe interfaces.</div> <div>2. Complete product range and reasonable price.</div> <div>3. The most flexible, extensible, and customized solution for industrial slot applications.</div>							
PICMG Design	<div>1. Use backplane to make system expansion easier.</div> <div>2. Easier maintenance and faster replacement of faulty parts make for reducing downtime and costing.</div>							
Model								
	PEAK888VL2		PEAK889VL2		PEAK688-Q		PEAK980	
CPU	Intel® 6/7 th Core™ i7/i5/i3 TDP Max 65W		Intel® 8 th Core™ i7/i5/i3 TDP Max 65W		Intel® 6/7 th Core™ i7/i5/i3 TDP Max 65W		Intel® 8/9 th i9/i7/i5/i3 TDP Max 65W	
PCH	Q170 PCH	H110 PCH	Q370 PCH	H310 PCH	Q170 PCH	Q370 PCH	H310 PCH	
Max. Memory	2x DDR4 U-DIMM up to 32G		2x DDR4 U-DIMM up to 32G		2x DDR4 SO-DIMM up to 32G		2x DDR4 SO-DIMM up to 32G	
Display	1x VGA , 1x DVI/HDMI, 1x DP		1x VGA , 1x Mini DP, 1x DP		1 x DVI-I (VGA+DVI-D) , 1x DP		1x VGA , 1x Mini DP, 1x DP	
On-board LAN	1x Intel® i219LM 1x Intel® i211AT		1x Intel® i219LM 1x Intel® i211AT	1x Intel® i219V	1x Intel® i219LM 1x Intel® i211AT	1x Intel® i219LM 1x Intel® i211AT	1x Intel® i219V	
I/O Interface								
RS232	3	3	3	3	2	3	3	
RS232/485/422	1	1	1	1	2	1	1	
LPT	1	1	1	1	No	No	No	
PS/2	1	1	1	1	1	No	No	
USB2.0	5	5	5	1	4	6	2	
USB3.x	4x USB 3.0	4x USB 3.0	2x USB 3.1 (Gen2), 4x USB 3.1 (Gen1)	4x USB 3.1 (Gen1)	2x USB 3.0, 3x USB2.0	2x USB 3.1 (Gen1)	2x USB 3.1 (Gen1)	
Audio	EBK-HAD Kit (Optional)				No	No	No	
GPIO	No	No	No	No	8In/8Out	4In/4Out	4In/4Out	
Storage								
SATA	5	3	4	4	4	4	4	
M.2	1	1	1	No	No	1	1	
	M.2 2280 M key with SATAIII & PCIe x4 (NVMe Gen 3)	2280 M key with SATAIII	M.2 2280 M key with SATAIII & PCIe x4 (NVMe Gen 3)	N/A	N/A	M.2 2280 M key with SATAIII & PCIe x4 (NVMe Gen 3)	NA	
Extension slot								
Slot	4x PCI, 1x PClex4, 1x PClex16				1xPClex1, 3x PClex4, PClex16		1xPClex1, 1x PClex4, 1xPClex16	1xPClex1, 1x PClex4, 1xPClex16
By Backplane	Ext ISA, PCI 32/64bit ,ACR, PClex1, PClex4, PClex8, PClex16,Mini PCIe, M.2							
Other	N/A	N/A	N/A	N/A	1x EXT60	1x EXT60	N/A	
Power In	by backplane (ATX)							
Form Factor	PICMG1.3 Full size: 338.58 mm x 126.39 mm				PICMG1.3 Half size: 208mm x 126mm, (Dual side)		PICMG1.3 Half size: 228mm x 126mm, (Dual side)	
Environment	Operating temperatures: -20°C to 60°C Storage temperatures: -20°C to 85°C							
Certifications	Meet CE / FCC Class A							

Applications	PICMG Target Market <ul style="list-style-type: none"> Compact machine controller AOI with GPU card Testing Equipment AI with VPU & GPU 3D Image builder Training device  	Solar Panel Testing Equipment <ul style="list-style-type: none"> PEAK + NBP 4 Port LAN Card for Machine Vision Support PCIe Gen3. up to 30 lanes Provide 10 slot expansion backplane 	Vision Inspection for Solar Panel  

