

EDM1-IMX6



Main Features

- ARM Cortex-A9 NXP i.MX6 scalable single/dual/quad core EDM Type 1 compact System on Module.
- Gigabit LAN, Wi-Fi 802.11 a/b/g/n/ac and Bluetooth 5 communication interface.
- Targeting multimedia applications with LVDS, TTL, HDMI, S/PDIF, I²S, MIPI Camera and Display.



Power	LAN	TTL		GPMC		I ² S 2 nd	SPDIF	CAN x2	SD	SPI x2	UART x2	Buttons + GPIO	RSVD
		LVDS	HDMI	PCIe x1	SATA 1 st	USB OTG	USB				I ² S 1 st		

Specifications

Core System

Processor	NXP i.MX6 Solo NXP i.MX6 DualLite NXP i.MX6 Dual NXP i.MX6 Quad NXP i.MX6 QuadPlus
Architecture	ARM Cortex-A9
PMIC	NXP MMPF0100
Memory	up to 2GB DDR3
Storage	eMMC (4GB Default) MicroSD Cardslot (optional)
Board-to-Board Connector	EDM connector (314-pin MXM3)
System on Module	EDM Type 1
Debug Interface	JTAG Interface by Through-hole

Connectivity

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

Signaling

I/O	HDMI	SATA
	LVDS (Single Channel)	SDIO
	RGB TTL	CAN
	LAN	UART
	PCIe	SPI
	USB	I ² C
	USB OTG	GPMC
	I ² S	PWM
	SPDIF	GPIO

