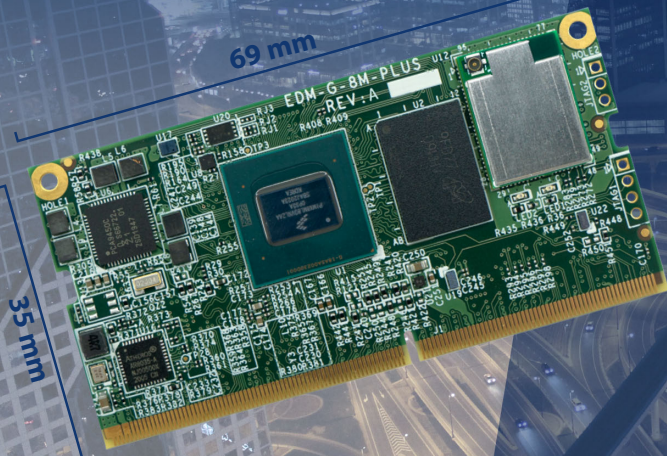


EDM-G-IMX8M-PLUS



- NXP i.MX 8M Plus applications processor
- Up to four Cortex-A53 1.8 GHz processors
- Cortex-M7 processor with speeds up to 800 MHz
- Neural Processing Unit (NPU)
- Image Signal Processor (ISP)
- Armv8 64-Bit CPU cores

Specifications

Core System

Processor	NXP i.MX8M Plus
Processor speed	1.8GHz
Architecture	ARM Cortex-A53 + M7
AI / ML	NN Accel 2.3 TOPS
PMIC	NXP PCA9450
Memory	up to 8GB LPDDR4
Storage	eMMC (32GB Default)
Board-to-Board Connector	260-pin DDR4 SO-DIMM (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 802.11 a/b/g/n/ac + BT (BR+EDR+BLE)
Antenna	MHF4 connector

Signaling

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

Video

Graphic Engine	Vivante GC520L (2D) Vivante GC7000UL
Video Decode	1080p60 HEVC, H.265, H.264, VP9, VP8
Video Encode	1080p60 H.265, H.264
Camera	Dual MIPI CSI (4 lanes)

Audio

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

Operation Systems

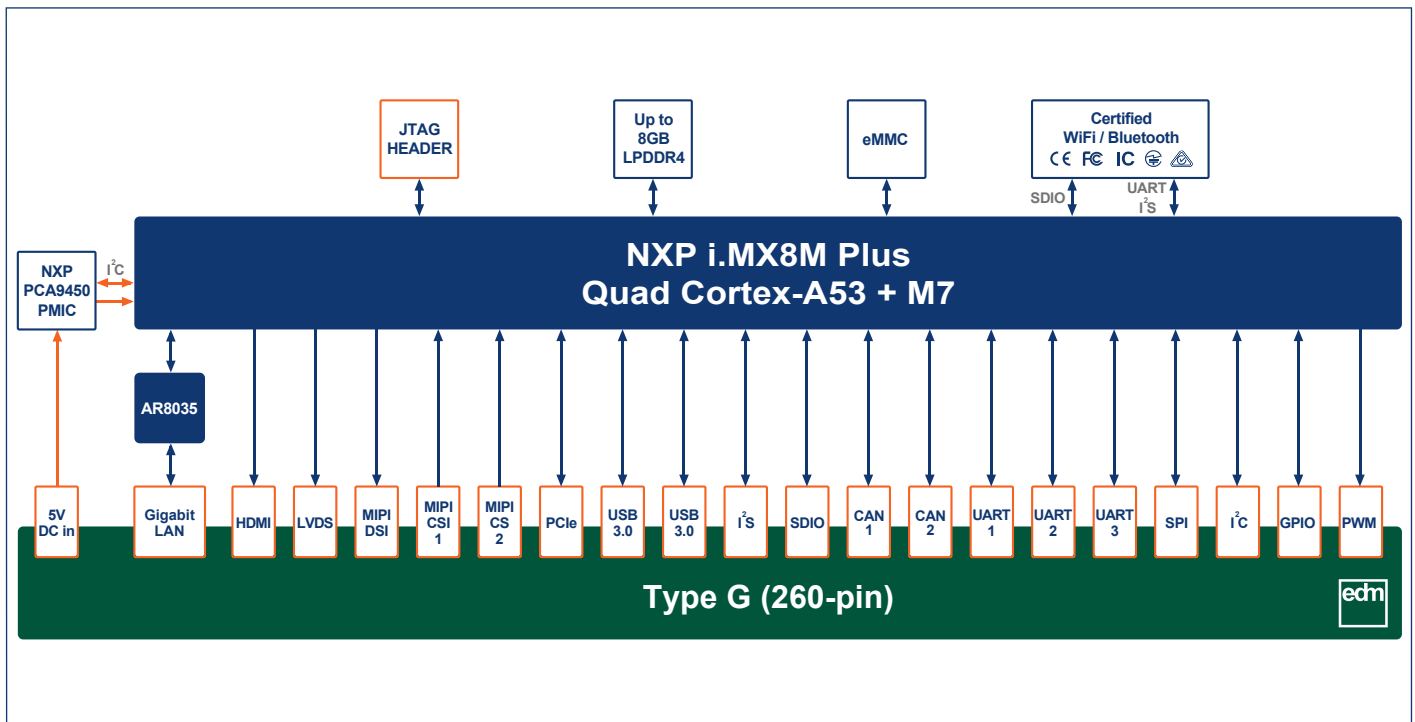
Standard Support	Linux Yocto Android Ubuntu
Extended Support	Boot2Qt Commercial Linux FreeRTOS Real Time OS

