

EDM2-CF-iMX6



EDM Type 2 Compact Form Factor Freescale i.MX6 System on Module



ARM Cortex-A9 Freescale i.MX6 scalable single/dual/quad core EDM type 2 compact System-on-Module

Communication by gigabit LAN, WiFi 802.11 a/b/g/n and Bluetooth v.4.0

Targeting multimedia applications with dual channel LVDS, HDMI, S/PDIF, I²S, MIPI camera and display.

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

Core System

Signalling CPU
EDM Type 2 compliant
Freescale i.MX6Quad @1.0GHz
Freescale i.MX6Dual @1.0 GHz
Freescale i.MX6DualLite @1.0 GHz
Freescale i.MX6Solo @1.0 GHz

System Memory Storage
up to 2GB DDR3
eMMC / iNAND
or optional NAND Flash

Debug Interface
JTAG Interface
FPC Connector
MIPI interface camera
MIPI interface DSI display

I/O

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
2x Flex CAN

CAN Bus
version 2.0B compliant

Serial Port
2x UART

Other
SPI, I²C, GPIO

Power Specifications

Input Power 5 VDC

Operating Systems

Standard Support
Linux
Android

Extended Support
Commercial Linux
Windows Embedded Compact 7
Real Time OS

Connectivity

Network
Atheros AR8031 Gigabit LAN

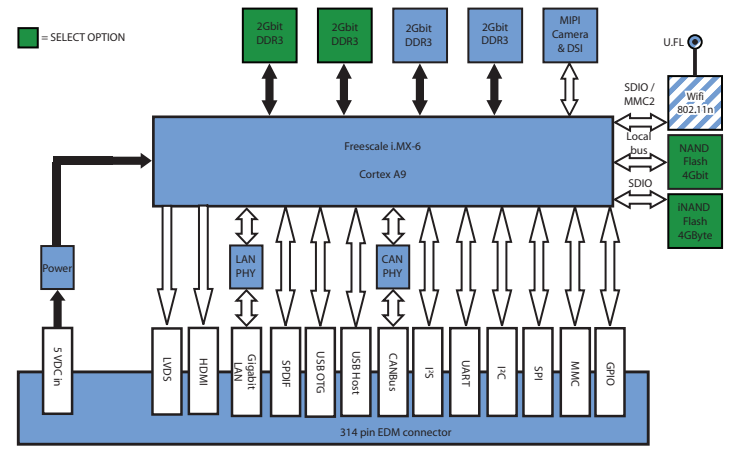
Wireless LAN
Broadcom BCM4330
802.11 a/b/g/n @ 2.4 / 5Ghz
Bluetooth v. 4.0

Audio

Interface
I²S (1 channel), S/PDIF
Audio Codec
on EDM Carrier Board

Video

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



Mechanical and Environmental

Temperature
Commercial: 0° to 60° C
Extended: -20° to 70° C
* Industrial: -40° to 85° C
(* = no wifi, no eMMC)

Humidity
10-90%

Module Connector
314 pins MXM3

Form Factor
EDM Compact Form Factor
82 x 60 mm
(3 1/8 x 2 3/8 inch)

Dimensions
>100,000 hours

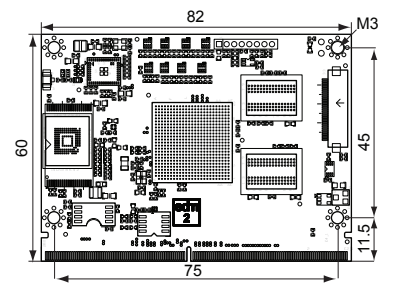
MTBF
Weight
20 grams

Shock
50G / 25ms

Vibration
20G / 0-600 Hz

Dimensions

units in mm



Ordering Information

- EDM2-CF-iMX6Q10-BW Freescale i.MX6 Quad core EDM Compact Type 2 with WiFi and Bluetooth
- EDM2-CF-iMX6Q10 Freescale i.MX6 Quad core EDM Compact Type 2
- EDM2-CF-iMX6D10-BW Freescale i.MX6 Dual core EDM Compact Type 2 with WiFi and Bluetooth
- EDM2-CF-iMX6D10 Freescale i.MX6 Dual core EDM Compact Type 2
- EDM2-CF-iMX6U10-BW Freescale i.MX6 DualLite core EDM Compact Type 2 with WiFi and Bluetooth
- EDM2-CF-iMX6U10 Freescale i.MX6 DualLite core EDM Compact Type 2
- EDM2-CF-iMX6S10-BW Freescale i.MX6 Single core EDM Compact Type 2 with WiFi and Bluetooth
- EDM2-CF-iMX6S10 Freescale i.MX6 Single core EDM Compact Type 2

