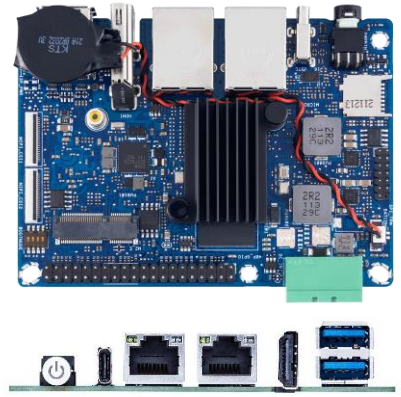


IMX8P-IM-A

NXP® i.MX 8M ARM Cortex-A53 core, 4GB LPDDR4, HDMI, Dual LAN, 16G eMMC,
1*M.2 E Key slot, 1*Micro SD Card, 3*USB 3.2 Gen 1

Features

- Pico-ITX Single Board Computer with NXP® i.MX 8M low power and scalable processor
- 16G on board eMMC and Micro-SD card for storage capacity
- Support Windows 10 IoT Core and Linux Yocto OS
- Wide Temperature Range: -20~60°C

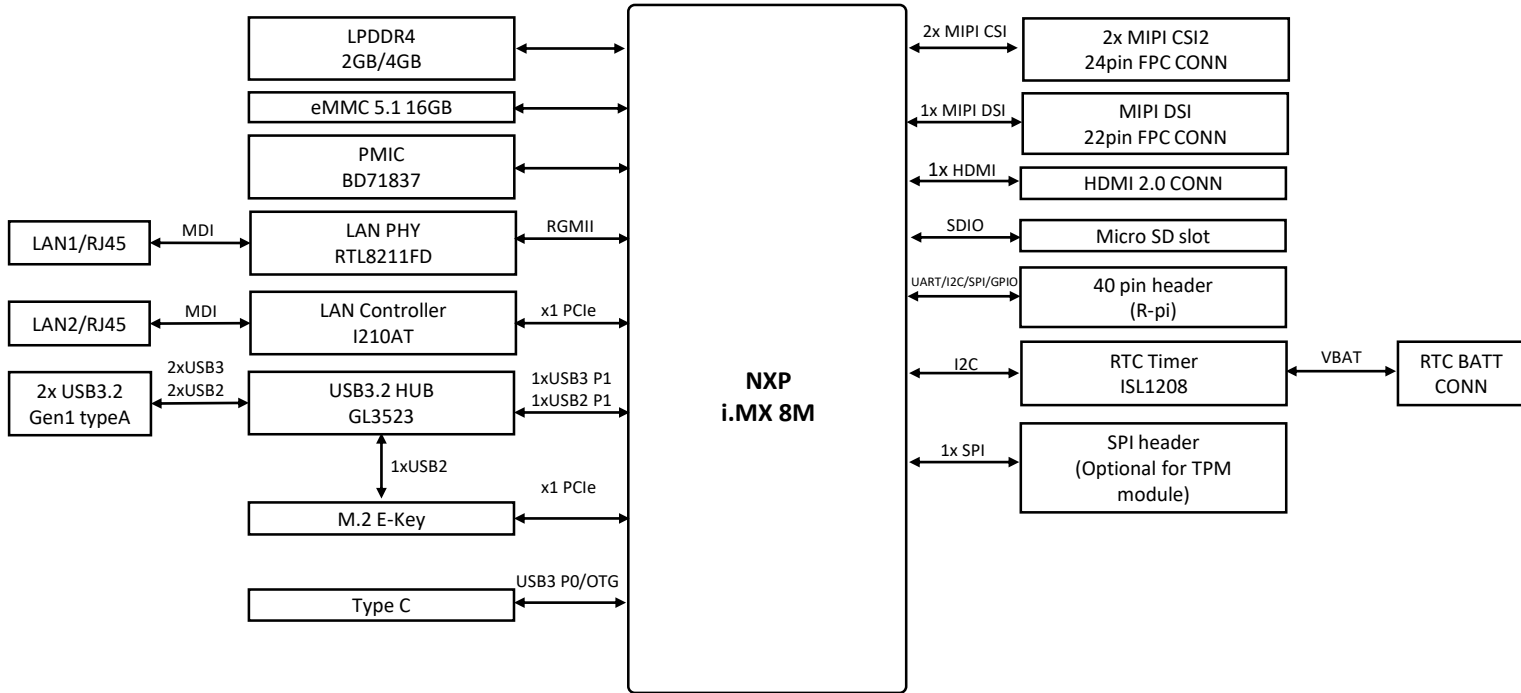


Specifications

| | | |
|---------------------------|---------------------------|---|
| Processor System | CPU | NXP® i.MX 8 M ARM Cortex-A53 core |
| | MAX.SPEED | 1.3 GHz |
| | L2 Cache | 1MB |
| | Chipset | Integrated |
| Memory | Technology | LPDDR4 |
| | Max. | 4GB on board memory |
| Display | HDMI | 1, Supports HDMI 2.0 up to 3840 x 2160 @ 60 Hz |
| | MIPI DSI | 1, Supports MIPI DSI (4 lane) up to 1920 x 1080 @ 60 Hz |
| Expansion Slot | M.2 | 1 x M.2 2230 E Key for BT/WiFi module (cooperate with Google EdgeTPU Module) |
| | Others | 1 x Micro-SD Card connector |
| Ethernet | Speed | 10/100/1000Mbps |
| | Controller | 1 x Realtek® RTL8211, supports WOL 1 x Intel I210-AT, supports WOL |
| | Connector | 2 x RJ-45 |
| Storage | eMMC | 1 x 16GB onboard eMMC |
| Front I/O | HDMI | 1 |
| | USB3.2 Gen1 | 2@Type A, 5V/2A 1@Type C OTG, 5V/1.5A |
| | Ethernet | 2 |
| | Power Button | 1 |
| | Reset Button | 1 |
| Rear I/O | Power Connector | DC Power input |
| Internal Connector | GPIO Header | 1 x 40-pin headers includes: - up to 6 x GPIO pins - up to 2 x I2C bus - up to 1 x UART - up to 2 x PWM - up to 1 x PCM/I2S - 2 x 5V power pins - 2 x 3.3V power pins - 8 x ground pins |
