

EDM1-CF-IMX6



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 b/g/n and Bluetooth v. 4.0 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	CANBus x2	SD	SPI x2	UART x2	Buttons + GPIO	RSVD
		LVDS	HDMI	PCIe x1	SATA 1 st	USB OTG	USB Host	I ² S 1 st			I ² C x2		

Specifications

Core System

Processor	NXP i.MX6 Solo NXP i.MX6 DualLite NXP i.MX6 Dual NXP i.MX6 Quad
Architecture	ARM Cortex-A9
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 AR8031 Gigabit LAN
WiFi/Bluetooth	Broadcom BCM4330 (optional) 802.11 b/g/n + 4.0 (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	I ² C
	USB OTG	GPMC
	I ² S	PWM
	SPDIF	GPIO

Video

Graphic Engine	Vivante GC320 (2D Composition) Vivante GC355 (Dual/Quad) Vivante GC880 (Solo/DualLite) Vivante GC2000 (Dual/Quad)
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 Interface	I ² S (1 channel) S/PDIF

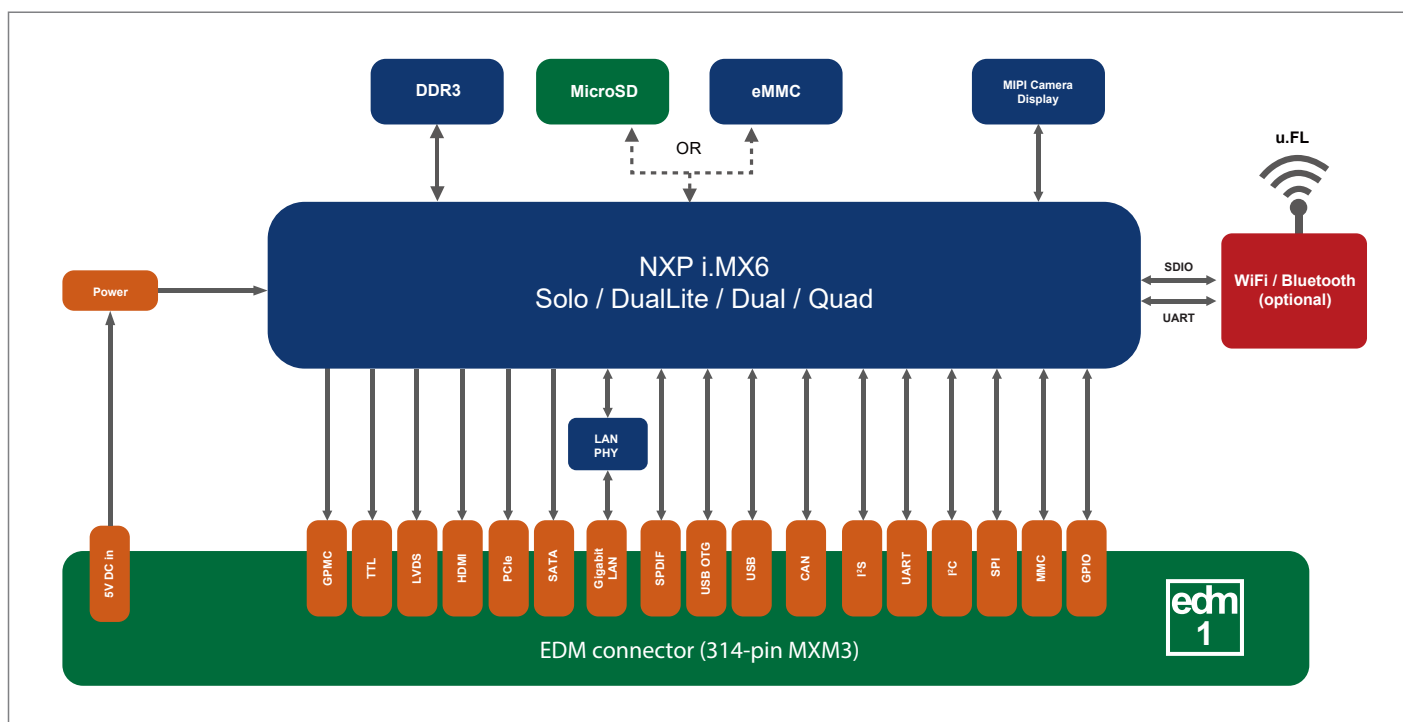
Power Specifications

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

Operation Systems

Standard Support	Linux Yocto Ubuntu Android
Extended Support	Commercial Linux

Block Diagram

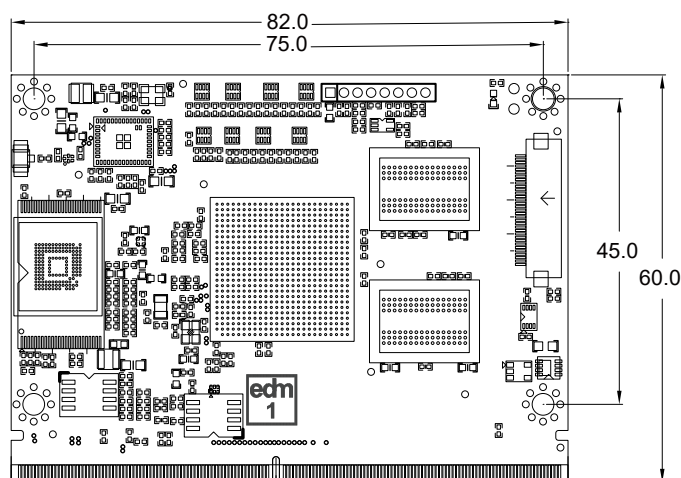


Environmental and Mechanical

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 (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-CF-IMX6x-10-Rxxx-NixG-xx-x-x-xx-xx-xxxx

	Code	Description
Processor	IMX6S	NXP i.MX6Solo
	IMX6U	NXP i.MX6DualLite
	IMX6D	NXP i.MX6Dual
	IMX6Q	NXP i.MX6Quad
Processor speed	10	1 GHz
Memory	R512	512 MB DDR3
	R1GB	1GB DDR3
	R2GB	2GB DDR3
Storage	SD	MicroSD Cardslot
	NI4G	eMMC capacity in Gigabyte NI4G = 4GB / NI8G = 8GB / NI16G = 16GB NI32G = 32GB / NI64G = 64GB
Bluetooth / WiFi	-	-
	BW	Broadcomm BCM4330 802.11b/g/n (2.4GHz) + Bluetooth 4.0
Network	-	-
	L	Gigabit Ethernet (Default)
SATA	-	-
	S	SATA(Dual/Quad)
CAN Bus	-	-
	2C	2x CAN(Default)
Temperature Range	-	Commercial Temperature range (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.