

EDM-G-IMX8M-MINI

From
\$44

35 mm

69 mm

- NXP i.MX 8M Mini applications processor
- Up to four Cortex-A53 1.8 GHz processors
- Armv8 64-Bit CPU cores
- Modern System on Module form factor

Specifications

Core System

Processor	NXP i.MX8M Mini
Architecture	ARM Cortex-A53 + M4
AI / ML	OpenCL CPU: 32 GOPS
PMIC	NXP PCA9450
Memory	up to 4GB LPDDR4
Storage	eMMC (32GB Default)
Board-to-Board Connector	EDM Type G connector (260-pin)
System on Module	EDM SOM
Debug Interface	JTAG Interface by Through-hole

Connectivity

Network LAN	1x Atheros AR8035 Gigabit LAN
Wi-Fi/Bluetooth	Qualcomm QCA9377
Antenna	802.11 a/b/g/n/ac + BT (BR+EDR+BLE) MHF4 connector

Signaling

I/O	LVDS	I ² S
	MIPI CSI	SDIO
	MIPI DSI	UART
	LAN	SPI
	PCIe	I ² C
	USB	PWM
	USB OTG	GPIO

Audio

Audio Codec	On carrier board
Audio Interface	I ² S (2 channel)



Video

Graphic Engine	Vivante GC NanoUltra (1 shader) Vivante GC520L (2D) OpenGL ES 2.0
Video Decode	1080p60 H.265, VP9, H.264, VP8
Video Encode	1080p60 H.264
Camera	MIPI CSI (4 lanes)

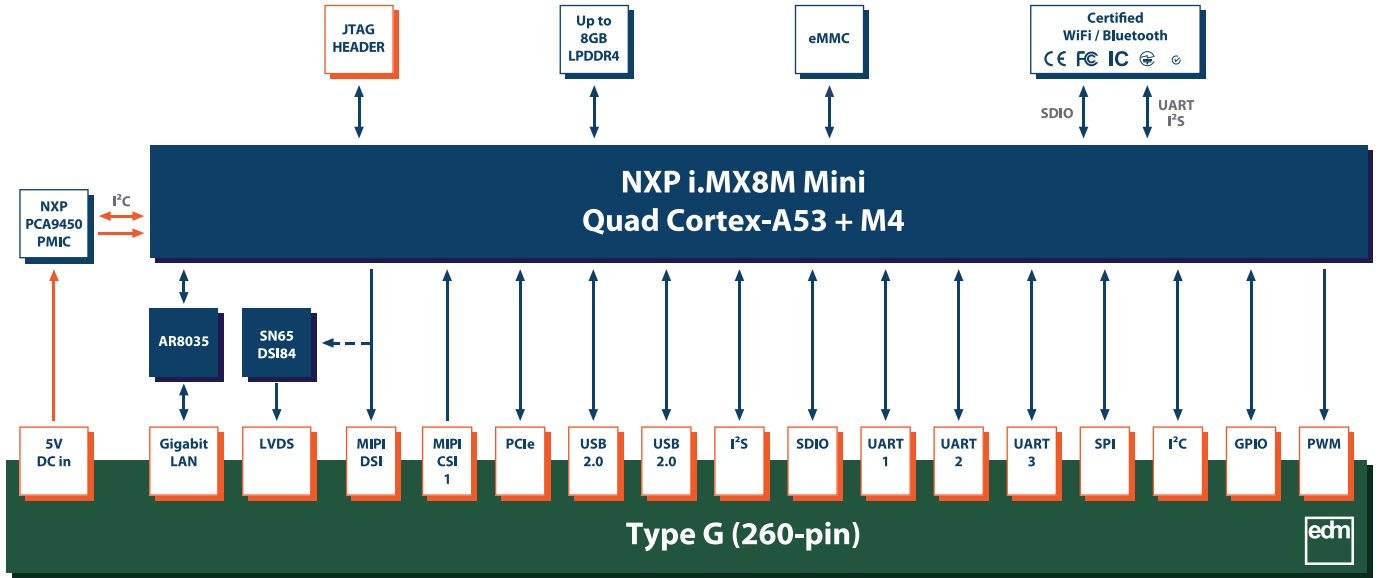
Operation Systems

Standard Support	Linux Yocto Ubuntu Android
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Certification and Compliance

USA	FCC ID: 2AKZA-QCA9377
Canada	IC: 22364-QCA9377
European Union	EN 55032 / EN 55024 EN 300 328 v2.2.2 EN 301 893 v2.1.1 TELEC: 201-180629
Japan	RCM
Australia/New Zealand	QCID 150839 (Bluetooth 4.2)
Bluetooth Logo Certification	Compliant with RoHS / REACH directives

Block Diagram



Environmental and Mechanical

Dimensions	69.6 x 35 mm
Weight	8 grams
Temperature	Commercial: 0° to +60°C Industrial: -40° to +85°C
Relative Humidity	10 to 90 %
MTBF	>100 000 Hours
Shock	15G half-sine 11 ms duration
Vibration	1 Grms random 5-500Hz hr/axis

Power Specifications

Power Input	5V DC +/-5%
Power Consumption	Depending on Configuration

Order Information

EDM-G-IMX8MMQ-xx-Rxx-Exx-xxxx-xx-xxxx

	Code	Description
Processor	IMX8MMQ	NXP i.MX8M Mini
Processor Speed	16	1.6GHz
	18	1.8GHz
Memory	R10	1GB LPDDR4
	R20	2GB LPDDR4
	R40	4GB LPDDR4
	R60	6GB LPDDR4
Storage	E32	eMMC 32GB
	EXX	eMMC other capacity
Wi-Fi / Bluetooth	-	-
Temperature Range	9377	Qualcomm QCA9377 802.11a/b/g/n/ac (2.4 + 5GHz) + Bluetooth
	-	Commercial Temperature (0° to +60°C)(Default)
Custom ID	TI	Industrial Temperature range (-40° to +85°C)
	XXXX	Custom Part number ID for customized Software loader and special component (BOM)

Dimensions (units in mm)

