

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







# 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			GРМС		I <sup>2</sup> S 2 <sup>nd</sup>	SPDIF	SPDIF CANBus	SD	SPI	UART x2	Buttons	RSVD
		LVDS	номі	PCle x1	SATA 1 <sup>st</sup>	USB OTG	USB Host	I <sup>2</sup> S 1 <sup>st</sup>	x2 30	х2	I <sup>2</sup> C x2	+ GPIO	RTC	

### **Specifications**

Signalling EDM Type 1 compliant CPU NXP i.MX6Solo @ 1GHz NXP i.MX6Duallite @ 1GHz NXP i.MX6Dual @ 1GHz

NXP i.MX6Ouad @ 1GHz up to 2GB DDR3

System Memory 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**

1x SATA 2.0 (Dual/Quad only) Storage

1x SDIO/MMC

Expansion 1x PCle 2.0 HDMI v1.4 Display

1 channel LVDS 18/24 bit

24 bit RGB TTL USB Host 2.0

**USB** 

USB OTG 2.0

**CAN Bus** 2x Flex CAN version 2.0B compliant

Serial Port 2x UART

Other SPI, I<sup>2</sup>C, I<sup>2</sup>S, GPIO, Local Bus (GPMC)

#### **Video**

Solo/Duallite GPU 3D Vivante GC880

35Mtri/s 266Mpxl/s

Open GL ES 2.0

GPU 2D emulated on GPU 3D

Vivante GC320 (Composition) 600Mpxl/s, BLIT

Video Decode Video Encode

(Vector Graphics)

1080p30 + D1

1080p30 H.264 BP/Dual 720p

## Vivante GC320 600Mpxl/s, BLIT

**Dual/Quad** 

Vivante GC2000

OpenGL ES 2.0

Vivante GC355

300Mpxl/s

OpenVG 1.1

& Halti, CL EP

200Mtri/s 1000Mpxl/s

1080p60 H.264 1080p30 H.264 BP/Dual 720p

#### **Audio**

GPU 2D

Interface I2S (2 channel), S/PDIF Audio Codec on EDM Carrier Board

#### **Power Specifications**

Input power 5V DC +/- 5%

#### **Operation Systems**

Standard Support Linux

Yocto

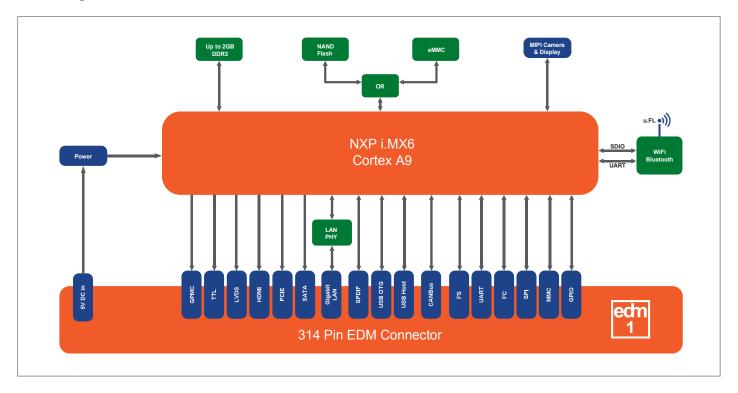
Android

**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

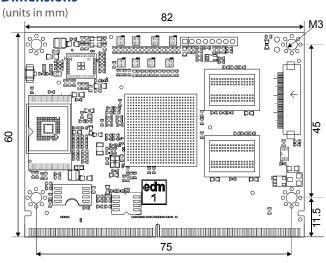
Form Factor **EDM Compact Form Factor** 

Dimensions 82 x 60 mm

(35/8x 23/8 inch) **MTBF** >100,000 hours 20 grams Weight 50G/25ms Shock 20G/0-600 Hz

#### **Dimensions**

Vibration



#### **Ordering Information**

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

	Code	Description
Processor	IMX6S	i.MX6 Solo
	IMX6U	i.MX6 Duallite
	IMX6D	i.MX6 Dual
		i.MX6 Quad
Processor speed	10	1 GHz (Default)
Memory	R512	512 MB DDR3
	11100	1GB DDR3
		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
	S	SATA(Dual/Quad)
CAN Bus	-	No
	2C	2 CAN(Default)
Temperature Range	-	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
Custom ID		(-40~85° C)
	XXXX	Custom Part number ID for customized
		software loader and special
		component (BOM)

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