Video

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

Audio

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

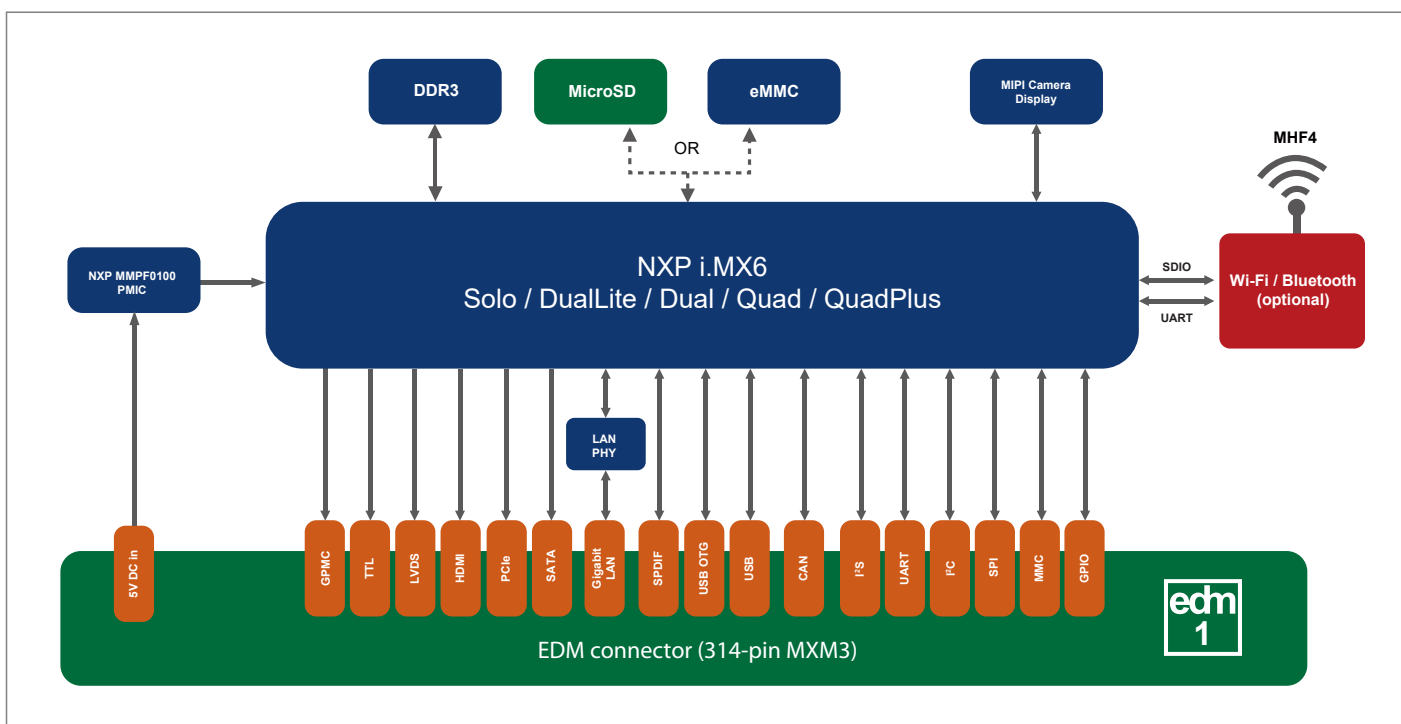
Power Specifications

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

Operation Systems

Standard Support	Linux Yocto Ubuntu Android
Extended Support	Commercial Linux

Block Diagram

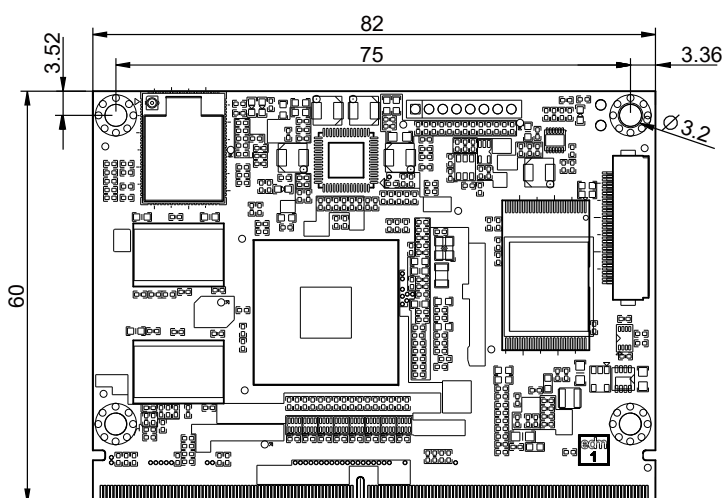


Environmental and Mechanical

Dimensions	82 x 60 mm / 3 $\frac{1}{8}$ x 2 $\frac{3}{8}$ inch
Form Factor	EDM Compact
Weight	20 grams
Temperature	Commercial: 0° to +60° C Extended: -20° to +70° C Industrial: -40° to +85° C
Relative Humidity	10 to 90 %
MTBF	>100 000 Hours
Shock	50G/25ms
Vibration	20G/0-600Hz
Certification	Compliant with CE / FCC / RoHS / REACH directives

Dimensions

(units in mm)



Ordering Information

EDM1-IMX6~~xx-xx-Rxx-xxx-xxxx-xx-xxxx~~

	Code	Description
Processor	IMX6S	NXP i.MX6Solo
	IMX6U	NXP i.MX6DualLite
	IMX6D	NXP i.MX6Dual
	IMX6Q	NXP i.MX6Quad
	IMX6QP	NXP i.MX6QuadPlus
Processor Speed	08	800MHz
	10	1.0GHz
Memory	R05	512 MB DDR3
	R10	1GB DDR3
	R20	2GB DDR3
Storage	MSD	MicroSD Cardslot
	E04	eMMC 4GB
	E08	eMMC 8GB
	EXX	eMMC other capacity
Wi-Fi / Bluetooth	-	-
	9377	Qualcomm QCA9377 802.11a/b/g/n/ac (2.4 + 5GHz) + Bluetooth 5
Temperature Range	-	Commercial Temperature (0° to +60° C)(Default)
	TE	Extended Temperature range (-20° to +70° C)
	TI	Industrial Temperature range (-40° to +85° C)
Custom ID	XXXX	Custom Part number ID for customized Software loader and special component (BOM)

* Feel free to contact us for custom tailored Carrier Board request for your projects.