

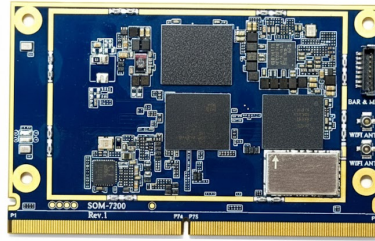
SOM Modules

VIA SOM-7200

Fanless low-power platform for Edge AI applications with MediaTek Genio 720 Octa-Core processor

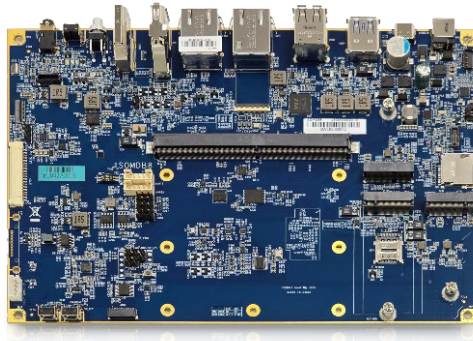
Features

- Dedicated high-performance Edge AI engine delivering a massive 10 TOPS of powerful on-device processing
- Exceptional power efficiency
- Advanced 4K multimedia and dual full HD display support
- Broad OS support for development (Android, Yocto Linux and Debian)
- Platform scalability & rich I/O connectivity



Specifications

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|--|---|
| Model Name | SOM-7200 |
| Processor | MediaTek Genio 720 Octa-Core Processor <ul style="list-style-type: none">- Two Cortex-A78 @ 2.6GHz- Six Cortex-A55 @ 2.0GHz |
| System Memory | 8GB/16GB LPDDR5X SDRAM (1 x LPDDR5X) |
| Storage | 128GB UFS Flash Memory |
| Graphics | ARM Mali-G57 MC2 High Performance GPU Graphics engine supporting OpenGL® ES 1.1/2.0/3.2, OpenCL ES 2.2, Vulkan 1.0/1.1 hardware acceleration Supports H.265 and H.264 video decoding up to 4K@60fps and video encoding up to 4K@30fps |
| AI Processor | MediaTek NPU 850 (supports up to 10 TOPS) |
| Ethernet | Integrated single-port Gigabit Ethernet Transceiver |
| PMIC/Audio Codec | MediaTek MT6365 |
| Display | 1 set of MIPI DSI 4D1C (MIPI C/D PHY) <ul style="list-style-type: none">- C-PHY: 2.0Gbps- D-PHY: 2.5Gbps 1 set of 4-Lane eDP 1.4b-TX supporting 5.4Gbps per lane |
| Supported I/O through Golden Finger | 1 MIPI DSI 1 eDP 1 MIPI CSI 1 SDIO 2 SPI 2 I2S 6 I2C 4 UART 2 USB 3.2 3 USB 2.0 1 PCIe (1-Lane) 1 Gigabit Ethernet 1 Watchdog Management 1 GPIO 1 PWR with GND |
| Onboard I/O | 1 Audio connector for Headphone out, Line out and MIC-in 2 Digital MICs 1 4-Lane MIPI CSI-2 connector |
| Operating System | Android 15, Yocto 5.0, Debian 12 |
| Operating Temperature | 0°C ~ 60°C |
| Operating Humidity | 0% ~ 95% (relative humidity; non-condensing) |
| Form Factor | SMARC 2.2 82mm x 50mm (3.22" x 2") |
| Compliance | CE, FCC, TELEC, UKCA |



Specifications

| | |
|-----------------------------------|---|
| Model Name | SOMDB8 Carrier Board |
| HDMI | Single Chip 4-Lane DisplayPort 1.4 to HDMI 2.1 Converter with Embedded MCU |
| Ethernet | GbE USB 3.0 Ethernet Network Interface Controller |
| Audio Amplifier | 3W Audio Power Amplifier with Shutdown Mode |
| USB | USB 3.1 Gen1 Hub Controller |
| High-Speed Signal Switches | 8-to-4 differential channel multiplexer/demultiplexer switch 2:1 MIPI 4-Lane data switch |
| Power Delivery | USB Type C and USB PD Controller |
| Power Management IC | MediaTek MT6375 |
| MCU | Mixed-signal microcontrollers with CAN-FD interface |
| Onboard I/O | 1 MXM 314-pin connector 1 MIPI DSI connector 1 LVDS single-channel connector (shared with MIPI DSI) 1 HDMI connector 1 4-Lane MIPI CSI-2 connector 1 SIM connector 1 M.2 3052 B-Key Slot (supports USB 3.2/SIM for a LTE/5G module) 1 M.2 2230 E-Key Slot (supports PCIe x 1 for a Wi-Fi module) 1 M.2 2242 M-Key Slot (supports PCIe x 1 for a SSD module) 1 Battery charge connector 1 Audio connector (supports headphone-out, line-out and MIC-in) 1 ADC/GPIO pin header for multiplexed Analog inputs/GPIOs (supported by MCU) 1 RTC battery connector 2 4-wire UART connectors (TX/RX/CTS/RTS) 1 WDT select pin header 1 Console connector 1 DC-in select pin header 1 12V DC-in power connector |
| Front I/O | 1 Volume+ button 1 Volume- button 1 MicroSD card slot |
| Back I/O | 1 USB 3.2 and PD Type C port 1 USB 3.2 Type A port 2 USB 2.0 Type A ports 1 Micro USB 2.0 port (for image download) 2 GLAN ports 1 9-pin D-sub connector (supports CAN-FD) 1 3.5mm Audio jack (supports Headphone-out and MIC-in) 1 4-way spring clip socket (supports speaker-out) 1 Reset button 1 Power button with LED |
| Power Supply | 12V DC-in or USB 5VDC |
| Operating Temperature | 0°C ~ 60°C |
| Operating Humidity | 0% ~ 95% (relative humidity ; non-condensing) |
| Form Factor | 151mm x 134mm (5.94" x 5.28") |