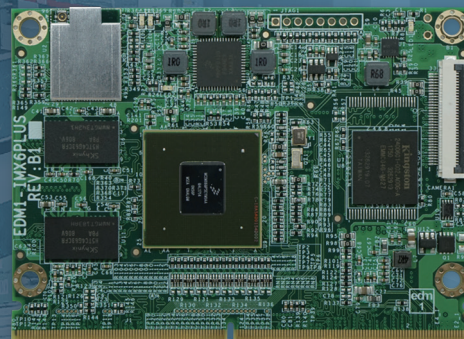


EDM1-IMX6

- The EDM1-IMX6 is a System on Module (SOM) based on an NXP i.MX6 Solo, Duallite, Quad or QuadPlus multicore Cortex-A9™ processor clocking up to 1GHz.
- The EDM1-IMX6 operates in commercial and industrial temperature ranges from -40 to 85° C. The system's built-in Vivante GC2000 GPU enriches the multimedia experience on interfaces such as HDMI, RGB TTL, LVDS, and an MIPI-CSI2 camera interface.
- The EDM1-IMX6 provides scalable solutions with industrial interfaces such as Gigabit Ethernet, USB, I2S, CAN, UART, SPI, I2C, PWM, GPIO for sensors for IIoT edge devices.
- Accelerate your time-to-market and reduce development costs with TechNexion pre-certified FCC / IC / CE / RCM / TELEC dual-band Wi-Fi 802.11 ac/a/b/g/n, Bluetooth.
- Linux, Yocto, Android runtime images and full source code available.



Specifications

Core System

Processor	NXP i.MX6 Solo NXP i.MX6 Duallite NXP i.MX6 Quad
Processor speed	Up to 1GHz
Architecture	ARM Cortex-A9
PMIC	NXP MMPF0100
Memory	Up to 2GB DDR3
Storage	16GB eMMC (default) MicroSD
Board-to-Board Connector	EDM connector (314-pin MXM3)
System on Module	EDM SOM
Debug Interface	JTAG Interface by Through-hole

Connectivity

Network LAN	1x Atheros AR8035 Gigabit LAN
Wi-Fi	Qualcomm Atheros QCA9377 Wi-Fi 5 – 802.11 a/b/g/n/ac (optional)
Bluetooth	Qualcomm Atheros QCA9377 Bluetooth (optional)
Antenna	MHF4 connector

Signaling

I/O	HDMI LVDS RGB TTL LAN MIPI CSI MIPI DSI PCIe SATA USB USB OTG I ² S SPDIF SDIO	CAN UART SPI I ² C GPMC PWM GPIO
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Video

GPU Engine	Vivante GC2000 (Dual/Quad) Vivante GC320 (2D Composition) Vivante GC355 (Dual/Quad) Vivante GC880 (Solo/DualLite)
Video decode	1080p30 + D1 (Solo/DualLite) 1080p60 H.264 (Dual/Quad)
Video encode	1080p30 H.264 BP/Dual 720p
Camera	MIPI CSI (4 lanes)

