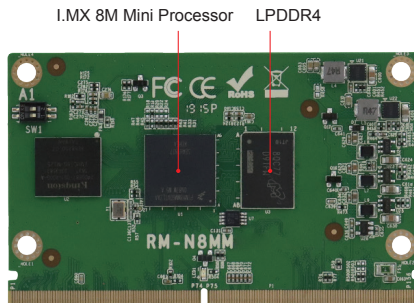


RM-N8MMI Series

SMARC 2.0 CPU Module

Wide-Temperature SMARC™ 2.0 Module with NXP ARM® Cortex-A53/Cortex-M4 i.MX 8M Mini Quad 1.8GHz Processor



Features

- With NXP Cortex™-A53/Cortex™-M4, i.MX 8M Mini Quad 1.6GHz processor
- 2GB LPDDR4, 8GB eMMC on board
- Rich peripheral I/O support
- Validated with Yocto v2.5 and Android 9.0
- Long life time supply with NXP solution
- Compliant with SGeT standard SMARC™ V2.0

System

Form Factor	SMARC™ V2.0
Processor	NXP i.MX 8M Mini Quad Cortex-A53 and Cortex-M4, 1.8GHz
System Memory	2GB LPDDR4 on board
Flash Memory	8GB eMMC on board (optional 16/32/64 GB)
Display	1x MIPI-DSI 4-lane up to 1920 x 1080 at 60Hz
Video Codec	• 1080p60 VP9 • 1080p60 HEVC/H.265 decoder • 1080p60 AVC/H.264 Baseline, Main, High decoder • 1080p60 VP8 • 1080p60 AVC/H.264 encoder • 1080p60 VP8 • TrustZone support
Graphics	• GCNanoUltra • Vivante GC320
Audio Interface	2x I ² S, 1x SPDIF
LAN	1x GbE LAN
USB	2x USB2.0 with OTG interface
Image Capture Interface	1x MIPI-CSI2 4-lane
Serial Interface	4x UART, 2x SPI Interface
Media Interface	2x High-speed MMC/SDIO (MMC 8-bit, SDIO 4-bit)
PCI-E	1x PCI-E (x1) Gen2
SATA	N/A

GPIO	12x GPIO
I ² C	4x I ² C
CAN Bus	N/A
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	Consumer Grade : 0°C ~ 70°C Industrial Grade : -40°C ~ 85°C
OS Support	Yocto 2.5 (Kernel 4.14.62) Android 9 (Kernel 4.14.62)
Certification	CE/ FCC Class B

Ordering Information

RM-N8MMI-Q208	SMARC 2.0 CPU module, Cortex-A53 i.MX 8M Mini Quad 1.8GHz, 2GB LPDDR4, 8GB MLC eMMC
RM-N8MMI-Q208I	Industrial Grade SMARC 2.0 CPU module, Cortex-A53 i.MX 8M Mini Quad 1.6GHz, 2GB LPDDR4, 8GB MLC eMMC
RP-103-SMC (Carrier Board)	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

Mouser Electronics

Authorized Distributor

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IBASE:

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