Huameishi Technology

H8MM300 Series System on Module

H8MM300 Series

High Performance Low Power SOM with NXP ARM® MX8M Mini/ Nano, Cortex-A53 Dual/Quad core up to 1.5GHz Processor

Features

- NXP MX8M Mini Cortex™-A53/Cortex™-M4, Dual/Quad up to 1.8GHz processor, or
- NXP MX8M Nano Cortex™-A53/Cortex™-M7, Dual/Quad up to 1.6GHz processor
- 512M/1//2/3GB LPDDR4, up to 64GB eMMC
- Rich peripheral I/O support
- Validated w/ Yocto v2.5 and Android 10
- Long life time supply with NxP solution
- Simple product design using SOM

Specifications

Form Factor	SOM
Processor	MX8M Mini Cortex™-A53/Cortex™-M4, Dual/Quad up to 1.8GHz processor, or MX8M Nano Cortex™-A53/Cortex™-M7, Dual/Quad up to 1.5GHz processor
System Memory	512MB/1GB/2GB/3GB LPDDR4
Flash Memory	8GB eMMC on board (optional up to 64 GB)
Display	SPI interface small display support
Video Codec	N/A
Graphic	N/A
Audio Interface	3x I²S, 1x SPDIF(Multi pin with others) for MX8M Mini, 2x I²S, 1x SPDIF(Multi pin with others) for MX8M Nano
LAN	1x GbE LAN
USB	2x USB2.0 for MX8M Mini, or 1x USB2.0 for MX8M Nano
Image Capture Interface	N/A
Serial	4x UART, 1x QSPI, 1x SPI Interface
Media Interface	1x High-speed MMC/SDIO (MMC 8-bit, SDIO 4-bit)
PCI-E	1x PCIe(x1) Gen2
SATA	N/A
GPIO	24x GPIO
I²C	4x I²C
CAN Bus	N/A
Dimensions	37mm x 39mm x 3mm
Environment	Humidity: 0 % to 90 % RH at 60° C (non-condensing) Shock: Non-Operating: 1G, 15 mins (x-, y-, z-axis) Vibration: Non-operating: 3 Hz to 500 Hz, 15 mins
Operating Temperature	Consumer Grade: 0°C ~ 60°C Industrial Grade: -40°C ~ 85°C (with heat sink)
Software Support	Yocto 2.5 (Kernel 4.14.62) Android 9 (Kernel 4.14.62)
Certification	CE/FCC Class B

Ordering Information

H8MM300-M216	MX8M Mini, Quad core A53, 1.8GHz, 2GB LPDDR4, 16GB MLC eMMC (heat sink may required)
H8MM300-M216I	Industrial Grade MX8M Mini, Quad core A53, 1.2GHz, 2GB LPDDR4, 16GB MLC eMMC
H8MM300-N116	MX8M Nano, Quad core A53, 1.5GHz, 1GB LPDDR4, 16GB MLC eMMC (heat sink may required)
H8MM300-N116I	Industrial Grade MX8M Nano, Quad core A53, 1.2GHz, 1GB LPDDR4, 16GB MLC eMMC
HX100 Carrier Board (For evaluation)	3.5" SMARC 2.0 carrier board, Dual LVDS, HDMI, 2x CSI, DSI, RS-234/422/285, USB3.0, M.2 Key-E(2230), Mini PCI-E w/ SIM socket, USB OTG, Audio/Speaker out/HP&MIC, MicroSD and 12~24VDC
H8MM300 SMARC	Putting H8MM300 module on SMARC 2.0 interface board using HX100 carrier board for evaluation/development