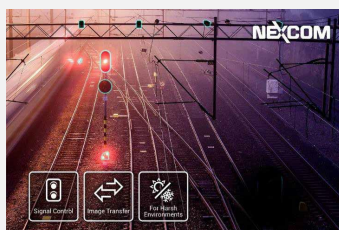
Embedded Board Product Guide

3.5" SBC

3.5" SBC Features	1. 3.5" SBC Form Factor 2. Offer many advantages for customers, such as fanless, low power consumption, industrial grade design, and diversified I/O options 3. Compact yet full functionality				
3.5" SBC Design	1. Fan less 2. Low Power System 3. Wide voltage input		4. Wide temperature 5. Offer customized, ODM, OEM and other services		
Model					 NEW
	EBC355X	EBC355	EBC357X	EBC357	EBC390
CPU	Intel® Atom™ processor E3845, 4C4T, 1.91GHz, TDP: 10W	Intel® Atom™ processor E3845, 4C4T 1.91GHz TDP: 10W J1900, 4C4T, 2.0GHz up to 2.42GHz, TDP: 10W	Intel® Atom™ processor E3950, 4C4T, 2.0GHz, TDP: 12W	Intel® Atom™ processor E3950, 4C4T, 2.0GHz, TDP: 12W J3455, 4C4T, 1.5GHz up to 2.00GHz, TDP: 10W	Intel® 6th Intel® Core™ i5-6200U, TDP:15W~25W
Chipset	Baytrial I		Apollo Lake		Skylake-U
Max. Memory	1x DDR3L SO-DIMM up to 8G		2x DDR3L SO-DIMM up to 16G		1x DDR3L SO-DIMM Up to 8GB
Display	1x VGA, 1x HDMI 1x LVDS 2CH 18/24-bit		1x VGA, 1x HDMI 1x LVDS 2CH 18/24-bit		1x VGA, 1x HDMI1, 1x LVDS 2CH 18/24-bit or eDP
On-board LAN	2x Intel® i211AT		2x Intel® i210-IT		2x Intel® i211AT
I/O Interface					
RS232	3	3	1	1	5 (2ports TX/RX)
RS232/485/422	1	1	1	1	1
LPT	N/A	N/A	N/A	N/A	N/A
PS/2	1	1	N/A	N/A	1
USB2.0	N/A	N/A	2	2	4
USB3.x	4	4	2	2	2
Audio	Yes				
GPIO	4In, 4Out				8bit
Storage					
SATA	2	2	1	1	2 (1x SATA, 1x mSATA)
M.2	N/A	N/A	1	1	N/A
	N/A	N/A	1x M.2 (2242) B key (BOM Change SATA Interface)		N/A
Extension Slot					
Slot	1x Full size Mini PCIe 1 x Half size Mini PCIe		1x M.2 2242 B-Key		2 x Full size Mini PCIe (1xPCIe, 1xmSATA) 1 x Expansion I/O connector
Other	LPC Bus(Debug Port), SM Bus		SIM card		Extended Board EBK-6C8U1M EBK-6C6U1M EBK-5C2L1M
Power In	DC12V				DC 9~28V
Form Factor	3.5" SBC Form Factor, (146mm x 105mm)				
Environment	Operating temperatures: -40°C to 85°C Storage temperatures: -25°C to 85°C	Operating temperatures: -0°C to 60°C Storage temperatures: -20°C to 80°C	Operating temperatures: -40°C to 85°C Storage temperatures: -25°C to 85°C	Operating temperatures: -0°C to 60°C Storage temperatures: -20°C to 80°C	
Certifications	Meet CE / FCC Class A				

3.5" SBC Target Market

- POS
- ATM
- MRT-TVM
- WebKiosk : ibon
- Self-checkout
- Speed camera
- Elevator Signage