Audio

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

Power Specifications

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

Operation Systems

Standard Support	Linux Yocto Android Ubuntu
Extended Support	Commercial Linux

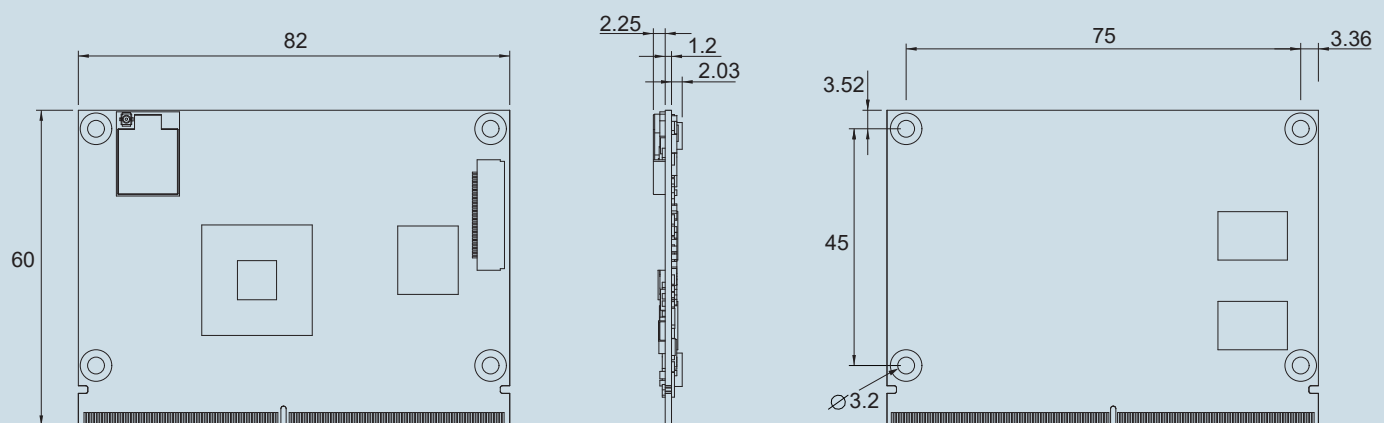
Environmental and Mechanical

Dimensions	82 (W) x 60 (H) x 5.48 (D) mm
Form Factor	EDM Type 1
Relative Humidity	10 to 90 %
MTBF	100,000+ Hours
Shock	15G half-sine 11 ms duration
Operation Temperature	Commercial: 0° to +60° C Industrial: -40° to +85° C
Vibration	20G/0-600Hz
Weight	20 grams

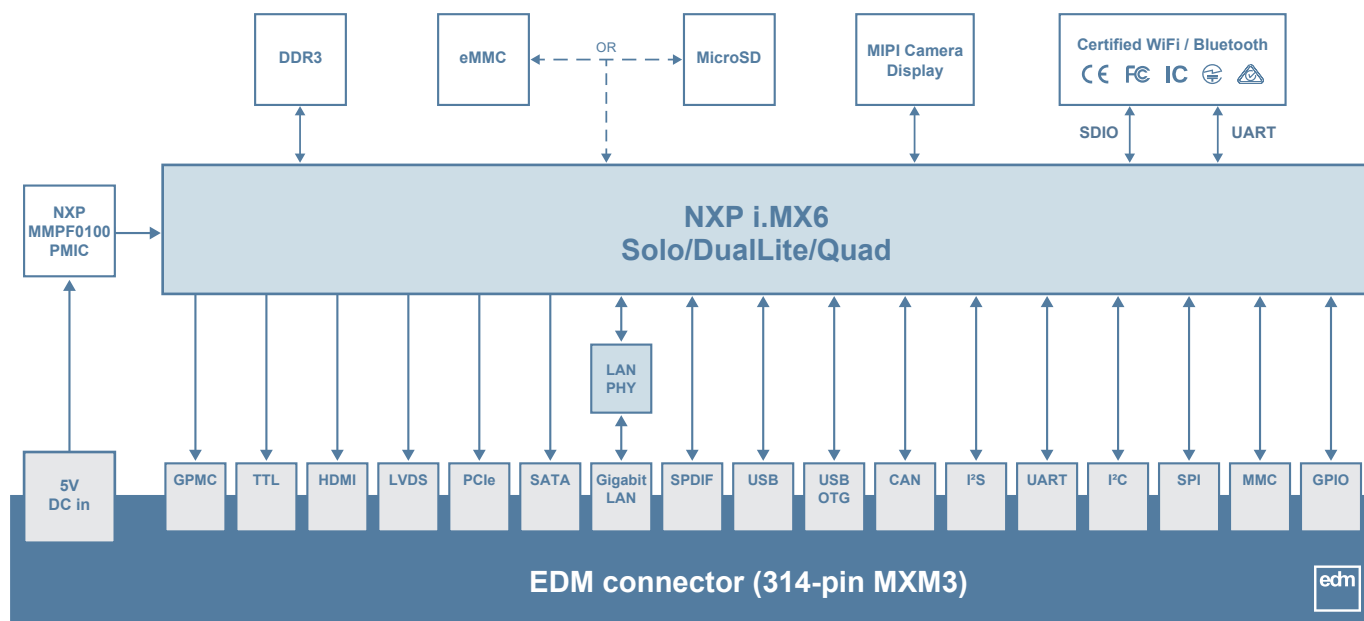
Certification and Compliance

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 RoHS / REACH directives

Dimensions (units in mm)



Block Diagram



Order Information

EDM1-IMX6xx-xx-Rxx-xxx-xxxx-xx-xxxx

	Code	Description
Processor	IMX6S	NXP i.MX6 Solo
	IMX6U	NXP i.MX6 DualLite
	IMX6Q	NXP i.MX6 Quad
Processor Speed	08	800MHz
	10	1.0GHz
Memory	R05	512 MB DDR3
	R10	1GB DDR3
	R20	2GB DDR3
Storage	MSD	MicroSD Cardslot
	E16	eMMC 16GB
	EXX	eMMC other capacity
Wi-Fi / Bluetooth	-	-
	9377	Qualcomm QCA9377 802.11a/b/g/n/ac (2.4 + 5GHz) + Bluetooth
Temperature Range	-	Commercial Temperature range (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)