



Features

- NXP i.MX8M Plus AI-Native processor
- LPDDR4 2133Mhz onboard memory up to 4GB and onboard 16GB eMMC
- Triple independent display HDMI, LVDS and mipi-DSI
- 2 GbE LAN with RJ-45 (one supports QoS with TSN)
- 2 USB 3.1 Host, 1x USB Client
- 1x M.2 Key E and 1x mini PCIe
- 50-pin Expansion IO (2 x CAN, 1x USB 3.1, 3 x USB 2.0, 4 x UARTs, 1x SPI, 2 x I2C, 6 GPIOs)
- 12V DC Power Supply

Ordering Information

Part Number	Description
pITX-MX8M-PLUS-2G	Pico-ITX SBC with NXP i.MX8M Plus Quad Core, 2GB LPDDR4, 0 C ~ 60 C
pITX-MX8M-PLUS-2G-I	Pico-ITX SBC with NXP i.MX8M Plus Quad Core, 2GB LPDDR4, -40 C ~ 85 C
pITX-MX8M-PLUS-4G	Pico-ITX SBC with NXP i.MX8M Plus Quad Core, 4GB LPDDR4, 0 C ~ 60 C
pITX-MX8M-PLUS-4G-I	Pico-ITX SBC with NXP i.MX8M Plus Quad Core, 4GB LPDDR4, -40 C ~ 85 C

Packing List

Part Number	Description	Quantity
pITX-MX8M-PLUS	pITX-MX8M-PLUS SBC	1

Specifications

Form Factor	Pico-ITX (100mm x 72mm)
CPU	NXP i.MX8M Plus quad core ARM Cortex-A53 up to 1.8GHz
Memory	<ul style="list-style-type: none"> • 16GB 5.x eMMC onboard • 2GB/4GB LPDDR4 4000MT/s onboard • 4MB EEPROM (for board serial number, revision number,...etc)
NPU	2.3 TOPS Neural Network performance
Display	<ul style="list-style-type: none"> • 1 x HDMI 2.0a, up to 3840 x 2160 @ 30Hz • 2 Single Channel or 1 Dual Channel 24 bit Bit LVDS • 14-Lane MIPI-DSI (shared with LVDS connector)
Ethernet	2 x 10/100/1000Mbps LANs (one supports QoS with TSN)
Watchdog	Integrated Chipset: TI TPS3828-33DBVR
TPM	TPM2.0 (ST33HTPHX32AHE1)
Audio	<ul style="list-style-type: none"> • Audio Codec: WM8960 • Headphone Out • Microphone In
USB	2 x USB 3.1 and 1x USB Client
Expansion	<ul style="list-style-type: none"> • 1 Mini-PCIe: 1 x Full Size Mini-PCIe Slot (USB 3.1 and USB 2.0 Signals only) • 1 x M.2 2230 Key E Slot (USB 2.0/I2C/UART/PCIe/UART/SDIO/I2S) • 1 x 50-pin 2.00mm Box Header (EIO50) at rear side • 1 x MicroSD Card Slot • 1 x NanoSIM Card Holder
Camera	2 x 4-Lane MIPI-CSI2
Power	<ul style="list-style-type: none"> • 12 V DC by Lockable DC Jack • Power Consumption: 7.21W
EIO50 Expansion	50-pin 2.0mm box header that supports: <ul style="list-style-type: none"> • 2 x CAN-FD • 4 x UARTs • 1 x USB 3.1 and 2 x USB 2.0 • 2 x I2C • 1 x SPI • 6 x GPIOs
Mechanical	<ul style="list-style-type: none"> • Dimensions: 100 x 72 x 19 mm • Weight: 0.05Kg (0.25Kg with Heat Sink)
Operating Systems	<ul style="list-style-type: none"> • Debian • Yocto • Android
Certification	CE/FCC Class B
Environment	<ul style="list-style-type: none"> • Operational Temperature: 0 ~ 60 C (Commercial) / -40 ~ 85 C (Industrial) • Operating Humidity: 5% ~ 95% Relatively Humidity, non-condensing

Optional Accessories

Part Number	Description
VTT-HS-9A981-A1	Heat Sink for pITX-MX8M-PLUS
pITX-I0B-2201	50-pin EIO50 extension board with 2 x CAN, 4 x RS232s, 1 x RS484, 1x USB 2.0 Type A, 1x USB 2.0+3.0 Type A, SPI, I2C
125021500AUD-00	Audio HP Out, Mic. In and Line In Cable
12605M200ABG-00	M.2 WiFi Module (IEEE 802.11 a/b/g/n/ac Wireless LAN 2T2R and Bluetooth 5.3 Combo Module)