

BPC-iMX8MP-06 Industrial Computer



BPC-iMX8MP-06 Industrial Computer



Overview:

BPC-iMX8MP-06 Industrial Computer is composed of a DEBIX SOM A (core board), a customized carrier board and an aluminium enclosure. Engineered for industrial applications with fanless design and compact appearance, it comes with rich isolated interfaces including 4 x DI, 1 x RS232, 1 x RS485, 1 x CAN, and 2 x Analog IN for improved safety. It has strong network connectivity with dual Gigabit Ethernet supporting IEEE 802.3af POE external power supply, 2.4GHz & 5GHz Wi-Fi and Bluetooth 5.0, one M.2 B-KEY 3042 (default)/3052 interface to support expansion of 4G/5G network module, and one M.2 M-KEY 2280 (default)/2242 interface to support NVME SSD storage.

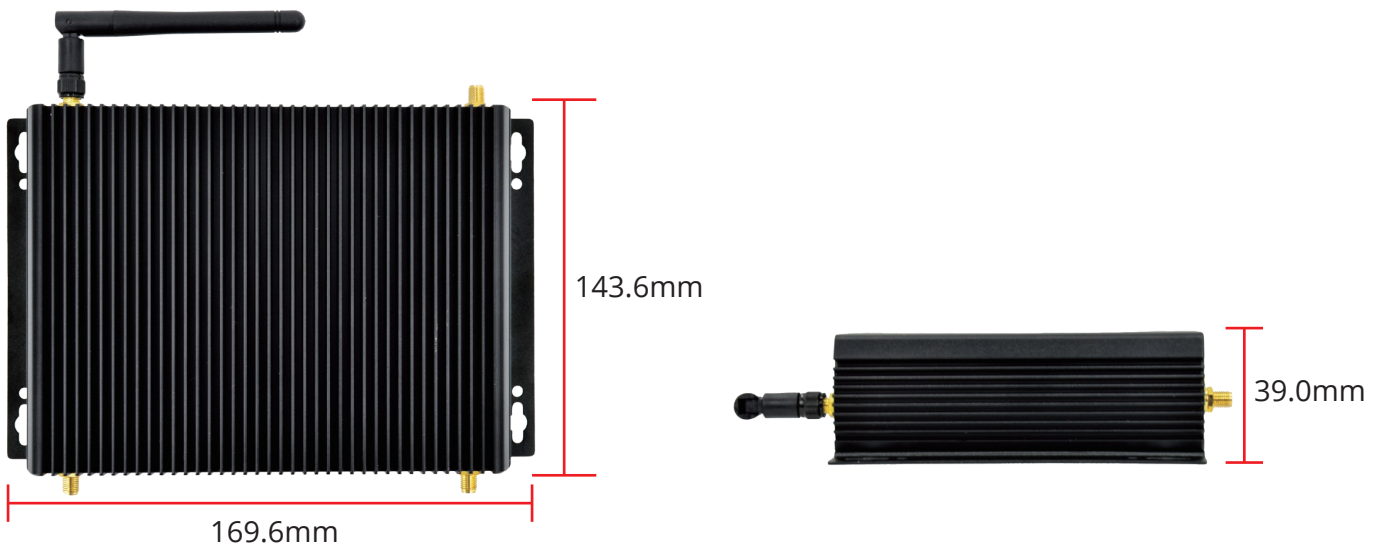
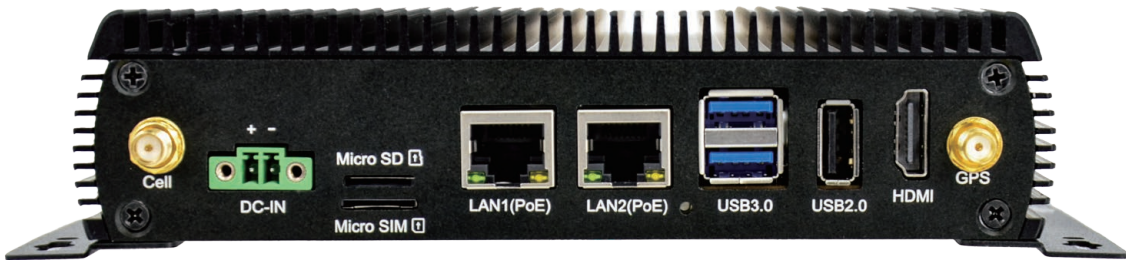
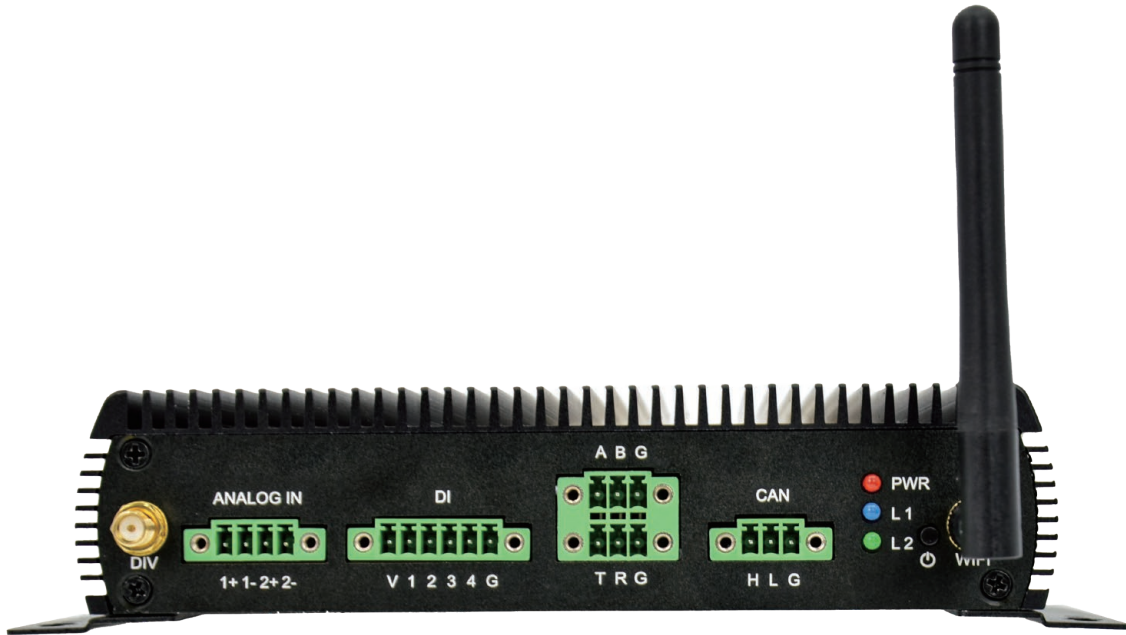
Main Features:

