

EDM1-IMX6UL



Main Features

- ARM Cortex-A7 NXP i.MX6UL an ultra-efficient, scalable, single core EDM Type 1 compact System on Module.
- Dual Fast Ethernet LAN, WiFi 802.11 a/b/g/n/ac and Bluetooth v.4.1 communication interface.
- EDM1-IMX6UL can be easily implemented for IoT designs.



yocto
PROJECT



Power	LAN 1 st	TTL		LAN 2 nd			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				I ² C x2		

Specifications

Core System

Processor	NXP i.MX6 UL
Architecture	ARM Cortex-A7
PMIC	NXP PF3000
Memory	up to 1GB DDR3L
Storage	NAND Flash (512MB Default)
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	2x Micrel KSZ8081RNBCA Fast Ethernet LAN
WiFi/Bluetooth	Broadcom BCM43438 (optional) 802.11 b/g/n + 4.1 (BR+EDR+BLE) Broadcom BCM4339 (optional) 802.11 a/b/g/n/ac + 4.1 (BR+EDR+BLE)
Antenna	u.FL connector (optional)

Signaling

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

Video

Graphic Engine	Image re-sizing / rotation / overlay and CSC Pixel Processing Pipeline
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Audio

Audio Codec	On carrier board
Audio Interface	I ² S (1 channel)

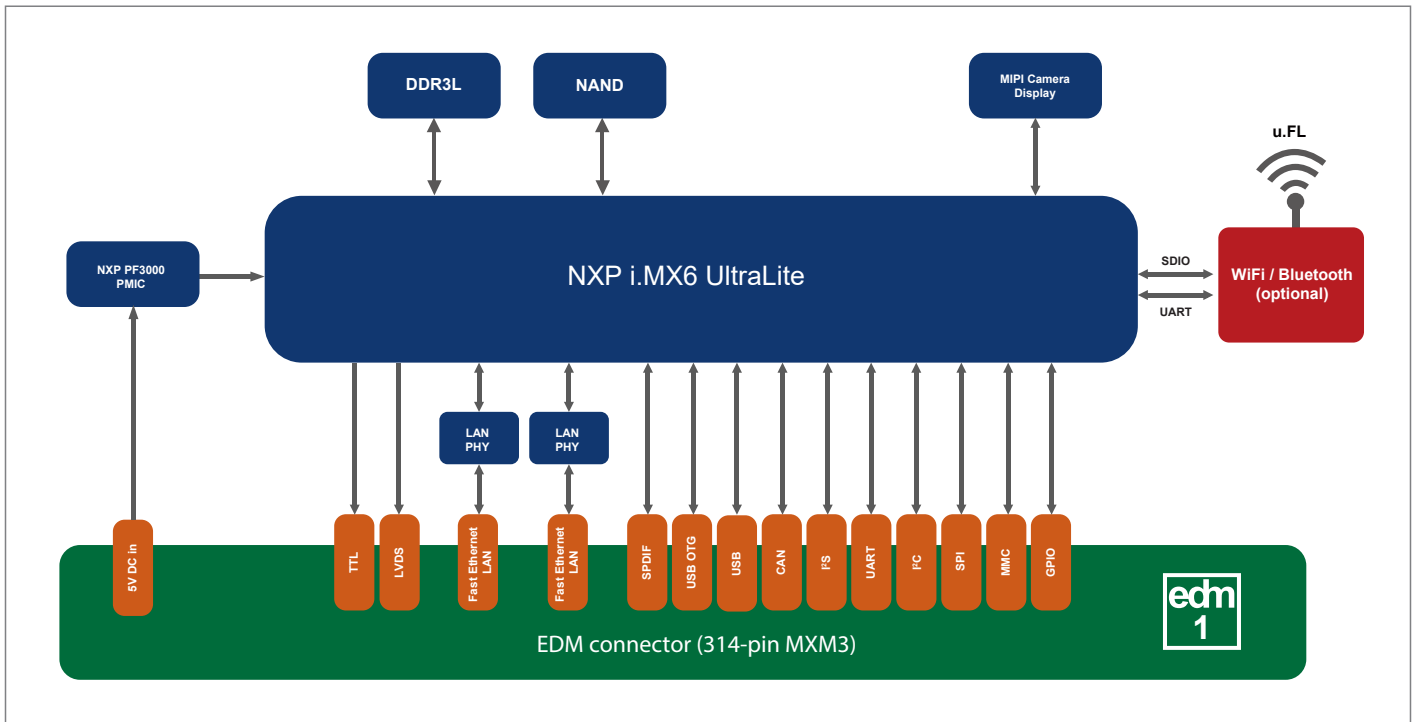
Power Specifications

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

Operation Systems

Standard Support	Linux Yocto Ubuntu
Extended Support	Commercial Linux

Block Diagram

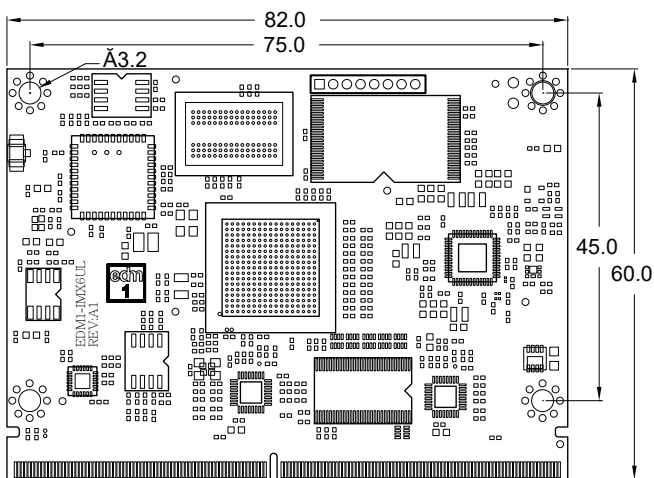


Environmental and Mechanical

Dimensions	82 x 60 mm / 3 ⁵ / ₈ x 2 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 (no WiFi)
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-IMX6G2-05-Rxx-Nxx-xx-xx-xx-xx-xxxx

	Code	Description
Processor	IMX6G2	NXP i.MX6UltraLite
Processor Speed	05	528MHz
Memory	R02	256MB DDR3L
	R05	512MB DDR3L
	R10	1GB DDR3L
Storage	N01	NAND 128MB
	N02	NAND 256MB
	N05	NAND 512MB
Display	-	TTL only
Network	DL	TTL + LVDS
	2L	2x Fast Ethernet LAN
Bluetooth / WiFi	-	-
	BB	Broadcom BCM43438 802.11b/g/n (2.4GHz) + Bluetooth 4.1
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.