

Intel® Celeron®/Core™ i Fanless Box Computer with 6 x COM (4 x RS-232/485), 2 x HDMI

Overview

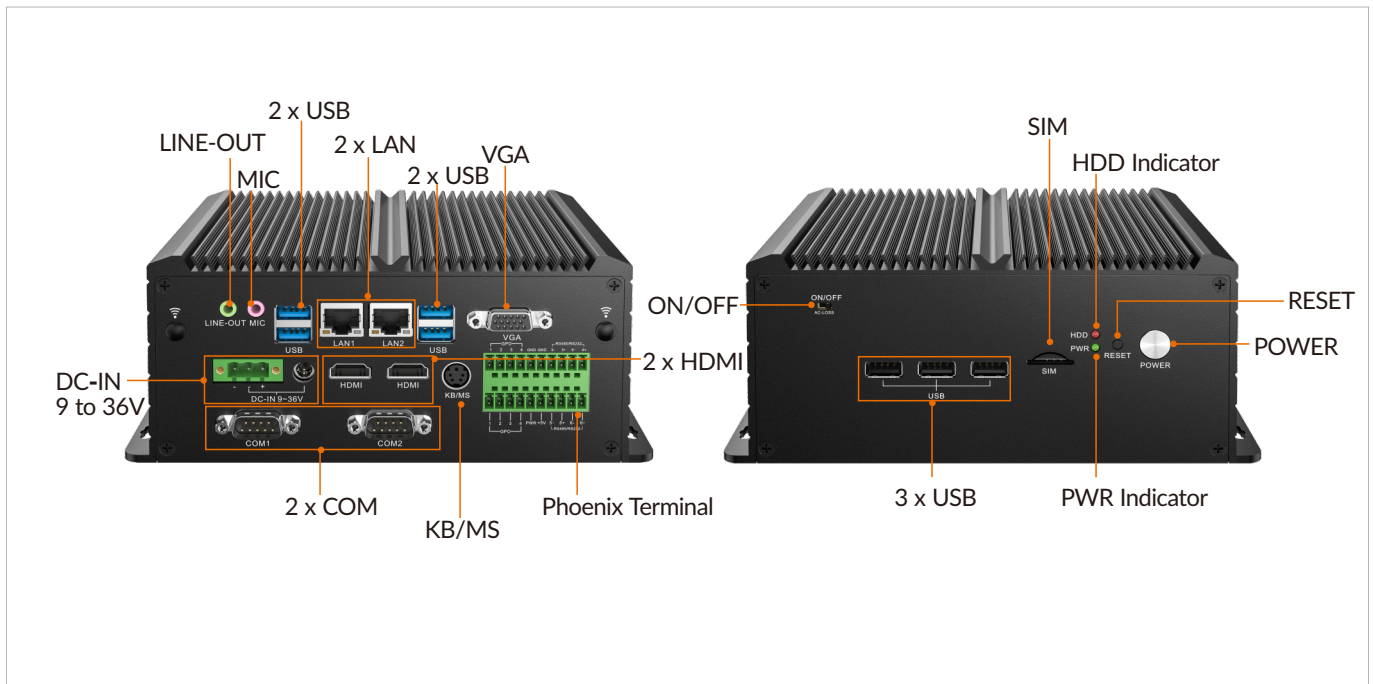
The MBC-3200 fanless industrial computer features a cableless design, ensuring excellent resistance to vibrations and interferences. Its modular design, featuring a CPU board that plugs into an I/O board, not only reduces the time and cost required for product updates but also allows for easy customization to meet specific customer application needs. Moreover, the MBC-3200 offers a wide range of I/O interfaces and expansion options, including COM ports, USB, GbE LAN, GPIO support, as well as M.2 3052 and Mini PCIe for 5G/4G connectivity and M.2 Key E 2230 for Wi-Fi/Bluetooth. This optimized design significantly enhances overall performance and functionality for industrial applications.

