

# EDM-G-IMX8M-PLUS

From  
**\$51**



- 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
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
Antenna	802.11 a/b/g/n/ac + BT (BR+EDR+BLE) MHF4 connector

### Signaling

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

### Audio

Audio Codec	On carrier board
Audio Interface	I <sup>2</sup> S (2 channel)

### 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)

### Operation Systems

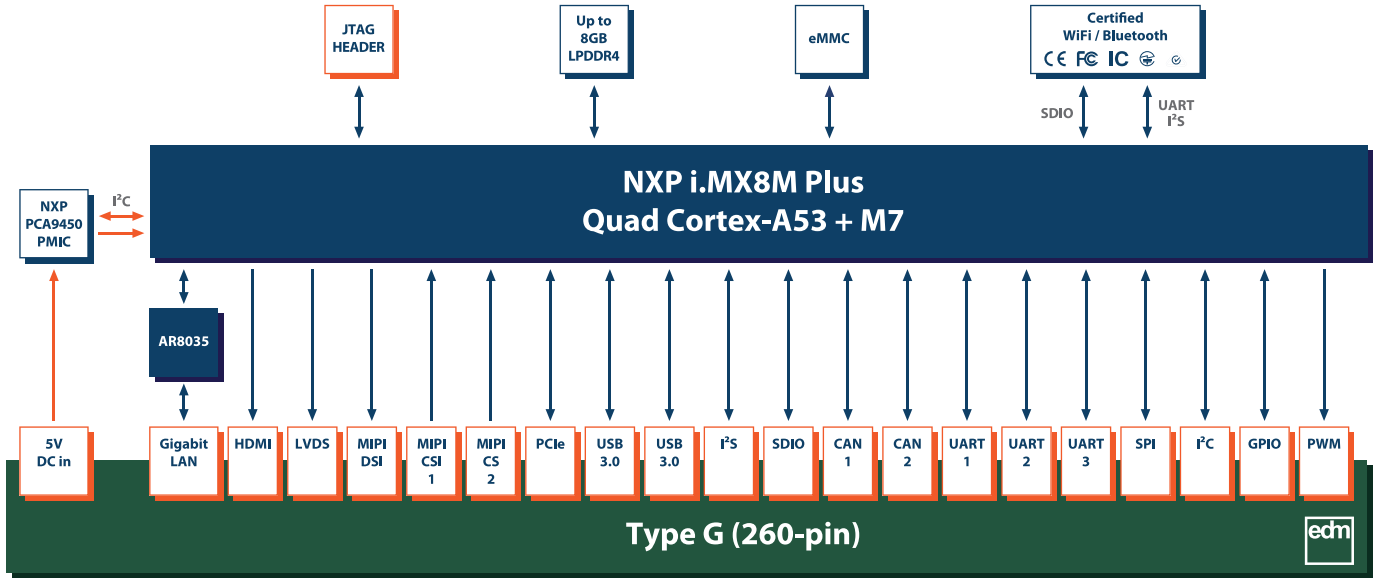
Standard Support	Linux
	Yocto
	Android
	Ubuntu
Extended Support	Boot2Qt
	Commercial Linux
	FreeRTOS
	Real Time OS

### 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	Compliant with RoHS /
Certification	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-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	-	-
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)

### Dimensions (units in mm)

