

EDM1-CF-IMX6



Main Features

- ARM Cortex-A9 Freescale 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 5 VDC	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	Freescale i.MX6Quad @ 1Ghz Freescale i.MX6Dual @ 1Ghz Freescale i.MX6DualLite @ 1Ghz Freescale i.MX6Solo @ 1Ghz
System Memory	up to 2GB DDR3
Storage	eMMC (default 4GB) optional NAND Flash (MOQ apply)
Debug Interface	JTAG Interface by thruhole
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

GPU 3D	Solo / Duallite Vivante GC880 35Mtri/s 266Mpxl/s OpenGL ES 2.0	Dual / Quad 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

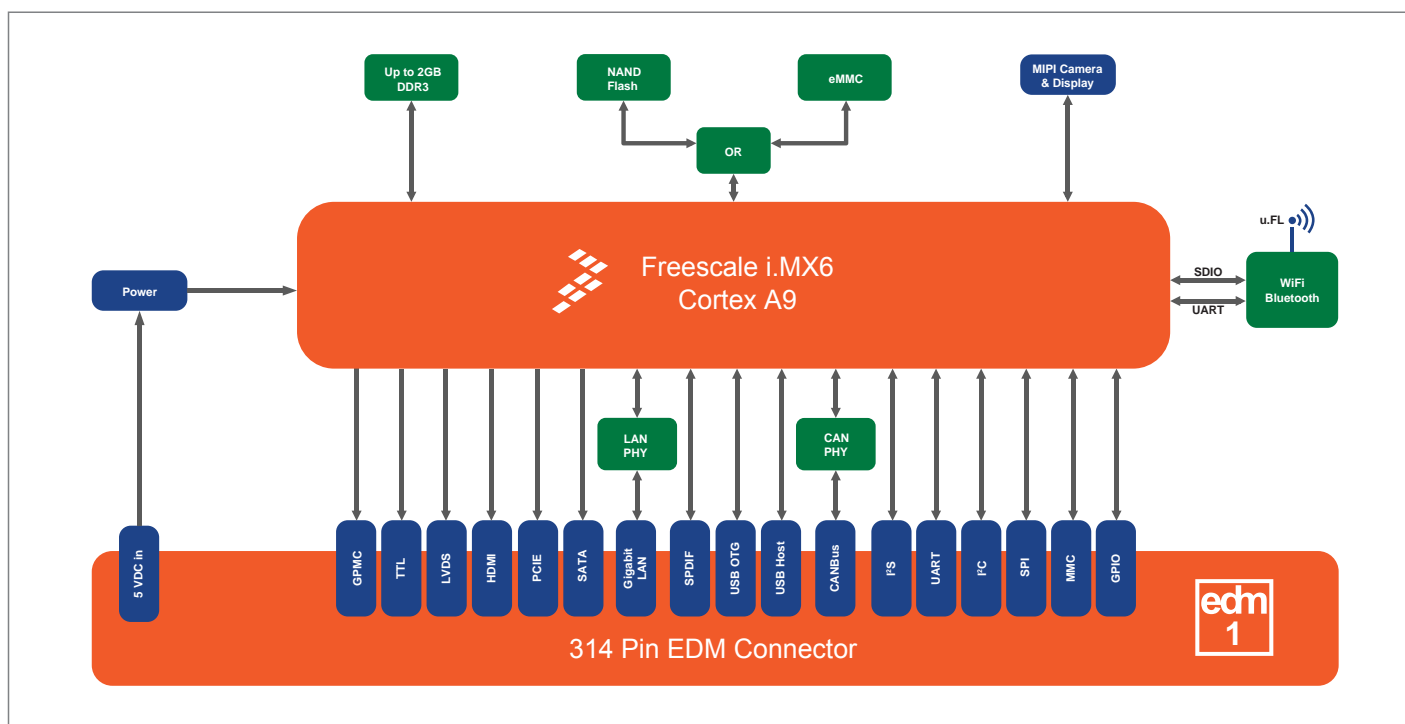
Power Specifications

Input power	5 VDC +/- 5%
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Operation Systems

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

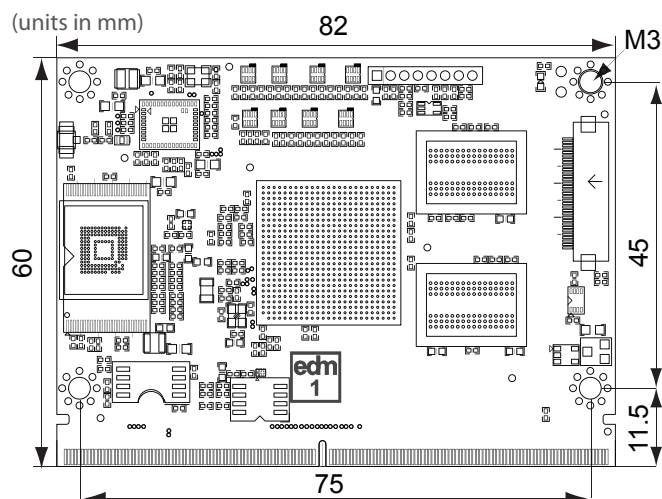
Block Diagram



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 $\frac{1}{8}$ x 2 $\frac{3}{8}$ inch)
MTBF	>100,000 hours
Weight	20 grams
Shock	50G / 25ms
Vibration	20G / 0-600 Hz

Dimensions



Ordering Information

- EDM1-CF-IMX6S10-R512-NI4G-L-2C**
EDM Compact Type 1 Freescale i.MX6 Solo 1Ghz + 512MB RAM + 4GB eMMC+ Gigabit LAN + 2 CAN
- EDM1-CF-IMX6U10-R1GB-NI4G-L-2C**
EDM Compact Type 1 Freescale i.MX6 Duallite 1Ghz + 1GB RAM + 4GB eMMC + Gigabit LAN + 2 CAN
- EDM1-CF-IMX6D10-R1GB-NI4G-L-S-2C**
EDM Compact Type 1 Freescale i.MX6 Dual 1Ghz + 1GB RAM + 4GB eMMC + Gigabit LAN + 2 CAN + SATA
- EDM1-CF-IMX6Q10-R2GB-NI4G-L-S-2C**
EDM Compact Type 1 Freescale i.MX6 Quad 1Ghz + 2GB RAM + 4GB eMMC + Gigabit LAN + 2 CAN + SATA
- EDM1-CF-IMX6S10-R512-NI4G-BW-L-2C**
EDM Compact Type 1 Freescale i.MX6 Solo 1Ghz + 512MB RAM + 4GB eMMC + Gigabit LAN + 2 CAN + 802.11bgn + Bluetooth 4.0
- EDM1-CF-IMX6U10-R1GB-NI4G-BW-L-2C**
EDM Compact Type 1 Freescale i.MX6 Duallite 1Ghz + 1GB RAM + 4GB eMMC + Gigabit LAN + 2 CAN + 802.11bgn + Bluetooth 4.0
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* Feel free to contact us for custom tailored Carrier Board request for your projects.