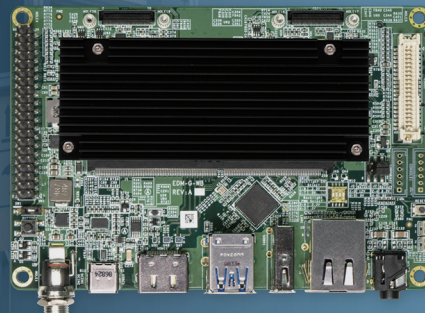


WB-EDM-G-IMX8M-PLUS

- NXP i.MX 8M Plus applications processor
- Up to 4 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	1.8 GHz
Architecture	ARM Cortex-A53 + M7
PMIC	NXP PCA9450
Memory	Upto 8GB LPDDR4
Storage	32GB eMMC (default)
Board-to-Board Connector	260-pin DDR4 SO-DIMM
System on Module	EDM SOM
Debug Interface	JTAG Interface by Through-hole

Connectivity

Network LAN	1x Realtek RTL8211
Wi-Fi	Qualcomm Atheros QCA9377 Wi-Fi 5 – 802.11 a/b/g/n/ac
Bluetooth	Qualcomm Atheros QCA9377 Bluetooth
Antenna	MHF4 connector

Signaling

HDMI	1x (HDMI 2.0a, up to 4K)
LVDS	1x Dual Channel LVDS (up to 1920×1080)
MIPI DSI	1x Quad Lane MIPI DSI (up to 1920×1080)
MIPI CSI2	2x Quad Lane MIPI CSI-2
LAN	Gigabit with TSN (+2nd RGMII)
PCIe	1 (x1 Gen 3)
USB 3.1	1x Host / 1x OTG (Gen 1)
USB 2.0	1x Host / 1x OTG
I ² S	6x SAI: I2S or AC97
PDM	4x lane
S/PDIF	1x TX/RX
CAN	2x CAN (Commerce Grade) or 2x CAN FD (Industry Grade)
UART	4x
SPI	2x
I ² C	6x
SDIO/SD/MMC	1x
PWM	4x
GPIO	86x
JTAG	thruhole on Module

Video

GPU Engine	Vulkan®, Open CL™ 1.2 FP
Video Decode	1080p60, h.265/4, VP9, VP8
Camera	2x MIPI CSI

Power Specifications

Power Consumption	Depending on Configuration
-------------------	----------------------------

Operation Systems

Standard Support	Linux Yocto Android Ubuntu
Extended Support	Boot2Qt Commercial Linux

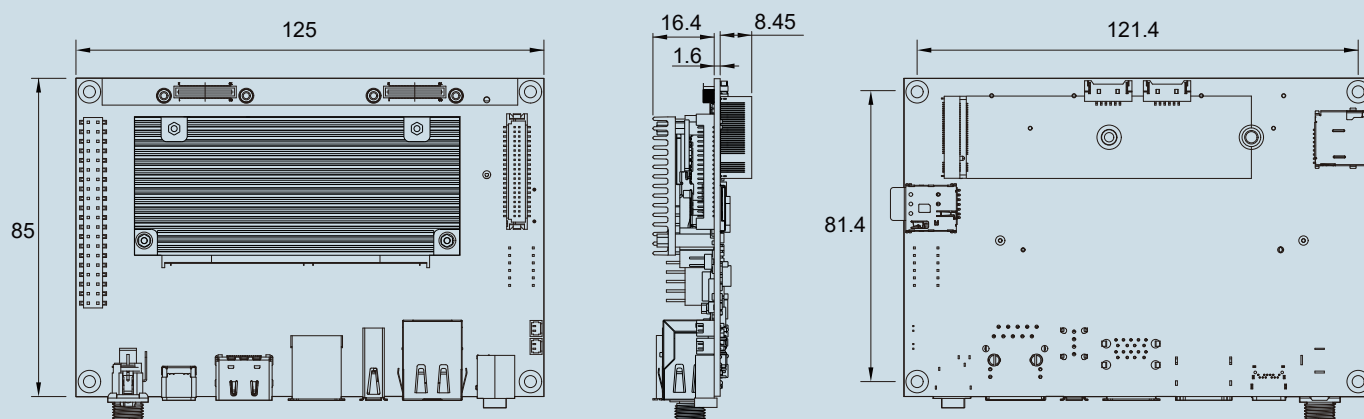
Environmental and Mechanical

Dimensions	125 (W) x 85 (H) x 26.45 (D) mm
Relative Humidity	10 to 90 %
MTBF	50,000 Hours
Shock	15G half-sine 11 ms duration
Operation Temperature	Commercial: 0° to +60° C
Vibration	1 Grms random 5-500Hz hr/axis
Weight	70 grams

