

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		

Specifications

Core System

Signalling	EDM Type 1 compliant
CPU	NXP i.MX6Solo @ 1GHz NXP i.MX6Dualite @ 1GHz NXP i.MX6Dual @ 1GHz NXP i.MX6Quad @ 1GHz
System Memory	up to 2GB DDR3
Storage	eMMC (default 4GB) optional NAND Flash (MOQ apply)
Debug Interface	JTAG Interface by Through-hole
FPC Connector	MIPI Interface Camera MIPI Interface Display

Connectivity

Network	Atheros AR8031 Gigabit LAN
WiFi	Broadcom BCM4330 802.11bgn
Bluetooth	Broadcom BCM4330 BT 4.0

I/O Interfaces

Storage	1x SATA 2.0 (Dual/Quad only) 1x SDIO/MMC
Expansion	1x PCIe 2.0
Display	HDMI v1.4 1 channel LVDS 18/24 bit 24 bit RGB TTL
USB	USB Host 2.0 USB OTG 2.0
CAN Bus	2x Flex CAN version 2.0B compliant
Serial Port	2x UART
Other	SPI, I ² C, I ² S, GPIO, Local Bus (GPMC)

Video

	Solo/Dualite	Dual/Quad
GPU 3D	Vivante GC880 35Mtri/s 266Mpxl/s Open GL ES 2.0	Vivante GC2000 200Mtri/s 1000Mpxl/s OpenGL ES 2.0 & Halti, CL EP
GPU 2D (Vector Graphics)	emulated on GPU 3D	Vivante GC355 300Mpxl/s OpenVG 1.1
GPU 2D (Composition)	Vivante GC320 600Mpxl/s, BLIT	Vivante GC320 600Mpxl/s, BLIT
Video Decode	1080p30 + D1	1080p60 H.264
Video Encode	1080p30 H.264 BP/Dual 720p	1080p30 H.264 BP/Dual 720p

