



Features

- NXP i.MX8M Plus Quad Cortex-A53 processor
- 3GB LPDDR4, 16GB eMMC on board
- Rich peripheral I/O support
- Validated with Yocto 4.0 (sumo, kernel 5.4.70) / Android 11
- Long-term supply with NXP solution
- Compliant with SMARC™ 2.1
- Wide-range operating temperature (-40°C~85°C)

Specifications

Form Factor	SMARC™ 2.1
Processor	NXP i.MX8M Plus Quad Cortex-A53 processor
System Memory	3GB LPDDR4 on board
Flash Memory	16GB eMMC on board (up to 64GB)
Display	HDMI, LVDS and MIPI-DSI 4-lane up to 1920 x 1080 at 60 Hz
Video Codec	Up to 1080p/60fps video decode, AVC/H.264, HEVC/H.265, VP8, VP9 Up to 1080p/60fps video encode, AVC/H.264, HEVC/H.265
Graphics	GC7000UL with OpenGL ES 1.1, 2.0, 3.0, OpenCL 1.2 and Vulkan
Audio Interface	1x I ² S
LAN	GbE with YT8531H LAN PHY on board
USB	2x USB 3.0 with OTG interface
Image Capture Interface	2x MIPI-CSI2 4-lane + 2-lane
Serial Interface	4x UART, 2x SPI
Media Interface	3x High-speed SDIO
PCI-E	1x PCI-E interface
SATA	N/A
GPIO	12x GPIO
I ² C	4x I ² C
Others	N/A
CAN Bus	2x CAN FD
Dimensions	82mm x 50mm (3.2" x 2")
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	-40°C~+85°C (-40°F ~ 185°F)
OS Support	Yocto 4.0 (sumo, kernel 5.4.70) / Android 11 Other OS (by request)
Certification	CE/ FCC Class A

Ordering Information

RM-N8MP	NXP i.MX8M Plus Quad Cortex-A53 1.8GHz processor, 3GB LPDDR4, 16GB eMMC
F8Sxx-HSK	Heat sink

Dimensions

