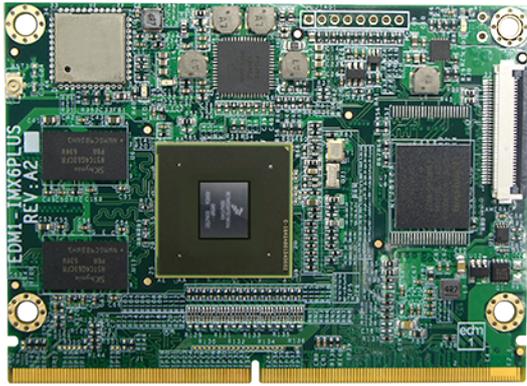# EDM1-IMX6PLUS

Main Features

- ARM Cortex-A9 NXP i.MX6 scalable single/dual/quad core EDM Type 1 compact System on Module.

- Gigabit LAN, WiFi 802.11 a/b/g/n/ac and Bluetooth v.4.1 communication interface.

- Targeting multimedia applications with LVDS, TTL, HDMI, S/PDIF, I²S, MIPI Camera and Display.

Power	LAN	TTL		GPMC		I²S 2nd	SPDIF	CAN x2	SD	SPI x2	UART x2	Buttons + GPIO	RSVD	
		LVDS	HDMI	PCIe x1	SATA 1st	USB OTG	USB	I²S 1st				I²C x2		RTC

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
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		
	HDMI	SATA
	LVDS (Single Channel)	SDIO
	RGB TTL	CAN
	LAN	UART
	PCIe	SPI
	USB	I²C
	USB OTG	GPMC
	I²S	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	I²S (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
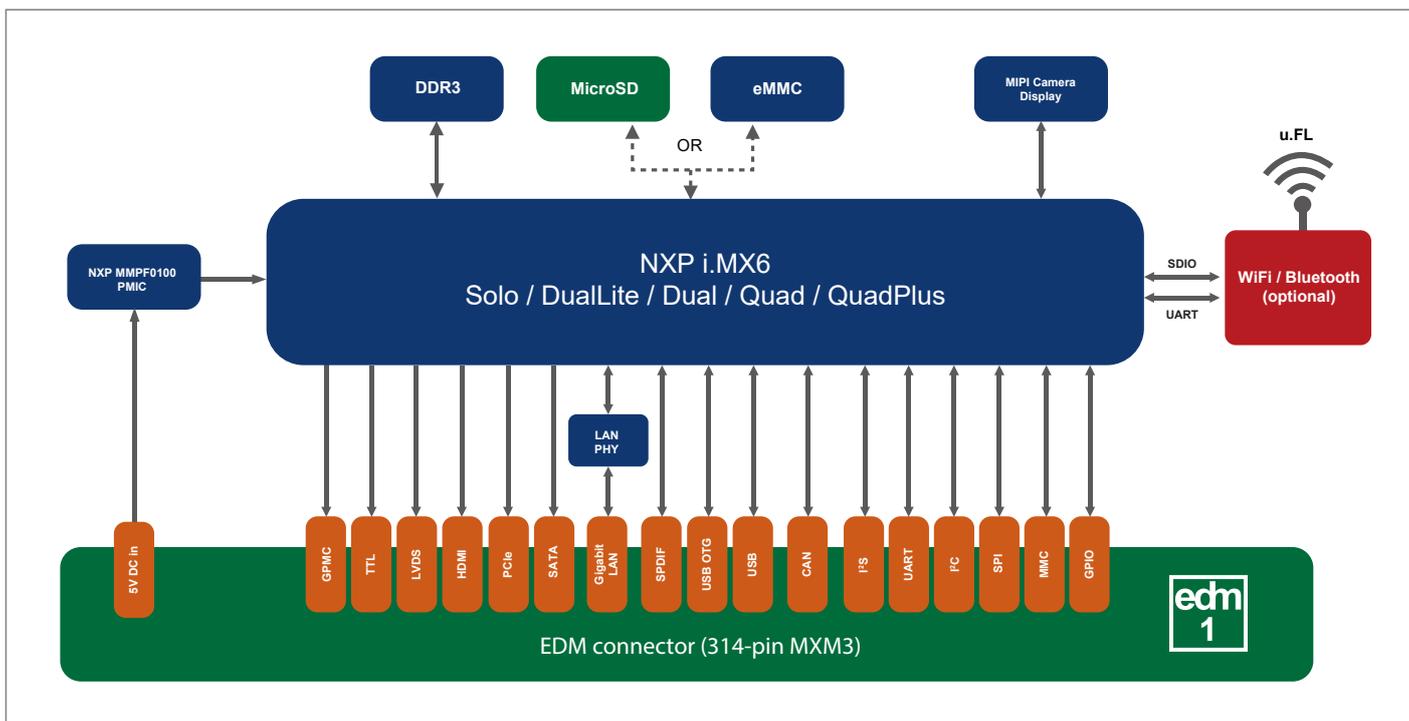
Environmental and Mechanical

Dimensions	82 x 60 mm / 3⅝ x 2⅜ 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)
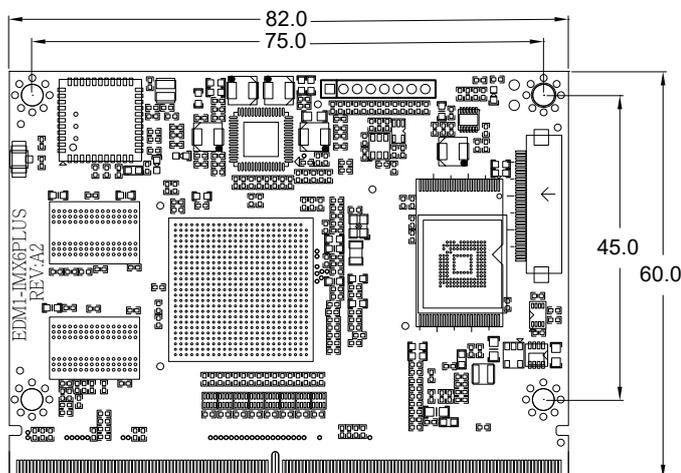
Ordering Information

EDM1-IMX6Pxx-Rxx-xxx-xx-xx-xxxx

	Code	Description
Processor	IMX6PS	NXP i.IM6Solo
	IMX6PU	NXP i.MX6DualLite
	IMX6PD	NXP i.MX6Dual
	IMX6PQ	NXP i.MX6Quad
	IMX6PQP	NXP i.MX6QuadPlus
Memory	R05	512 MB DDR3
	R10	1GB DDR3
	R20	2GB DDR3
Storage	MSD	MicroSD Cardslot
	E04	eMMC capacity in Gigabytes E04 = 4GB / E08 = 8GB / E16 = 16GB E32 = 32GB / E64 = 64GB /
Bluetooth / WiFi	-	-
	BB	Broadcom BCM43438 802.11b/g/n (2.4GHz) + Bluetooth 4.1
	BW	Broadcom BCM4339 802.11a/b/g/n/ac (2.4 + 5GHz) + 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.