- Utilizes DEBIX SOM A core board and Customized carrier board;
- Support boot from eMMC (default), Micro SD;
- Support Ubuntu and Yocto operating systems;
- Strong connections including dual Gigabit network, 2.4GHz & 5GHz Wi-Fi, Bluetooth 5.0 and one M.2 B-KEY 3042 (default)/ 3052 interface for expansion of 4G/5G module;
- 2 x USB 3.0, 2 x USB 2.0;
- 1 x HDMI, 1 x Cell antenna interface, 1 x GPS antenna interface, 1 x WiFi antenna interface, 1x Div 4G/5G diversity antenna interface (reserved);
- Isolated interfaces: 1 x RS232, 1 x RS485, 1 x CAN, 4 x DI, 2 x Analog IN.

Specification:

System	
Motherboard	DEBIX SOM A (Core Board) and Customized Carrier Board
Memory	Onboard 4GB LPDDR4
Storage	Onboard 64GB eMMC
OS	Ubuntu, Yocto-L5.10.72_2.0.0
Boot	(1) Support boot from eMMC on DEBIX SOM A (default) (2) Support boot from Micro SD on carrier board
Communication	
Gigabit Ethernet	2 x Independent MAC Gigabit Ethernet port, both support IEEE 802.3af POE external power supply
Wi-Fi & BT	2.4GHz & 5GHz Wi-Fi and Bluetooth 5.0, external SMA antenna for Wi-Fi
Cell	1 x 4G/5G network module, external SMA antenna for Cell (optional)
GPS	1 x GPS module, external SMA antenna for GPS (optional)
Video	
HDMI	1 x HDMI output, Type-A female socket
I/O Interface	
Power socket	1 x 2Pin/3.5mm pitch Phoenix terminal
USB	(1) 2 x USB 3.0 Host, double-layer Type-A interface (2) 1 x USB 2.0 Host, Type-A interface
Serial port	(1) 1 x Isolated RS232 (2) 1 x Isolated RS485
CAN	1 x Isolated CAN
DI	4 x Isolated DI, support wet contact
Analog IN	2 x Isolated Analog IN
Slot	(1) 1 x Micro SIM slot (2) 1 x Micro SD slot
LED & Key	(1) 1 x Power LED (2) 1 x L1 LED (3) 1 x L2 LED (4) 1 x ON/OFF Key
Power Supply	
Power Input	DC 12V power input for default, supports DC 12V-36V
Temperature	
Temperature	-40°C~85°C (If SSD card is inserted, the temperature range is 0°C~70°C)
Mechanical & Environmental	
Enclosure Material	Aluminum alloy
Dimensions	169.6mm x 143.6mm x 39.0mm (L x W x H)
Weight	851g (±0.5g)

I/O Interfaces and Dimension:



Safety Instruction:

To avoid malfunction or damage to this product please observe the following:

- Disconnect the device from the DC power supply before cleaning. Use a damp rag. Do not use liquid detergents or spray-on detergents.
- Keep the device away from moisture.
- During installation, put the device on a reliable table. It will be damaged if you drop it.
- Before connecting the power supply, ensure that the voltage is in the required range.
- The air vent in the bottom of the enclosure is used for heat dissipation. To prevent the device from overheating, don't cover the hole.
- Put the power cable in place to avoid stepping on it.
- If the device is not used for a long time, power it off to avoid damage caused by sudden overvoltage.
- Do not pour liquid into the hole of the enclosure, as this could cause fire or electrocution.
- For safety reasons, the device can only be disassembled by professional personnel.
- Do not place the device in a place where the ambient temperature is below -40°C or above 85°C . This will damage the machine. It needs to be kept in an environment at controlled temperature.