Features

- Intel® Celeron®/Core™ i3/i5/i7 processor
- 6 x COM (4 x RS-232/485), 2 x LAN, 7 x USB, 1 x VGA, 2 x HDMI
- 1 x 2.5" SATA HDD/SSD, 1 x mSATA
- 1 x Full length Mini PCIe, 1 x M.2 2230, 1 x M.2 3052(5G)
- 9 to 36VDC power input



I/O Interfaces



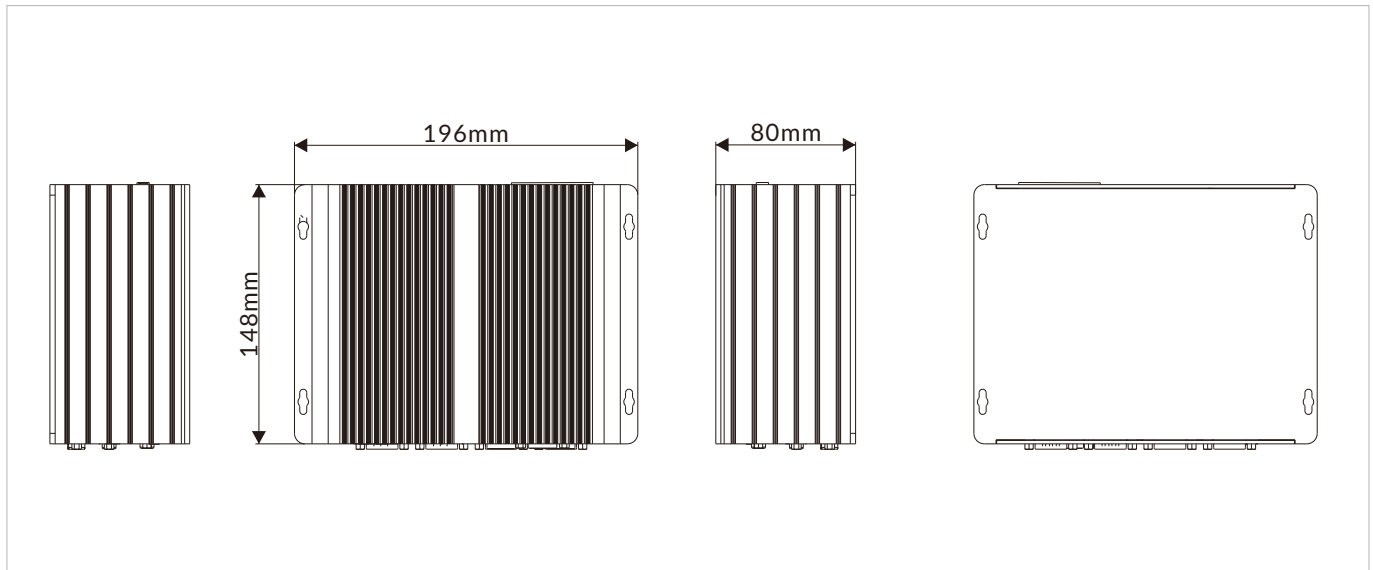
Specifications

System	MBC-3200-J1900		MBC-3200-5020U	MBC-3200-6300U
CPU	Intel® Celeron® J1900		Intel® Core™ i3-5020U	Intel® Core™ i5-6300U
CPU TDP	10W			15W
Memory	1 x DDR3L 1333 MHZ SO-DIMM up to 8GB			2 x DDR4 2133 MHZ SO-DIMM up to 32GB
Storage	1 x 2.5" SATA HDD 1 x mSATA			
BIOS	AMI UEFI			
Watchdog Timer	Software programmable. Supports 256 levels system reset			
I/O Ports				
USB	6 x USB 2.0, 1 x USB 3.0		5 x USB 2.0, 2 x USB 3.0	3 x USB 2.0, 4 x USB 3.0
Serial	6 x COM (COM1/2 supports RS-232, COM3/4/5/6 supports RS-232/485)			
Ethernet	2 x RJ45 GbE Intel® I210AT			
Display	1 x VGA, 2 x HDMI			
SIM Card Slot	1 x SIM card slot			
DIO	4 x DI, 4x DO			
PS/2	1 x PS/2 Keyboard Mouse			
Antenna	2 x SMA antenna holes			
Expansion Slot				
Mini PCIe	1 x Full length mini PCIe			
M.2	1 x M.2 3052			
RF Communication				
Wi-Fi	Mini PCIe/M.2 expansion (optional)			
Cellular	Mini PCIe expansion (optional)			
Bluetooth	Mini PCIe/M.2 expansion (optional)			
GNSS	Mini PCIe expansion (optional)			
Audio				
Audio	Mic in, line out			
Power				
Button	Yes			
DC Input	9 to 36VDC			
Power Mode	AT/ATX			
Operating System				
Windows	Windows 7, Windows 10			
Linux	Ubuntu			
Mechanical				
Dimensions (W x D x H)	196 x 148 x 80 mm (7.72 x 5.83 x 3.15 inches)			
Weight (N.W.)	2.5 kg (5.51 lbs)			
Mounting	Wall mount			
Material	Aluminum alloy			
Environment				
Operating Temperature	-10 to 60°C(14 to 140°F)			
Storage Temperature	-20 to 60°C(-4 to 140°F)			
Relative Humidity	10%~95% @ 40°C (104°F), non-condensing			
Certification				
EMC	CE, FCC Class A			