ATM

- **3.5" SBC**
- QR Code
- Fingerprint recognition
- Face recognition



ATX

ATX Features	1. Comply with ATX specification, provide 7 slots with different interfaces, such as PCIe16, PCIe4, PCIe1 and PCI interface 2. Diversified hardware resources are sufficient to meet the application needs of different customer groups		
ATX Design	1. Provide a high-performance platform 2. Diversified hardware resources		
Model	 <div>NEW</div>	 <div>NEW</div>	 <div>NEW</div>
	NEX912	NEX913	NEX913C
CPU	6/7th Intel® Core™ i7/i5/i3/Celeron processor TDP 95W	8/9th (Coffee Lake-S, Coffee Lake-S Refresh) Intel® Core™ i9/i7/i5/i3/Pentium Processor, Max. 95W	8/9th (Coffee Lake-S, Coffee Lake-S Refresh) Intel® Core™ i9/i7/i5/i3/Pentium Processor, Max. 95W Notice: Support MAX CPU TDP: Hexa-Core 65W and Octa-Core 35W
Chipset	Intel® Q170	Intel® Q370	
Max. Memory	4x DDR4 U-DIMM, non-ECC up to 64 GB		
Display	1x VGA, 2x HDMI	1x VGA1, 1x HDMI, 1x DP	1x VGA, 1x eDP, 1x DVI-D, 1x HDMI
On-board LAN	1x Intel® PHY i219LM 1x Intel® i211AT	1x Intel® PHY i219LM 1x Intel® i211AT BOM option: i211AT x 2, RJ45 x 2	1x Intel® PHY i219LM 1x Intel® i211AT
I/O Interface			
RS232	5	5	4
RS232/485/422	1	1	1x RS232/485/422 1x RS232/485
LPT	N/A	N/A	N/A
PS/2	1	N/A	1
USB2.0	4	6	7
USB3.x	10	4x USB3.1(Gen2) 2x USB3.1 (Gen1)	6x USB3.1(Gen1)
Audio	Yes		
GPIO	8bit	8bit	8bit
Storage			
SATA	4	4	4
M.2	N/A	1	1
	N/A	1x M.2 2280 M-key (PCIe4/SATA3)	(1x mSATA share SATA port1)
Extension Slot			
Slot	1x PCIe16, 2x PCIe4, 4x PCI	1x PCIe16, 2x PCIe4, 2x PCIe1, 2x PCI M.2 2230 E-key (PCIe1/USB2.0/CNVi)	1x PCIe16(Gen3), 4x PCIe4, 2x PCI, 1x Mini PCIe
Other	N/A	TPM2.0(Optional)	SM Bus, Onboard TPM2.0, SIM card
Power In	1x 24-pin ATX connector and 1x 8-pin ATX 12V power connector		
Form Factor	ATX Form Factor, 12"x9.6" (305mm x 244mm)		
Environment	Operating temperatures: 0°C to 60°C Storage temperatures: -20°C to 80°C		
Certifications	Meet CE / FCC Class A		

ATX Target Market

- AOI
- AI
- Logistics inspection



Logistics inspection

- **ATX**
- 5x PCIe LAN Card
- 20 PCS Camera



5x PCIe 4x LAN card, support 20x LAN



20pcs high resolution camera



Micro-ATX

Embedded Board Product Guide

Micro-ATX Features	1. Comply with Micro ATX specification, provide 4 slots with different interfaces, such as PCIe16, PCIe4, PCIe1 and PCI interface 2. Simple hardware resources meet the needs of middle and low-end customers		
Micro-ATX Design	1. Provide a high-performance platform 2. Diversified hardware resources		
Model	 NEW	 NEW	Coming SoonNEW
	NEX812	NEX813	NEX814 planning
CPU	6/7 th Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® Processor, TDP 95W.	8/9 th Intel® (Coffee Lake-S) Core™ i9/ i7/ i5 /i3 Processor, TDP 95W	Intel® Xeon / Core™ i9/i7/ Pentium™ /Celeron® Processors TDP : 65W
Chipset	Intel® Q170	Intel® Q370	Comet Lake-S Intel® W480E
Max. Memory	4 x DDR4 U-DIMM non-ECC up to 64 GB		
Display	1x DVI-I , 2x HDMI	1x VGA , 2x HDMI, 1x DP	
On-board LAN	1x Intel® PHY I219LM 1x Intel® I211AT		
I/O Interface			
RS232	5	5	
RS232/485/422	1	1	
LPT	N/A	N/A	
PS/2	1	1	
USB2.0	4	3	
USB3.x	10x USB3.1(Gen1)	6x USB3.1(Gen2) 4x USB3.1(Gen1)	
Audio	Yes		
GPIO	8bit	8bit	
Storage			
SATA	6	4	
M.2	N/A	1	
	N/A	1x M.2 2280 M-key (PCIe4/SATA3)	
Extension Slot			
Slot	1x PCIe16, 1x PCIe4, 1x PCIe1, 1x PCI	1x PCIe16, 2x PCIe4, x PCIe1, 2x PCI	
Other	TPM2.0 (Optional)	On board TPM2.0	
Power In	1x 24-pin ATX connector and 1x 8-pin ATX 12V power connector		
Form Factor	Micro-ATX Form Factor, 9.6"x9.6" (244 mm x 244 mm)		
Environment	Operating temperatures: 0°C to 60°C Storage temperatures: -20°C to 80°C		
Certifications	Meet CE / FCC Class A		
Applications	ATX Target Market		
	<div><ul style="list-style-type: none">• IIoT / IoT gateway• Logistics inspection• Kiosk / Vending Machine• Gaming Game console• Digital signage• Charging station• Logistics inspection</div> <div><ul style="list-style-type: none">• Mico-ATX• 10x USB3.1 ports• 6x CCOM ports• 8bit GPIO</div>		
	<div></div> <div><div>Charging station</div><div></div></div>		




