

i.MX8M Plus SOM

Up to 4 x Arm Cortex-A53 cores, 1 x Cortex-M7

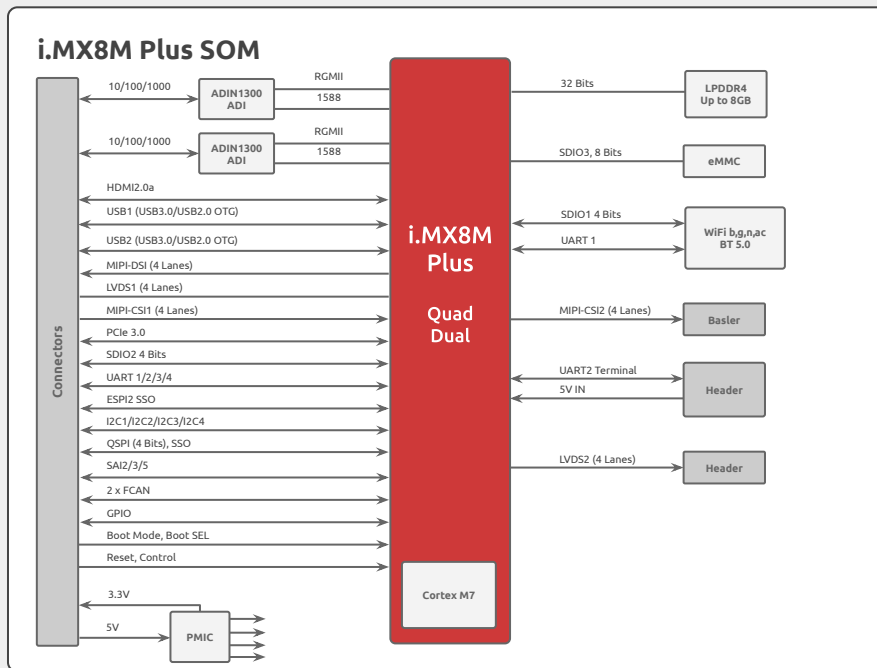
NXP i.MX 8M Plus Processor System on Module



- Integrated NPU (2.3 TOPs) for embedded AI/ML applications and edge inferencing
- Dual to Quad-core options with onboard WiFi/BT, eMMC, MIPI-CSI, LVDS
- Connect up to 2 MIPI cameras, 4K vision with HDR for detailed image processing



| | i.MX8M Plus Dual | i.MX8M Plus Quad |
|--------------|--------------------------------|---|
| CPU Details | CPU Name | NXP i.MX8M Plus Dual |
| | CPU Type | 2 x Cortex A53 1 x Cortex M7 1 x NPU up to 2.3 TOPS |
| | CPU Speed | 1.8GHz Commercial 1.6GHz Industrial |
| | Floating Point | VFPv4 |
| | SIMD | NEON |
| RAM | Memory & Storage | 1GB LPDDR4 |
| | Internal Storage | 8GB eMMC |
| | External Storage Support | NOR-Flash SD PCIe-SSD |
| Networking | Ethernet | 2 x 10/100/1000 Mbps 1 x with TSN |
| | Wireless | 802.11 ac/a/b/g/n + BT 5.0 |
| Multimedia | GPU | Vivante GC7000UL |
| | 3D GPU Support | OpenGL ES 3.1/3.0 Vulkan OpenCL 1.2 FP OpenVG 1.1 |
| | Video Decoder | 1080p60 |
| | Video Encoder | 1080p60 |
| | Display Interfaces | HDMI 2.0, MIPI-DSI, LVDS |
| | Camera Interface | 1 x MIPI-CSI2 (4 Lane) 2 x ISP |
| | S/PDIF Input / Output | 1 |
| Connectivity | Digital Audio Serial Interface | 18x I2S TDM, DSD512, 8-ch PDM Mic input, eARC, ASRC Low power voice accelerator: Cadence® Tenilica® HiFi 4 DSP @ 800 MHz |
| | USB 3.0 | 2 |
| | PCIe | 1 (Gen 3.0) |
| | I2C | 3 |
| | SPI | 1 |
| | UART | 2 (RTS/CTS/RX/TX) +1 (TX/RX) |
| | GPIO | 75 |
| | PWM | 4 |
| | CAN | 2 |
| | SD/MMC | 1 |
| JTAG | Test point header | |
| OS Support | Embedded Linux | Linux |
| Physical | Size | 47 x 30 mm |
| | Interface | 3 x Hirose DF40 connectors |
| Power | Main Voltage | 5V |
| | I/O Voltage | 3.3V/1.8V |
| Environment | Temperature | Commercial: 0°C to 70°C Industrial: -40°C to 85°C |
| | Humidity | Humidity (non-condensing): 10% – 90% |



Ordering Information

Available on Shop

| SKU | Description |
|---|---|
| SRMP8QDW00D01GE008V10C0 | SOM i.MX8M Plus Quad No WiFi/BT 1GB RAM 8GB eMMC Com.Temp R1.0 Unfused |
| SRMP8QDWB1D01GE008V10C0 | SOM i.MX8M Plus Quad Inc. WiFi/BT 1GB RAM 8GB eMMC Com.Temp R1.0 Unfused |
| SRMP8-KIT001 | i.MX8 Plus Starter Kit - SOM i.MX8M Plus Quad HummingBoard Pulse Inc. WiFi/BT 1GB RAM 8GB eMMC Com.Temp R02 Inc. Heatsink 12V 1.5A Power adapter Micro SD USB to Micro USB Cable WiFi Antenna |

- To choose your ideal configuration see our [Product Configurator Tool](#)

Accessories:

| SKU | Description |
|--------------------------|-----------------|
| HS00016K | i.MX8M Heatsink |

Kits

| SKU | Description |
|---|---|
| SRMP8QDW00D01GE008M01CH | SOM i.MX8M Plus Quad HummingBoard Mate No WiFi/BT 1GB RAM 8GB eMMC Com.Temp R01 Inc. Heatsink |
| SRMP8QDWB1D01GE008M01CH | SOM i.MX8M Plus Quad HummingBoard Mate Inc. WiFi/BT 1GB RAM 8GB eMMC Com.Temp R01 Inc. Heatsink |

For more information about the i.MX8M Plus SOM Software/Hardware visit our:

[Developer Center](#)