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	QDID 150839 (Bluetooth 4.2)
Bluetooth Logo Certification	Compliant with RoHS / REACH directives



Block Diagram



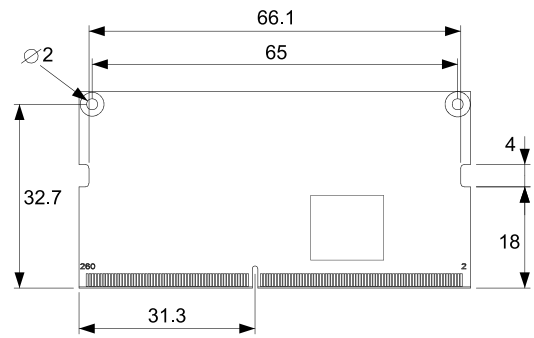
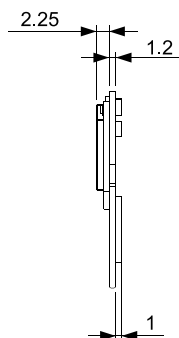
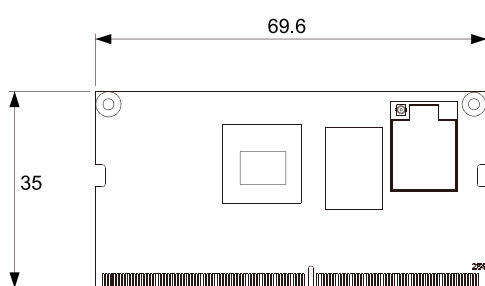
Environmental and Mechanical

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

Dimensions
(units in mm)



Order Information :

EDM-G-IMX8MLQ-18-Rxx-Exx-xxxx-xx-xxxx

	Code	Description
Processor	IMX8MLQ	NXP i.MX8M Plus
Processor Speed	18	1.8GHz
Memory	R10	1GB LPDDR4
	R20	2GB LPDDR4
	R40	4GB LPDDR4
	R60	6GB LPDDR4
	R80	8GB LPDDR4
Storage	E32	eMMC 32GB
	EXX	eMMC other capacity
Wi-Fi / Bluetooth	-	-
	9377	Qualcomm QCA9377 802.11a/b/g/n/ac (2.4 + 5GHz) + Bluetooth
Temperature Range	-	Commercial Temperature (0° to +60°C)(Default)
	TI	Industrial Temperature range (-40° to +85°C)
Custom ID	XXXX	Custom Part number ID for customized Software loader and special component (BOM)

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