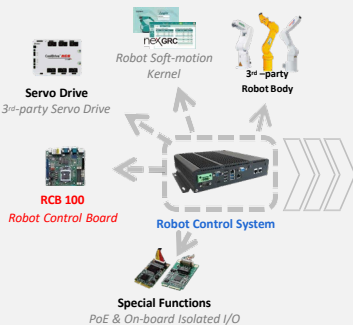

Mini-iTX

Embedded Board Product Guide

Mini-iTX Features	<ol style="list-style-type: none"> 1. Comply with Mini-iTX specification, such as PCIe16, PCIe4, PCIe1, Mini PCIe, M.2 & LCD panel (LVDS/eDP) Interface 2. Diversified hardware resources are sufficient to meet the application needs of different customer groups 		
Mini-iTX Design	<ol style="list-style-type: none"> 1. Lightweight platform 2. Provide medium and low performance platforms 3. Diversified hardware I/O resources 4. ATX & DC Power In (Wide voltage input) option 5. Fanless design 		
Model			
	NEX650	NEX614	NEX614B
CPU	Intel® Atom™ processor J1900, 4C4T, 2.0GHz up to 2.42GHz, TDP: 10W	6/7 th Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® Processor, TDP 65W	6/7 th Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® Processor, TDP 65W
Chipset	Baytrial –D	Intel® H110	
Max. Memory	5x DDR3L SO-DIMM, non-ECC up to 8 GB	2x DDR4 SO-DIMM, non-ECC up to 32 GB	
Display	1x VGA, 1x HDMI 1x LVDS 2CH 18/24-bit	1x VGA1, 1x HDMI, 1x DP 1x LVDS 2CH 18/24-bit	2x HDMI 1x LVDS 2CH 18/24-bit
On-board LAN	2x Realtek RTL8111G-CG	1x Intel® PHY i219LM 1x Intel® i211AT	2x Realtek RTL8111G-CG
I/O Interface			
RS232	2	3	1
RS232/485/422	3	1	1
LPT	1	N/A	N/A
PS/2	1	N/A	1
USB2.0	6	4	4
USB3.x	4	4	4
Audio	Yes		
GPIO	4In, 4Out	4In, 4Out	8bit
Storage			
SATA	2 (1 x full size mSATA slot share with SATA port 2)	3	2
M.2	N/A	N/A	1
	N/A	N/A	1x mSATA
Extension Slot			
Slot	1x half Size Mini PCIe 1x PCIe1	1x PCIe 16x, 1x Mini PCIe(full size)	1x half Size Mini PCIe 1x PCIe x1
Other	TPM pin header	TPM 2.0 (Optional)	TPM (Optional)
Power In	DC12~24V		DC 12V
Form Factor	Mini-iTX Form Factor, 6.7"x6.7" (170mm x 170mm)		Mini-iTX Form Factor, 6.7"x6.7" (170mm x 170mm) Thin Type
Environment	Operating temperatures: 0°C to 60°C Storage temperatures: -20°C to 80°C		
Certifications	Meet CE / FCC Class A		
Applications	<div> <div> Mini-iTX Target Market <ul style="list-style-type: none"> • IIoT / IoT gateway • Logistics inspection • Kiosk / Vending Machine • Self-service ordering machine • Gaming Game console • Digital signage • Charging station • Logistics inspection <ul style="list-style-type: none"> • Mini-iTX • 2x LAN • 2x RS232 • 1x LVDS • 3x USB </div> <div> Self-service ordering machine   </div> </div>		

