

# EDM2-CF-IMX6



## Main Features

- ARM Cortex-A9 Freescale i.MX6 scalable single/dual/quad core EDM type 2 compact System-on-Module
- Gigabit LAN, WiFi 802.11 b/g/n and Bluetooth v. 4.0 communication interface
- Targeting multimedia applications with LVDS, HDMI, S/PDIF, I<sup>2</sup>S, MIPI camera and display



Power 5 VDC	LAN	LVDS	HDMI	PCIe x4	SATA 2 <sup>nd</sup>	LPC	HDA	SPDIF	CANBus x2	SD	SPI x2	UART x2	Buttons + GPIO	RSVD
		LVDS	HDMI	PCIe x1	SATA 1 <sup>st</sup>	USB OTG	USB Host	I <sup>2</sup> S 1 <sup>st</sup>				I <sup>2</sup> C x2		

## Specifications

### Core System

Signalling	EDM Type 2 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 2 channel LVDS 18/24 bit
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 <sup>2</sup> C, GPIO

### Video

GPU 3D	<b>Solo / Duallite</b> Vivante GC880 35Mtri/s 266Mpxl/s OpenGL ES 2.0	<b>Dual / Quad</b> 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 <sup>2</sup> S (2 channel), S/PDIF
Audio Codec	on EDM Carrier Board

