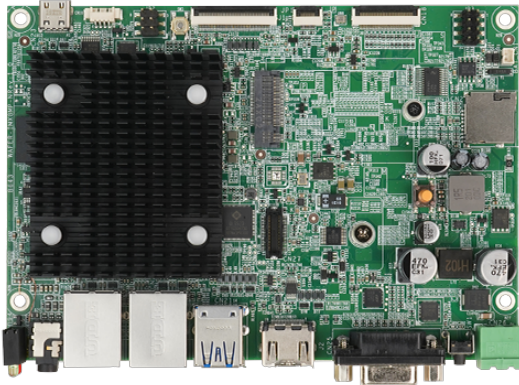


WAFER-IMX8MP

3.5" SBC supports NXP i.MX 8M Plus Processors with 4GB LPDDR4 memory & 16 GB eMMC NAND FLASH on board default, dual display and MIPI_CSI, I²C, GPIO, dual GbE Lan, USB 3.2 Gen 1, Full RS-232, 0°C~70°C and RoHS



Features

- » 3.5" SBC with NXP i.MX 8M Plus Quad processor on-board SoC
- » 4GB LPDDR4 memory (up to 8GB) & 16GB eMMC NAND flash (up to 128GB)
- » Dual displays with HDMI™, MIPI DSI and camera MIPI CSI input
- » Rich I/O: GbE RJ45, USB 5Gb/s, full RS-232/422/485, micro SD slot
- » M.2 B Key Slot (3G/LTE/5G module optional)
- » Optional Wi-Fi 5 / Wi-Fi 6 / Bluetooth 5.0
- » OS supports Android 13 / Yocto 4.0 (Linux Kernel 5.10)

Specifications

| | |
|-----------------------------|--|
| Form Factor | |
| Form Factor | 3.5" SBC |
| System | |
| CPU | » Processor: NXP i.MX 8M Plus Quad (Quad-core Cortex-A53 up to 1.8 GHz) » GPU: GC7000UL 3D (2 shaders), GC520L » NPU: up to 2.3 TOPS |
| Memory | 4GB LPDDR4-3200 |
| Memory Max. | up to 8GB |
| Cooling method / System Fan | Heatsink |
| Supported OS | Android 13, Yocto 4.0, Ubuntu 22.04 |
| Physical Characteristics | |
| Dimensions (LxWxH) (mm) | 146 x 102 |
| Storage | |
| Storage | SD/MicroSD card : Micro SD slot eMMC : 16GB eMMC NAND flash, up to 128GB |
| I/O Interface | |
| Display Output | 1 x HDMI™ : output 2.0a Type A, up to 4K 1 x MIPI DSI : 4 lanes (40-pin 0.5mm FPC 90°) |
| Ethernet | 2 x LAN : GbE RJ45 |
| Audio | Description: 1 x 3.5mm Audio Jack (Mic-in & Line out) 2 x Speaker (3W/8Ω) |
| I/O Interface | 1 x External RS-232/422/485 (DB9 Port) 1 x Internal RS-232/422/485 : RS-232/RS-485 (2x3 pin header) 1 x I ² C (for Touch, 8-pin 2.0mm FPC) GPIO : 8 bit (4 in / 4 out, pin header) |
| Expansion | 3 x USB - 2 x Type-A (5 Gb/s) 1 x Type-C (Support USB 2.0 for download) 1 x PCIe x1 (Gen 3) 1 x M.2(NGFF) : B Key Slot (3G/LTE/5G module optional) |
| Wireless | |
| Wi-Fi | Support Wi-Fi 5/6 (B to B IEI module optional) |

| | |
|-----------------------|---|
| Bluetooth | Bluetooth V5.0 optional |
| Other Features | |
| Camera | 1 x MIPI CSI 4 lanes (30-pin 0.5mm FPC) |
| Power | |
| Input | 12V DC |
| Environment | |
| Operating Temperature | 0°C ~ 70°C with air flow |
| Storage Temperature | -20°C ~ 80°C |
| Humidity | 10% ~ 99% (non-condensing) |
| Certifications | |
| Safety & EMC | EMC Class B |

Ordering Information

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|-----------------------|---|
| WAFER-IMX8MP-Y/BD-R10 | 3.5" SBC supports NXP i.MX 8M Plus Processors with 4GB LPDDR4 memory & 16GB eMMC NAND Flash, Yacto platform |
| WAFER-IMX8MP-U/BD-R10 | 3.5" SBC supports NXP i.MX 8M Plus Processors with 4GB LPDDR4 memory & 16GB eMMC NAND Flash, Ubuntu platform |
| WAFER-IMX8MP-D/BD-R10 | 3.5" SBC supports NXP i.MX 8M Plus Processors with 4GB LPDDR4 memory & 16GB eMMC NAND Flash, Debian platform |
| WAFER-IMX8MP-A/BD-R10 | 3.5" SBC supports NXP i.MX 8M Plus Processors with 4GB LPDDR4 memory & 16GB eMMC NAND Flash, Android platform |

Packing List

| | |
|--|-------------------------------------|
| 1 x WAFER-IMX8MP single board computer | 1 x Pluggable female terminal block |
| 1 x QIG | |