

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

## Overview

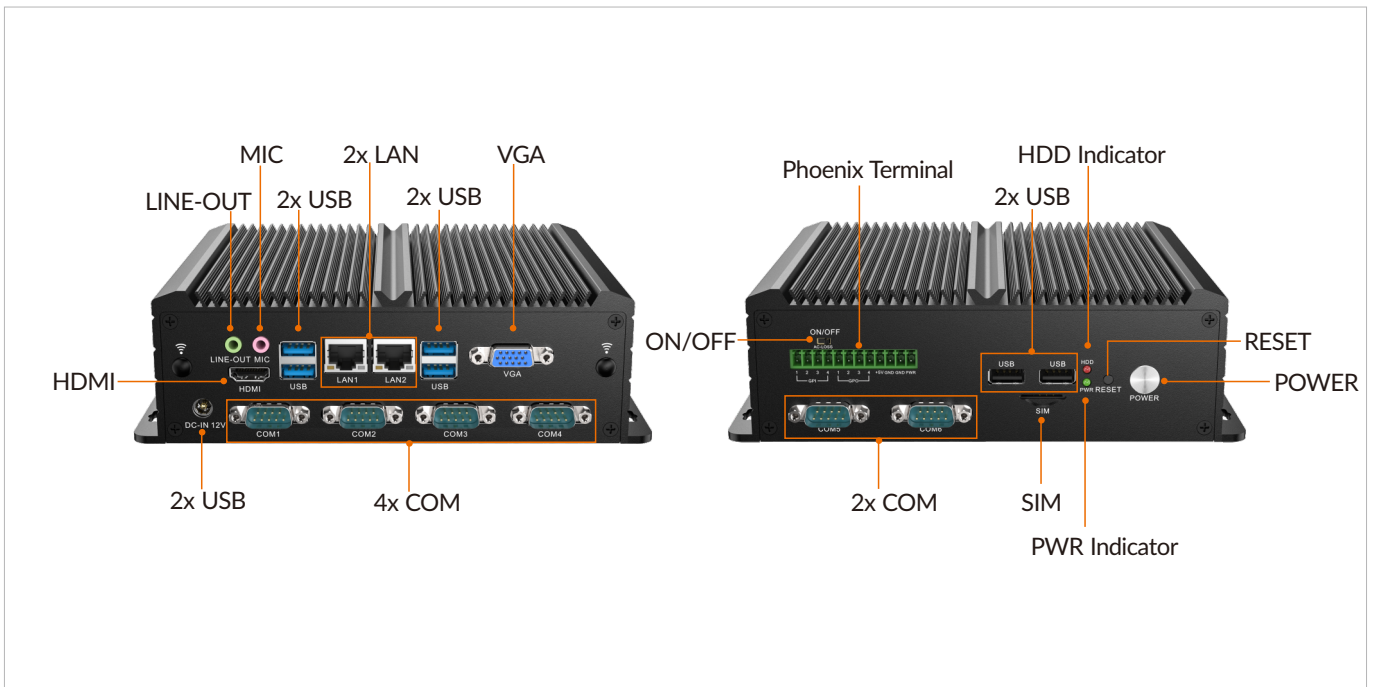
The MBC-2300 fanless industrial computer features a cableless design, ensuring excellent resistance to vibrations and interferences. Its modular design, featuring a CPU board that plugs into an I/O board, not only reduces the time and cost required for product updates but also allows for easy customization to meet specific customer application needs. Moreover, the MBC-2300 offers a wide range of I/O interfaces and expansion, including COM, GbE LAN, GPIO, WiFi, and 4G connectivity.

## Features

- Intel® Celeron®/Core™ i3/i5/i7 processor
- 6x COM (2x RS-232/485), 2x LAN, 6x USB, 1x VGA, 1x HDMI
- 1x 2.5" SATA HDD/SSD, 1x mSATA
- 1x full length Mini PCIe, 1 x M.2 2230
- 12VDC power input