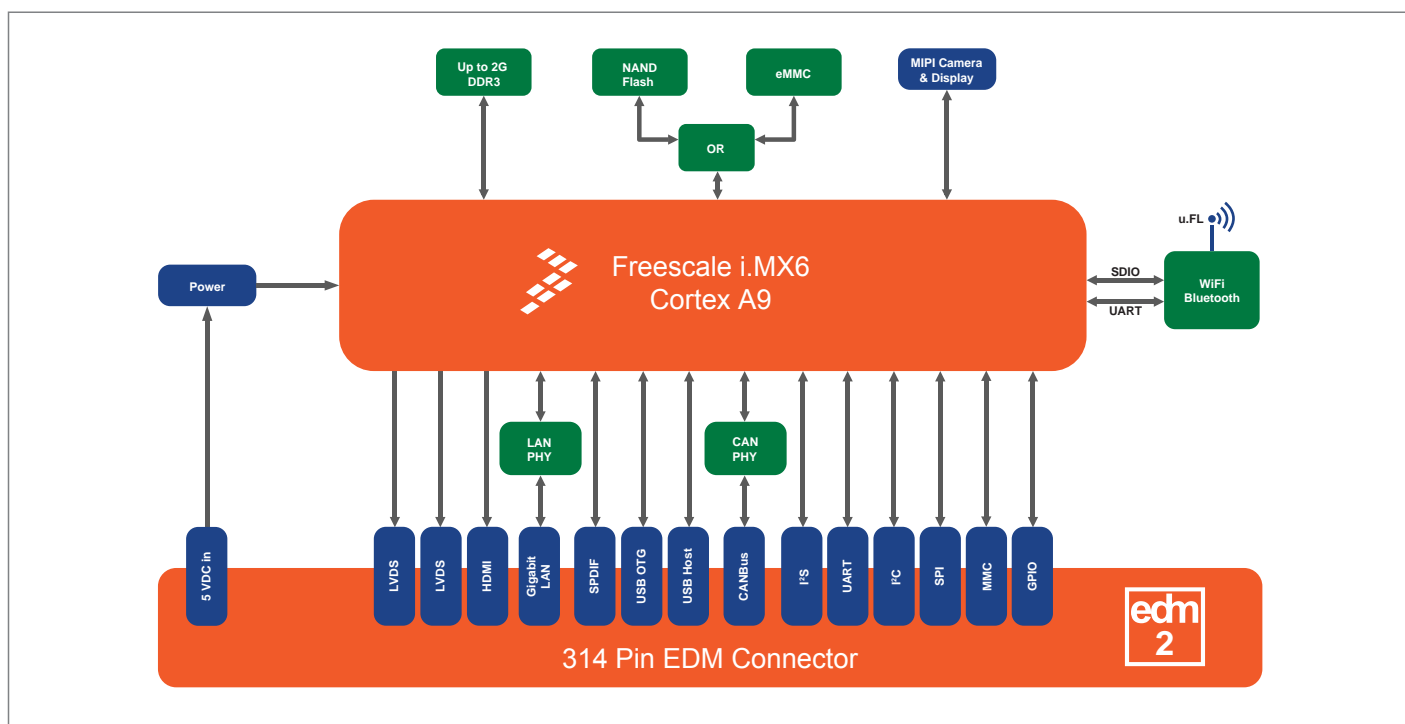
### Power Specifications

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

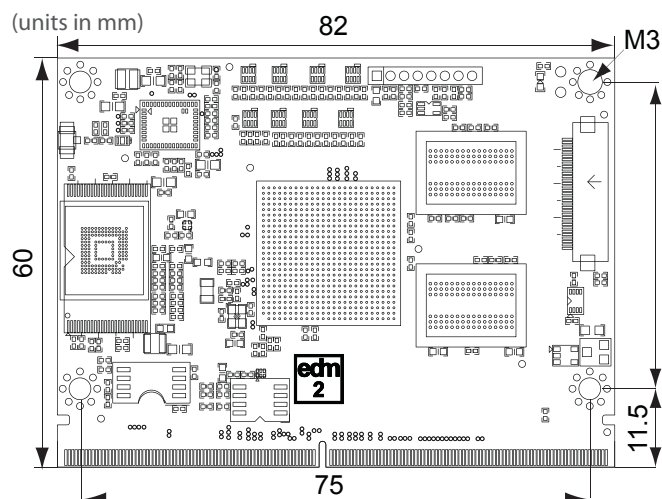
## Block Diagram



## 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

### EDM2-CF-IMX6S10-R512-NI4G-L-2C

EDM Compact Type 2 Freescale i.MX6 Solo 1Ghz + 512MB RAM + 4GB eMMC + Gigabit LAN + 2 CAN

### EDM2-CF-IMX6U10-R1GB-NI4G-L-2C

EDM Compact Type 2 Freescale i.MX6 Duallite 1Ghz + 1GB RAM + 4GB eMMC + Gigabit LAN + 2 CAN

### EDM2-CF-IMX6D10-R1GB-NI4G-L-S-2C

EDM Compact Type 2 Freescale i.MX6 Dual 1Ghz + 1GB RAM + 4GB eMMC + Gigabit LAN + 2 CAN + SATA

### EDM2-CF-IMX6Q10-R2GB-NI4G-L-S-2C

EDM Compact Type 2 Freescale i.MX6 Quad 1Ghz + 2GB RAM + 4GB eMMC + Gigabit LAN + 2 CAN + SATA

### EDM2-CF-IMX6S10-R512-NI4G-BW-L-2C

EDM Compact Type 2 Freescale i.MX6 Solo 1Ghz + 512MB RAM + 4GB eMMC + Gigabit LAN + 2 CAN + 802.11bgn + Bluetooth 4.0

### EDM2-CF-IMX6U10-R1GB-NI4G-BW-L-2C

EDM Compact Type 2 Freescale i.MX6 Duallite 1Ghz + 1GB RAM + 4GB eMMC + Gigabit LAN + 2 CAN + 802.11bgn + Bluetooth 4.0

### EDM2-CF-IMX6D10-R1GB-NI4G-BW-L-S-2C

EDM Compact Type 2 Freescale i.MX6 Dual 1Ghz + 1GB RAM + 4GB eMMC + Gigabit LAN + 2 CAN + SATA + 802.11bgn + Bluetooth 4.0

### EDM2-CF-IMX6Q10-R2GB-NI4G-BW-L-S-2C

EDM Compact Type 2 Freescale i.MX6 Quad 1Ghz + 2GB RAM + 4GB eMMC + Gigabit LAN + 2 CAN + SATA + 802.11bgn + Bluetooth 4.0

\* Feel free to contact us for custom tailored Carrier Board request for your projects.