

# BPC-iMX8MP-08 Industrial Computer

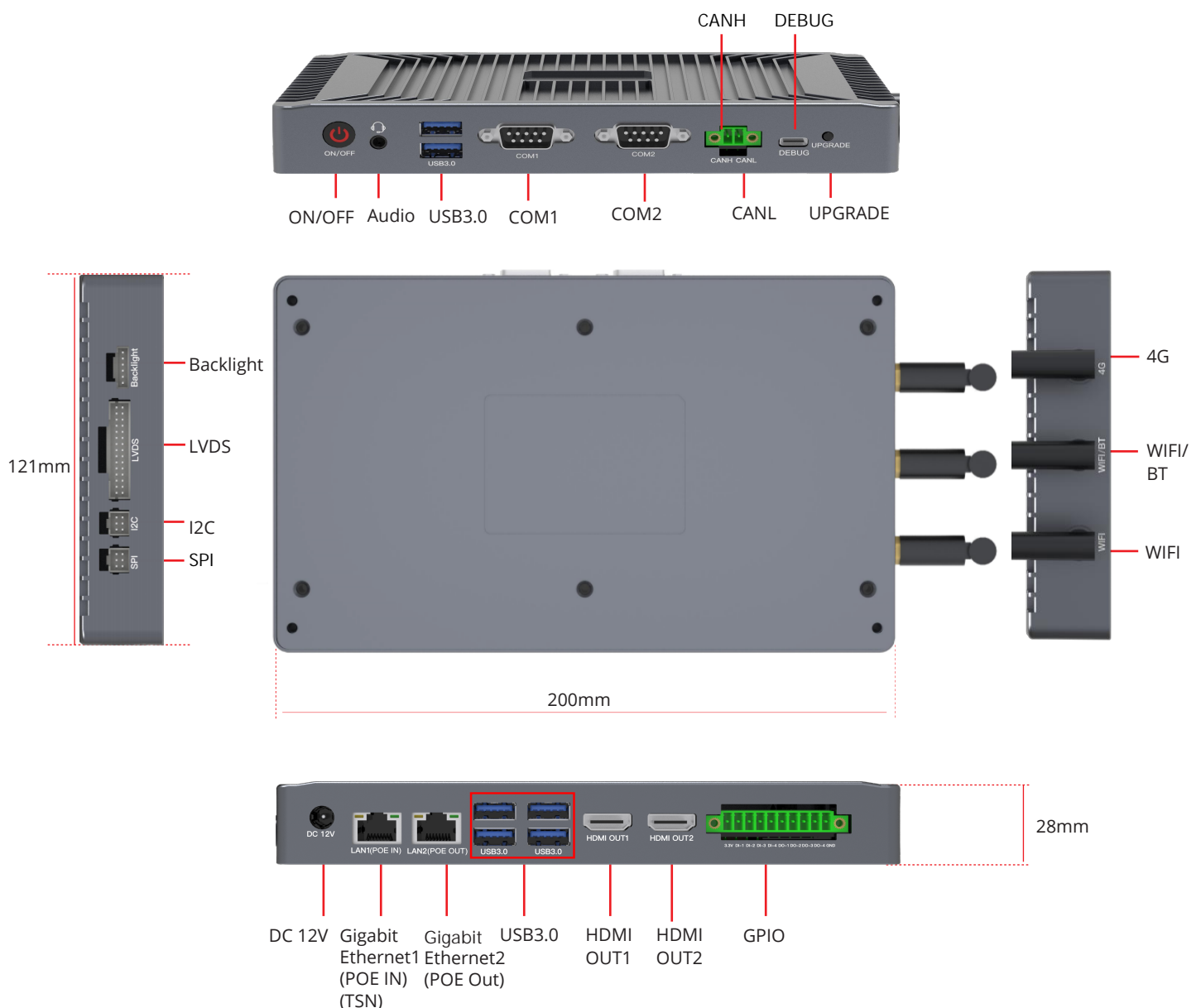


## Industrial Computer Based on NXP i.MX 8M Plus Processor

### Overview:

BPC-iMX8MP-08 Industrial Computer is composed of a DEBIX customized board and an aluminium alloy enclosure. Engineered for industrial applications with fanless design and compact appearance, it comes with rich interfaces including 4 x DI, 4 x DO, and 1 x CAN. It has strong network connectivity with dual Gigabit Ethernet supporting IEEE 802.3 af, one for POE PSE and the other for POE PD and TSN, 2.4GHz & 5GHz Wi-Fi and Bluetooth 5.3, supports 4G/5G via Mini PCIe. And two HDMI OUT, one LVDS support 4K@30Hz + 1080P@60Hz Dual screen display.

### I/O Interfaces and Dimension:



## Specification:

| System                     |   |
|----------------------------|---|
| CPU                        | NXP i.MX 8M Plus, 4 x ARM Cortex-A53, 1.6GHz, 2.3 TOPS NPU  |
| Memory                     | 2GB LPDDR4 (4GB/8GB optional)   |
| Storage                    | 16GB eMMC (32GB/64GB/128GB/256GB optional)  |
| OS                         | Android 11, Ubuntu 20.04, Debian 12.6, Yocto-L6.6.23_2.2.0, Windows 10 IoT Enterprise (4GB/8GB LPDDR4 version)  |
| Communication              |   |
| Gigabit Ethernet           | 2 x Gigabit Ethernet ports (independent MAC address), support IEEE 802.3af (1 x POE PD & TSN, 1 x POE PSE)      |
| WIFI & BT                  | 1 x M.2 2230 2.4GHz & 5GHz WIFI and BT5.3 Combo Module (optional)   |
| 4G                         | 1 x Mini PCIe for 4G/5G Module (optional)   |
| Antenna                    | 3 x ANT (1 x 4G Main ANT, 1 x WiFi Main ANT, 1 x WiFi Diversity ANT+BT Main ANT)                                |
| HDMI                       | 2 x HDMI OUT  |
| LVDS                       | 1 x LVDS, single & dual channel 8 bit   |
| Backlight                  | 1 x Backlight for LVDS  |
| Audio                      | 1 x 3.5mm Headphone and Mic combo port  |
| I/O Interface              |   |
| LED & KEY                  | (1) 1 x ON/OFF System Key with LED<br>(2) 1 x Upgrade Key (eMMC firmware upgrade and update for system storage) |
| DC IN                      | 1 x DC IN female connector  |
| USB 3.0                    | 6 x USB 3.0 Host  |
| Debug                      | 1 x System Debug  |
| COM                        | 2 x COM (RS232 for default, supports RS485 via internal DIP switch)   |
| CAN                        | 1 x CAN   |
| I2C                        | 1 x I2C   |
| SPI                        | 1 x SPI   |
| DIN/DO                     | (1) 4 x Digital Output<br>(2) 4 x Digital Input   |
| Power Supply               |   |
| Power Supply               | DC 12V/3A   |
| Mechanical & Environmental |   |
| Dimension                  | 200.0mm x 121.0mm x 28.0mm (±0.5mm)   |

(Continued)

| Mechanical & Environmental  |  |
|-----------------------------|--|
| Net Weight (PCBA)           | 175g (±0.5g)                           |
| Net Weight (PCBA+Enclosure) | 637g (±0.5g) (excluding antennas)      |
| Operating Temp.             | -20°C ~ +70°C (-40°C ~ +85°C optional) |
| Enclosure Color             | Grey (Black is optional)               |
| Enclosure Material          | Aluminum alloy                         |

## 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 -20 °C or above 70 °C. This will damage the machine. It needs to be kept in an environment at controlled temperature.

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## Contact Us:

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