Specifications

System	MBC-3200-8145U	MBC-3200-8265U	MBC-3200-8565U
CPU	Intel® Core™ i3-8145U	Intel® Core™ i5-8265U	Intel® Core™ i7-8565U
CPU TDP	15W		
Memory	2 x DDR4 2400 MHZ SO-DIMM up to 32GB		
Storage	1 x 2.5" SATA HDD 1 x mSATA		
BIOS	AMI UEFI		
Watchdog Timer	Software programmable. Supports 256 levels system reset		
I/O Ports			
USB	3 x USB 2.0, 4 x USB 3.0		
Serial	6 x COM (COM1/2 supports RS-232, COM3/4/5/6 supports RS-232/485)		
Ethernet	2 x RJ45 GbE Intel® I210AT		
Display	1 x VGA, 2 x HDMI		
SIM Card Slot	1 x SIM card slot		
DIO	4 x DI, 4 x DO		
PS/2	1 x PS/2 Keyboard Mouse		
Antenna	2 x SMA antenna holes		
Expansion Slot			
Mini PCIe	1 x Full length mini PCIe		
M.2	1 x M.2 3052		
RF Communication			
Wi-Fi	Mini PCIe/M.2 expansion (optional)		
Cellular	Mini PCIe expansion (optional)		
Bluetooth	Mini PCIe/M.2 expansion (optional)		
GNSS	Mini PCIe expansion (optional)		
Audio			
Audio	Mic in, line out		
Power			
Button	Yes		
DC Input	9 to 36VDC		
Power Mode	AT/ATX		
Operating System			
Windows	Windows 10		
Linux	Ubuntu		
Mechanical			
Dimensions (W x D x H)	196 x 148 x 80 mm (7.72 x 5.83 x 3.15 inches)		
Weight (N.W.)	Wall mount		
Mounting	Aluminum alloy		
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Environment			
Operating Temperature	-10 to 60°C(14 to 140°F)		
Storage Temperature	-20 to 60°C(-4 to 140°F)		
Storage Temperature	10%~95% @ 40°C (104°F), non-condensing		
Relative Humidity			
Certification			
CE, FCC Class A			
EMC			

Dimensions



Optional Accessories

Part No.	Description
A.02.001.000022	AC/DC power adaptor 60W 12V 5A
C.02.009.000039	AC/DC power adaptor 84W 12V 7A

Ordering Information

Part No.	Description
MBC-3200-J1900	Celeron® J1900 MBC with 6x COM (4x RS-232/485), 2x LAN, 7x USB, 1x VGA, 2x HDMI, 1x SIM socket, 9 to 36VDC
MBC-3200-5020U	Core™ i3-5020U MBC with 6x COM (4x RS-232/485), 2x LAN, 7x USB, 1x VGA, 2x HDMI, 1x SIM socket, 9 to 36VDC
MBC-3200-8145U	Core™ i3-8145U MBC with 6x COM (4x RS-232/485), 2x LAN, 7x USB, 1x VGA, 2x HDMI, 1x SIM socket, 9 to 36VDC
MBC-3200-6300U	Core™ i5-6300U MBC with 6x COM (4x RS-232/485), 2x LAN, 7x USB, 1x VGA, 2x HDMI, 1x SIM socket, 9 to 36VDC
MBC-3200-8265U	Core™ i5-8265U MBC with 6x COM (4x RS-232/485), 2x LAN, 7x USB, 1x VGA, 2x HDMI, 1x SIM socket, 9 to 36VDC
MBC-3200-8565U	Core™ i7-8565U MBC with 6x COM (4x RS-232/485), 2x LAN, 7x USB, 1x VGA, 2x HDMI, 1x SIM socket, 9 to 36VDC