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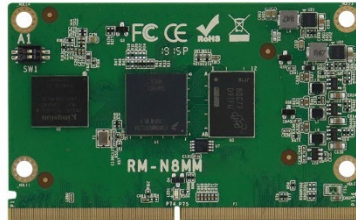
Datasheet

iBase

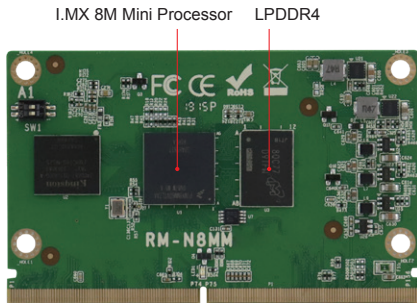
RM-N8MMI Series

Wide-Temperature SMARC™ 2.0 CPU Module with NXP ARM®

Quad Cortex-A53/Cortex-M4 i.MX 8M Mini Processor



The information contained in this document has been carefully researched and is, to the best of our knowledge, accurate. However, we assume no liability for any product failures or damages, immediate or consequential, resulting from the use of the information provided herein. Our products are not intended for use in systems in which failures of product could result in personal injury. All trademarks mentioned herein are property of their respective owners. All specifications are subject to change without notice.



Features

- NXP Cortex™-A53/ Cortex™-M4 i.MX 8M Mini Quad processor
- 2GB LPDDR4, 8GB eMMC on board
- Wide-range operating temperature (-40°C to 85°C)
- Rich peripheral I/O support
- Validated with Yocto v2.5 and Android 9.0
- Long life time supply with NXP solution
- Compliant with SMARC™ 2.0

Specifications

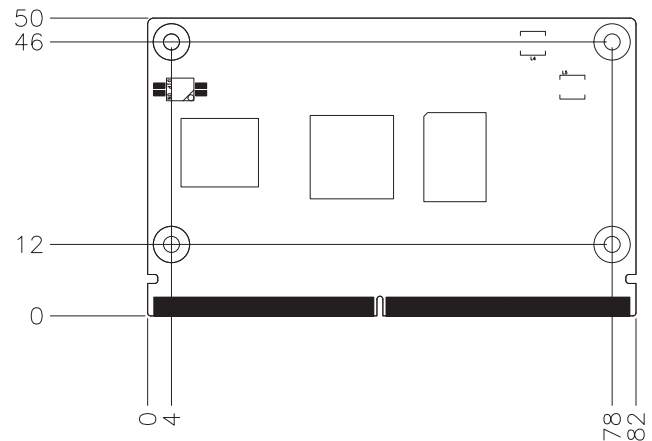


Form Factor	SMARC™ 2.0
Processor	NXP i.MX 8M Mini Quad Cortex™-A53 and Cortex™-M4 processor
System Memory	2GB LPDDR4 on board
Flash Memory	8GB eMMC on board
Display	1x MIPI-DSI 4-lane up to 1920 x 1080 at 60Hz
Video Codec	<ul style="list-style-type: none"> • 1080p60 VP9 • 1080p60 HEVC/H.265 decoder • 1080p60 AVC/H.264 Baseline, Main, High decoder • 1080p60 VP8 • 1080p60 AVC/H.264 encoder • 1080p60 VP8 • TrustZone support
Graphics	<ul style="list-style-type: none"> • GCNanoUltra • Vivante GC320
Audio Interface	2x I²S, 1x SPDIF
LAN	1x GbE LAN
USB	2x USB 2.0 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
I²C	4x I²C
Others	wireless WCN3980 (optional)
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	-40°C ~ 85°C (-40°F ~ 185°F)
OS Support	Yocto 2.5 Android 9 Other OS (by request)
Certification	CE/ FCC Class-B

Ordering Information

RM-N8MMI-Q2081	Industrial Grade SMARC™ 2.0, Cortex™-A53 i.MX 8M Mini Quad 1.6GHz processor, 2GB LPDDR4, 8GB eMMC
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Dimensions



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