Mini-iTX(RCB)

Embedded Board Product Guide

RCB Features	<ol style="list-style-type: none"> 1. Robotic Controller Board Interface 2. Diversified hardware resources meet the application needs of different customer groups, such as CNC, machine tool and robot arm 		
RCB Design	<ol style="list-style-type: none"> 1. Lightweight platform 2. Provide medium and low performance platforms 3. LAN (Support EtherCAT Protocol) 		<ol style="list-style-type: none"> 4. Diversified hardware I/O resources 5. DC Power In 6. Fanless design
Model		 NEW	 NEW
	RCB100	RCB100-L4	MARS100 (Fanless)
CPU	6 th Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® Processor, TDP 65W	6/7 th Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® Processor, TDP 65W	Main board RCB100 /RCB100-L4 6 th Intel® Core™ i7/i5/i3/ Pentium®/ Celeron® Processor, TDP 35W
Chipset	Intel® H110		
Max. Memory	2x DDR4 SO-DIMM, non-ECC up to 32 GB		
Display	1 x VGA, 1 x HDMI		
On-board LAN	2x Intel® i211AT GbE LAN (one port can be PoE port, IEEE 802.3af compliant, need optional PSE board) 2x Intel® i211AT LAN (Support EtherCAT Protocol)	2 x Intel® i211AT GbE LAN 2x Intel® i211AT LAN (Support EtherCAT Protocol)	same as Main board RCB100 /RCB100-L4
I/O Interface			
RS232	N/A	N/A	same as Main board RCB100 /RCB100-L4
RS232/485/422	1	1	same as Main board RCB100 /RCB100-L4
LPT	N/A	N/A	Main board RCB100 /RCB100-L4
PS/2	N/A	N/A	same as Main board RCB100 /RCB100-L4
USB2.0	4	4	same as Main board RCB100 /RCB100-L4
USB3.x	4	4	same as Main board RCB100 /RCB100-L4
Audio	N/A		
GPIO	12In, 4Out		12In, 4Out
			N/A
Storage			
SATA	1	1	same as Main board RCB100 /RCB100-L4
M.2	N/A	N/A	same as Main board RCB100 /RCB100-L4
	N/A	N/A	same as Main board RCB100 /RCB100-L4
Extension Slot			
Slot	1x PCIe16, 1 x Mini PCIe full size (PCIe & USB for Wifi & Albooster card)		1x Mini PCIe full size (PCIe & USB for Wifi & Albooster card)
Other	POE(PSE) NISKPOE KIT Optional	N/A	same as Main board RCB100 /RCB100-L4
Power In	DC 24V		DC 24V
Form Factor	Mini-iTX Form Factor, 6.7"x6.7" (170mm x 170mm)		298.6 mm(W) x 249mm (D) x 68mm (H) without wall mount bracket 260 mm(W) x 249mm (D) x 58mm (H)
Environment	Operating temperatures: 0°C to 60°C / Storage temperatures: -20°C to 80°C		Operating temperatures: 0°C to 50°C / Storage temperatures: -20°C to 80°C
Certifications	Meet CE / FCC Class A		
Applications	<div> <div> RCB Target Market <ul style="list-style-type: none"> • Robotic Controller Board • Logistics inspection  </div> <div> Logistics inspection <ul style="list-style-type: none"> • MARS200 • Mini-iTX form factor, Intel 6th Generation • 2 x USB 3.0, 4 x USB 2.0, 1x POE • Internal USB for software license dongle • Optional digital isolated I/O • 12x GPI, 4x GPO </div> <div> Robotic Controller <ul style="list-style-type: none"> • MARS100 • Mini-iTX form factor, Intel 6th Generation • 2 x USB 3.0, 4 x USB 2.0 • Internal USB for software license dongle • Optional digital isolated I/O • 12x GPI, 4x GPO </div> <div>  </div> </div>		