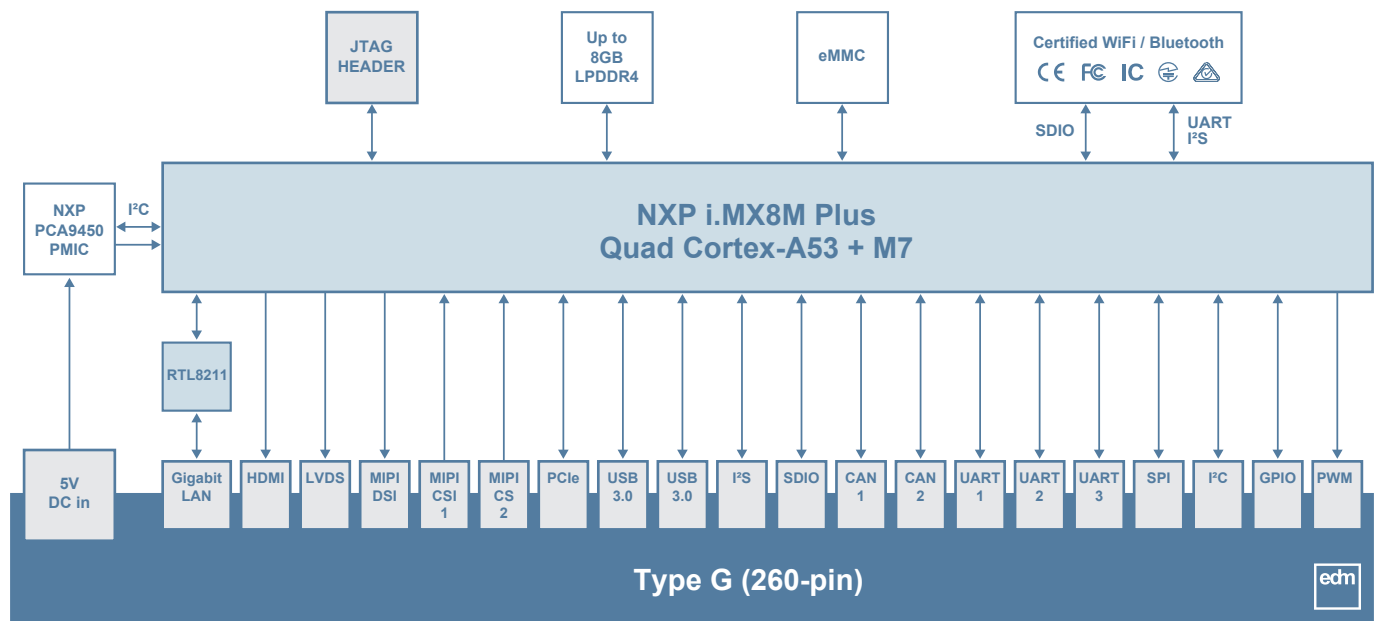
Certification and Compliance

USA	FCC ID: 2AKZA-QCA9377
Canada	IC: 22364-QCA9377
European Union	EN 300 328 v2.2.2 EN 301 893 v2.1.1 EN 55032 / EN 55024
Japan	TELEC: 201-180629
Australia/New Zealand	RCM Compliant
Bluetooth Logo	QDID 150839 (Bluetooth 4.2) QDID 193238 (Bluetooth 5)
Certification	Compliant with CE / FCC / RoHS / REACH directives

Dimensions (units in mm)



Block Diagram



Ordering Information

WB-EDM-G-IMX8M-PLUS

Development Kit based around NXP i.MX8M Plus applications processor including camera module, capture card, 10.1 inch display and cable set.