Audio

Interface	I ² S (2 channel), S/PDIF
Audio Codec	on EDM Carrier Board

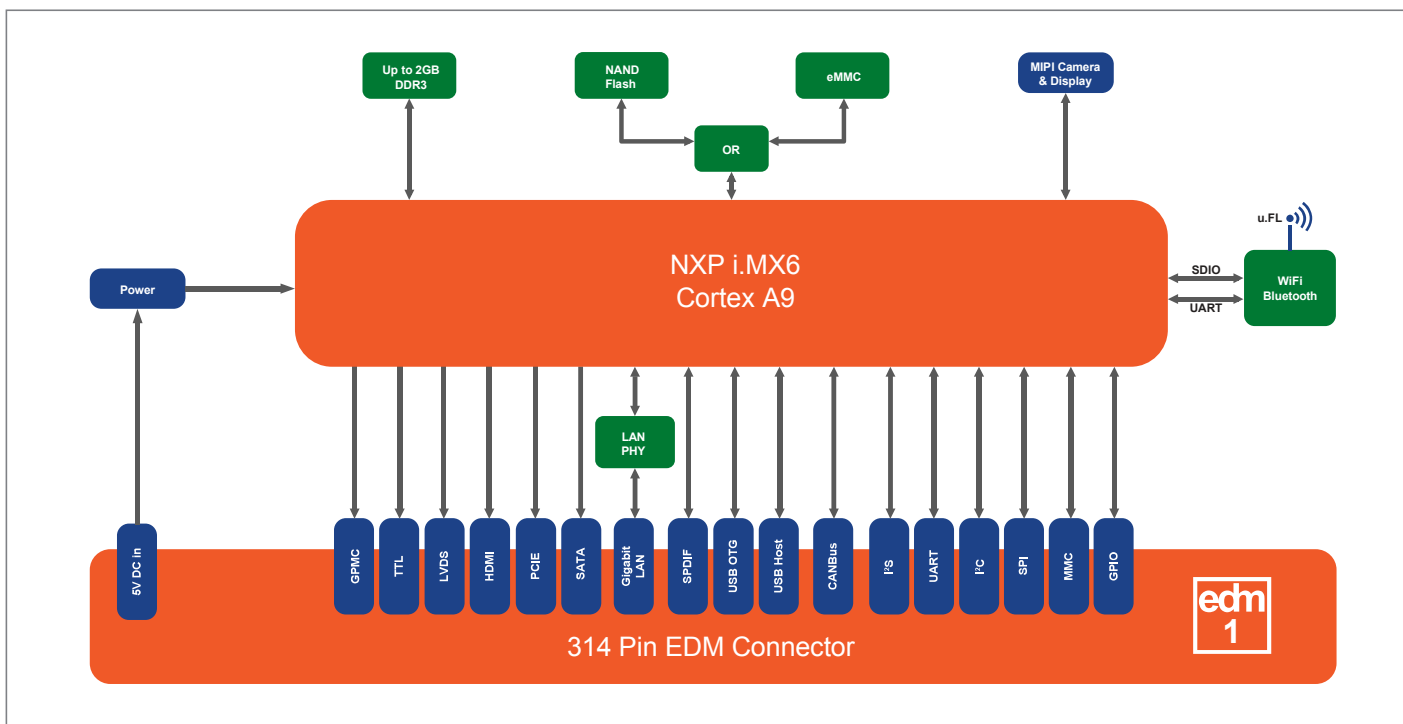
Power Specifications

Input power	5V DC +/- 5%
-------------	--------------

Operation Systems

Standard Support	Linux Yocto Android
Extended Support	Commercial Linux Windows Embedded Compact Real Time OS

Block Diagram

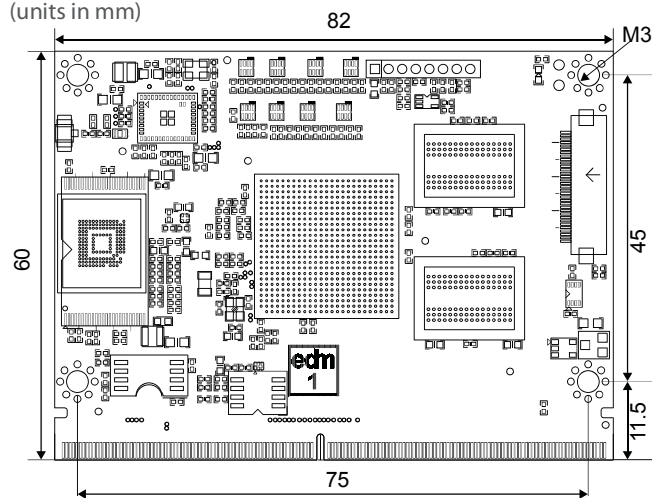


Environmental and Mechanical

Temperature	Commercial : 0° to 60° C Extended : -20° to 70° C Industrial : -40° to 85° C (no WiFi)
Humidity	10 to 90%
Module Connector	314 pins MXM3
Form Factor	EDM Compact Form Factor
Dimensions	82 x 60 mm (3 1/8 x 2 3/8 inch)
MTBF	>100,000 hours
Weight	20 grams
Shock	50G/25ms
Vibration	20G/0-600 Hz

Dimensions

(units in mm)



Ordering Information

EDM1-CF-IMX6x-10-Rxxx-NIxG-xx-x-x-xx-xxx-xxxx

	Code	Description
Processor	IMX6S	i.MX6 Solo
	IMX6U	i.MX6 Duallite
	IMX6D	i.MX6 Dual
	IMX6Q	i.MX6 Quad
Processor speed	10	1 GHz (Default)
Memory	R512	512 MB DDR3
	R1GB	1GB DDR3
	R2GB	2GB DDR3
Storage	NI4G	eMMC capacity in Gigabyte
		NI4G = 4GB : NI8G = 8GB : NI16G = 16GB
		NI32G = 32GB : NI64G = 64GB
Wireless Networking	-	No
	BW	802.11bgn + Bluetooth 4.0
Network	-	No
	L	Gigabit LAN(Default)
SATA	-	No
CAN Bus	S	SATA(Dual/Quad)
	-	No
Temperature Range	2C	2 CAN(Default)
	-	Commercial Temperature range (0~60° C)(Default)
	TE	Extended Temperature range (-20~70° C)
	TI	Industrial Temperature range (-40~85° C)
	TEC	Certified Extended Temperature range (-20~70° C)
	TIC	Certified Industrial Temperature range (-40~85° 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.