| | Micro-SD Card | 1 Slot |
| | TPM Header | 1 (14-1 pin) |
| | MIPI DSI | 1, Supports MIPI DSI (4 lane) up to 1920 x 1080 @ 60 Hz |
| | MIPI CSI | 2, support two MIPI-CSI camera inputs (4-lane each) |
| | Watchdog Timer | S/W |
| Security Module | TPM | TPM 2.0 power by Nuvoton NCPT 750 (Optional) |
| Manageability | | WOL |
| Power | Power Type | DC power input |
| | Voltage | 12-24V DC input |
| Operating System | Linux | Linux Yocto |
| | Microsoft Windows | Windows 10 IoT Core (Limited support, beta version available) |
| Environment | Operating Temperature | -20~60°C |
| | Non-Operating Temperature | -40~85°C |
| | Relative Humidity | 10~95% |
| Dimension | Form Factor | 100mm x 72mm x 21mm |
| Certification | Safety | CE, FCC |

Block Diagram

IMX8P-IM-A
Size: Pico-ITX



Ordering Information

| Model Name | Part Number | Description |
|-----------------|-------------|--|
| IMX8P-IM-A | 90ME01F0* | I.MX 8M,HDMI,DUAL LAN,MB |
| IMX8P-IM-A R2.0 | 90ME05V0* | I.MX 8M,HDMI,DUAL LAN,MB, I210-AT, NO I2C Header |

* The part number might vary for different regulations and package. Please consult the TPM in your region for exact 90PN.

Optional Accessories

| Part Number | Description | Quantity |
|-------------|-------------------------------------|----------|
| 0C011- | WIFI5 AC+BT5.0(2*2)M.2 2230 | 1 |
| 14012- | WIFI RF CABLE ASSEMBLY SMA/MHF 14CM | 2 |
| 14008- | WIFI_MAIN_ANTENNA | 2 |
| 0A001- | Power Adaptor 65W | 1 |
| 14G1100- | Power Cord | 1 |

* The part number might vary due to part number revision.

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