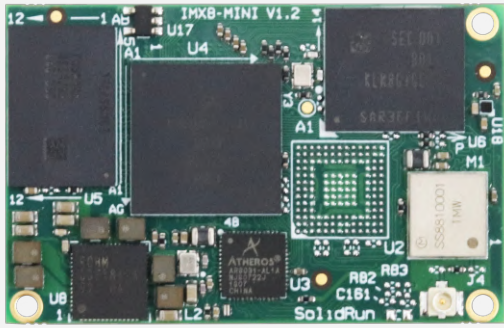


i.MX8M Mini SOM

Up to 4 x Arm Cortex-A53 cores, 1 x Cortex-M4

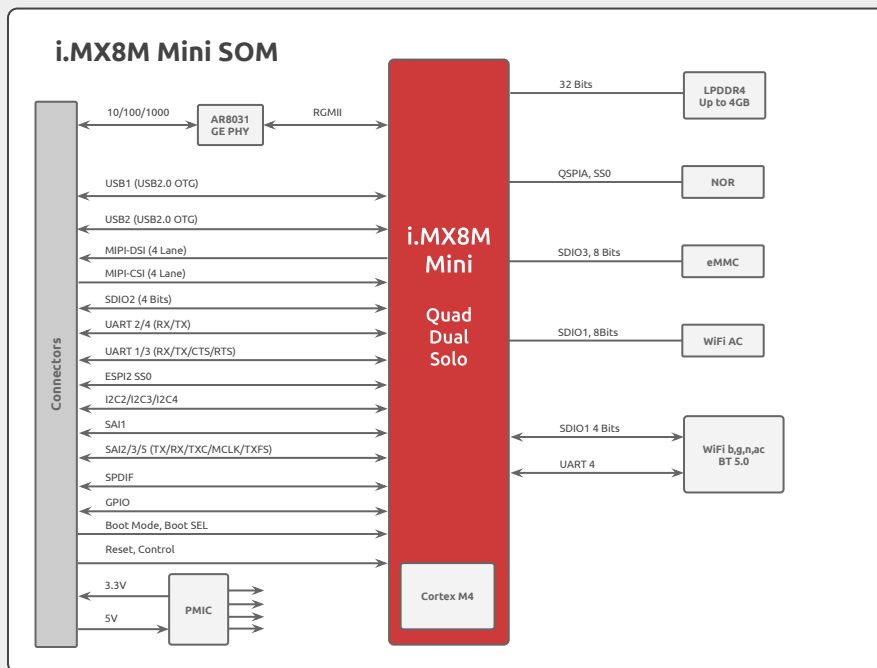
NXP i.MX 8M Mini Processor System on Module



- Single to quad-core ArmV8 64-bit processors up to 1.8 GHz
- Onboard Dual Band Wifi 802.11 a/b/g/n/ac with Bluetooth 5.0
- Pin to Pin compatible with i.MX 8M Nano application processor (Ordering option)