## I/O Interfaces



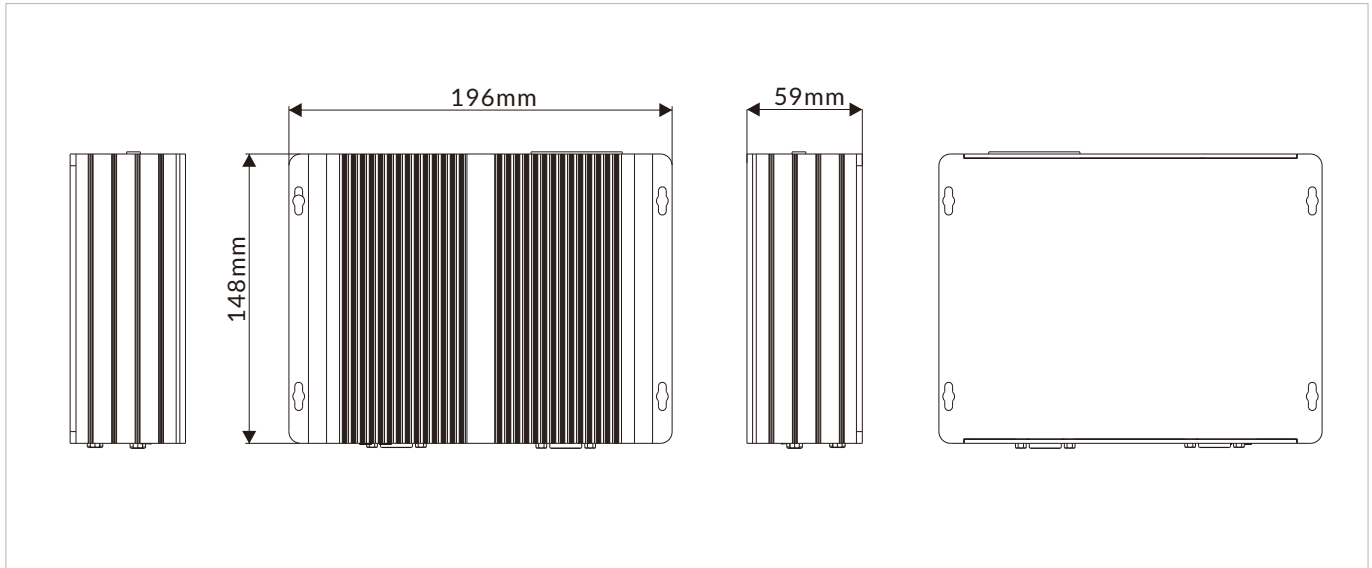
## Specifications

System	MBC-2300-J1900	MBC-2300-5020U	MBC-2300-6300U
CPU	Intel® Celeron® J1900	Intel® Core™ i3-5020U	Intel® Core™ i5-6300U
CPU TDP	10W	10W	15W
Memory	1x DDR3L 1333 MHZ SO-DIMM up to 8GB		2x DDR4 2133 MHZ SO-DIMM up to 32GB
Storage	1x 2.5" SATA HDD 1x mSATA		
BIOS	AMI UEFI		
Watchdog Timer	Software programmable. Supports 256 levels system reset		
<b>I/O Ports</b>			
USB	5x USB 2.0, 1x USB 3.0	4x USB 2.0, 2x USB 3.0	2x USB 2.0, 4x USB 3.0
Serial	6x COM (COM5/6 supports RS-232/485)		
Ethernet	2x RJ45 GbE Intel® I210AT		
SIM Card Slot	1x SIM card slot		
DIO	4x DI, 4x DO		
Antenna	2x SMA antenna holes		
<b>Expansion Slot</b>			
Mini PCIe	1x Full length mini PCIe		
M.2	1 x M.2 2230 Key E		
<b>RF Communication</b>			
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)		
<b>Audio</b>			
Audio	Mic in, line out		
<b>Power</b>			
Button	Yes		
Remote Power On/Off	2-pin remote switch		
DC Input	12VDC		
Power Mode	AT/ATX		
<b>Operating System</b>			
Windows	Windows 7, Windows 10		
Linux	Ubuntu		
<b>Mechanical</b>			
Dimensions (W x D x H)	196 x 148 x 59 mm (7.72 x 5.83 x 2.32 inches)		
Weight (N.W.)	1.5 kg (3.31 lbs)		
Mounting	Wall mount		
Material	Aluminum alloy		
<b>Environment</b>			
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		
<b>Certification</b>			
EMC	CE, FCC Class A		

## Specifications

System	MBC-2300-8145U	MBC-2300-8265U	MBC-2300-8586U
CPU	Intel® Core™ i3-8145U	Intel® Core™ i5-8265U	Intel® Core™ i7-8565U
CPU TDP	15W		
Memory	2x DDR4 2400 MHZ SO-DIMM up to 32GB		
Storage	1x 2.5" SATA HDD 1x mSATA		
BIOS	AMI UEFI		
Watchdog Timer	Software programmable. Supports 256 levels system reset		
<b>I/O Ports</b>			
USB	2x USB 2.0, 4x USB 3.0		
Serial	6x COM (COM5/6 supports RS-232/485)		
Ethernet	2x RJ45 GbE Intel® I210AT		
SIM Card Slot	1x SIM card slot		
DIO	4x DI, 4x DO		
Antenna	2x SMA antenna holes		
<b>Expansion Slot</b>			
Mini PCIe	1x Full length mini PCIe		
M.2	1 x M.2 2230 Key E		
<b>RF Communication</b>			
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)		
<b>Audio</b>			
Audio	Mic in, line out		
<b>Power</b>			
Button	Yes		
Remote Power On/Off	2-pin remote switch		
DC Input	12VDC		
Power Mode	AT/ATX		
<b>Operating System</b>			
Windows	Windows 10		
Linux	Ubuntu		
<b>Mechanical</b>			
Dimensions (W x D x H)	196 x 148 x 59 mm (7.72 x 5.83 x 2.32 inches)		
Weight (N.W.)	1.5 kg (3.31 lbs)		
Mounting	Wall mount		
Material	Aluminum alloy		
<b>Environment</b>			
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		
<b>Certification</b>			
EMC	CE, FCC Class A		

## 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-2300-J1900	Celeron® J1900 MBC with 6x COM (2x RS-232/485), 2x LAN, 6x USB, 1x VGA, 1x HDMI, 1x SIM socket, 12VDC
MBC-2300-5020U	Core™ i3-5020U MBC with 6x COM (2x RS-232/485), 2x LAN, 6x USB, 1x VGA, 1x HDMI, 1x SIM socket, 12VDC
MBC-2300-8145U	Core™ i3-8145U MBC with 6x COM (2x RS-232/485), 2x LAN, 6x USB, 1x VGA, 1x HDMI, 1x SIM socket, 12VDC
MBC-2300-6300U	Core™ i5-6300U MBC with 6x COM (2x RS-232/485), 2x LAN, 6x USB, 1x VGA, 1x HDMI, 1x SIM socket, 12VDC
MBC-2300-8265U	Core™ i5-8265U MBC with 6x COM (2x RS-232/485), 2x LAN, 6x USB, 1x VGA, 1x HDMI, 1x SIM socket, 12VDC
MBC-2300-8565U	Core™ i7-8565U MBC with 6x COM (2x RS-232/485), 2x LAN, 6x USB, 1x VGA, 1x HDMI, 1x SIM socket, 12VDC