		i.MX8M Mini Quad	i.MX8M Mini Dual	i.MX8M Mini Solo
CPU Details	CPU Name	NXP i.MX8M Mini Quad	NXP i.MX8M Mini Dual	NXP i.MX8M Mini Solo
	CPU Type	4 x Cortex A53 1 x Cortex M4	2 x Cortex A53 1 x Cortex M4	1 x Cortex A53 1 x Cortex M4
	CPU Speed	1.8GHz Commercial 1.6GHz Industrial	1.8GHz Commercial 1.6GHz Industrial	1.8GHz Commercial 1.6GHz Industrial
	Floating Point	VFPv4	VFPv4	VFPv3
	SIMD	NEON	NEON	NEON
RAM	Memory & Storage	2GB LPDDR4	1GB LPDDR4	1GB LPDDR4
	Internal Storage	8GB eMMC	8GB eMMC	8GB eMMC
	External Storage Support	NOR-Flash SD PCIe-SSD	NOR-Flash SD PCIe-SSD	NOR-Flash SD PCIe-SSD
Networking	Ethernet	10/100/1000 Mbps	10/100/1000 Mbps	10/100/1000 Mbps
	Wireless	802.11 ac/a/b/g/n + BT 5.0	802.11 ac/a/b/g/n + BT 5.0	802.11 ac/a/b/g/n + BT 5.0
Multimedia	GPU	GC NanoUltra 3D + GC320 2D	GC NanoUltra 3D + GC320 2D	GC NanoUltra 3D + GC320 2D
	3D GPU Support	OpenGL ES 2.0	OpenGL ES 2.0	OpenGL ES 2.0
	Video Decoder	1080p60	1080p60	1080p60
	Video Encoder	1080p60	1080p60	1080p60
	Display Interfaces	MIPI-DSI	MIPI-DSI	MIPI-DSI
	Camera Interface	1 x MIPI-CSI2 (4 Lane)	1 x MIPI-CSI2 (4 Lane)	1 x MIPI-CSI2 (4 Lane)
	S/PDIF Input / Output	1	1	1
Connectivity	Digital Audio Serial Interface	20 channels, 32bits @384khz, DSD512, 8 x PDM DMIC channel	20 channels, 32bits @384khz, DSD512, 8 x PDM DMIC channel	20 channels, 32bits @384khz, DSD512, 8 x PDM DMIC channel
	USB 2.0	2	2	2
	PCIe	1 (Gen 2.0)	1 (Gen 2.0)	1 (Gen 2.0)
	I2C	2	2	2
	SPI	1	1	1
	UART	2 (RTS/CTS/RX/TX) +1 (TX/RX)	2 (RTS/CTS/RX/TX) +1 (TX/RX)	2 (RTS/CTS/RX/TX) +1 (TX/RX)
	GPIO	75	75	75
	PWM	4	4	4
	SD/MMC	1	1	1
	JTAG	Test point header	Test point header	Test point header
OS Support	Embedded Linux	Linux	Linux	Linux
Physical	Size	47 x 30 mm	47 x 30 mm	47 x 30 mm
	Interface	3 x Hirose DF40 connectors	3 x Hirose DF40 connectors	3 x Hirose DF40 connectors
Power	Main Voltage	5V	5V	5V
	I/O Voltage	3.3V	3.3V	3.3V
Environment	Temperature	Commercial: 0°C to 70°C Industrial: -40°C to 85°C	Commercial: 0°C to 70°C Industrial: -40°C to 85°C	Commercial: 0°C to 70°C Industrial: -40°C to 85°C
	Humidity	Humidity (non-condensing): 10% – 90%	Humidity (non-condensing): 10% – 90%	Humidity (non-condensing): 10% – 90%



Ordering Information

Available on Shop

SKU	Description
SRMM8ODW00D02GE008V12C0	SOM i.MX8M Mini Quad No WiFi/BT 1GB RAM 8GB eMMC Com.Temp R1.2 Unfused
SRMM8ODWB1D02GE008V12C0	SOM i.MX8M Mini Quad Inc. WiFi/BT 2GB RAM 8GB eMMC Com.Temp R1.2 Unfused
SRMM8-KIT001	i.MX8 Mini Starter Kit - SOM i.MX8M Mini Quad HummingBoard Pulse Inc. WiFi/BT 1GB RAM 8GB eMMC Com.Temp R02 Inc. Heatsink 12V 1.5A Power adapter Micro SD USB to Micro USB Cable WiFi Antenna

- To choose your ideal configuration see our [Product Configurator Tool](#)

Accessories:

SKU	Description
HS00016K	i.MX8M Heatsink

Kits

SKU	Description
SRMM8ODW00D02GE008R02CH	SOM i.MX8M Mini Quad No WiFi/BT 2GB RAM 8GB eMMC HummingBoard Ripple Com.Temp Unfused
SRMM8ODWB1D02GE008R02CH	SOM i.MX8M Mini Quad Inc. WiFi/BT 2GB RAM 8GB eMMC HummingBoard Ripple Com.Temp Unfused

For more information about the i.MX8M Mini SOM Software/Hardware visit our:

[Developer Center](#)