Optional Accessories

- EDM-C-Bracket EDM compact Carrier Board mount bracket
- HSP-EDM-C-10W EDM passive heatsink
- HS-EDM-CF-iMX6 EDM-CF-i.MX6 compatible heatspreader

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

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www.texim-europe.com



Start Kits

EDM2-CF-iMX6S10-START
EDM2-CF-iMX6U10-START
EDM2-CF-iMX6D10-START

EDM Compact Type 2 Freescale i.MX6 Solo 1Ghz + 512MB RAM + 4GB iNAND + Gigabit LAN + 2 CAN (**EDM2-CF-iMX6S10-R512-Ni4G-L-2C**)
EDM Compact Type 2 Freescale i.MX6 Duallite 1Ghz + 1GB RAM + 4GB iNAND + Gigabit LAN + 2 CAN (**EDM2-CF-iMX6U10-R1GB-Ni4G-L-2C**)
EDM Compact Type 2 Freescale i.MX6 Dual 1Ghz + 1GB RAM + 4GB iNAND + Gigabit LAN + 2 CAN + SATA & EDM Compact passive heatsink (**EDM2-CF-iMX6D10-R1GB-Ni4G-L-S-2C + EDM-HS-CP12-20-05-01**)
EDM Compact Type 2 Freescale i.MX6 Quad 1Ghz + 2GB RAM + 4GB iNAND + Gigabit LAN + 2 CAN + SATA & EDM Compact passive heatsink (**EDM2-CF-iMX6Q10-R2GB-Ni4G-L-S-2C + EDM-HS-CP12-20-05-01**)

EDM2-CF-iMX6Q10-START

EDM Compact Type 2 Freescale i.MX6 Solo 1Ghz + 512MB RAM + 4GB iNAND + Gigabit LAN + 2 CAN + 802.11abgn + Bluetooth 4.0 & EDM antenna kit (**EDM2-CF-iMX6S10-R512-Ni4G-BW-L-2C + EDM-ANT-P150-A138-045D-2450-BK**)
EDM Compact Type 2 Freescale i.MX6 Duallite 1Ghz + 1GB RAM + 4GB iNAND + Gigabit LAN + 2 CAN + 802.11abgn + Bluetooth 4.0 & EDM antenna kit (**EDM2-CF-iMX6U10-R1GB-Ni4G-BW-L-2C + EDM-ANT-P150-A138-045D-2450-BK**)

EDM2-CF-iMX6S10-BW-START

EDM2-CF-iMX6U10-BW-START

EDM Compact Type 2 Freescale i.MX6 Dual 1Ghz + 1GB RAM + 4GB iNAND + Gigabit LAN + 2 CAN + SATA + 802.11abgn + Bluetooth 4.0 & EDM antenna kit & EDM Compact passive heatsink (**EDM2-CF-iMX6D10-R1GB-Ni4G-BW-L-S-2C + EDM-ANT-P150-A138-045D-2450-BK + EDM-HS-CP12-20-05-01**)
EDM Compact Type 2 Freescale i.MX6 Quad 1Ghz + 2GB RAM + 4GB iNAND + Gigabit LAN + 2 CAN + SATA + 802.11abgn + Bluetooth 4.0 & EDM antenna kit & EDM Compact passive heatsink (**EDM2-CF-iMX6Q10-R2GB-Ni4G-BW-L-S-2C + EDM-ANT-P150-A138-045D-2450-BK + EDM-HS-CP12-20-05-01**)

EDM2-CF-iMX6D10-BW-START

EDM2-CF-iMX6Q10-BW-START

Standard Partnumbers

EDM2-CF-iMX6S10-R512-Ni4G-L-2C
EDM2-CF-iMX6U10-R1GB-Ni4G-L-2C
EDM2-CF-iMX6D10-R1GB-Ni4G-L-S-2C
EDM2-CF-iMX6Q10-R2GB-Ni4G-L-S-2C

EDM Compact Type 2 Freescale i.MX6 Solo 1Ghz + 512MB RAM + 4GB iNAND + Gigabit LAN + 2 CAN
EDM Compact Type 2 Freescale i.MX6 Duallite 1Ghz + 1GB RAM + 4GB iNAND + Gigabit LAN + 2 CAN
EDM Compact Type 2 Freescale i.MX6 Dual 1Ghz + 1GB RAM + 4GB iNAND + Gigabit LAN + 2 CAN + SATA
EDM Compact Type 2 Freescale i.MX6 Quad 1Ghz + 2GB RAM + 4GB iNAND + Gigabit LAN + 2 CAN + SATA

EDM2-CF-iMX6S10-R512-Ni4G-BW-L-2C
EDM2-CF-iMX6U10-R1GB-Ni4G-BW-L-2C
EDM2-CF-iMX6D10-R1GB-Ni4G-BW-L-S-2C
EDM2-CF-iMX6Q10-R2GB-Ni4G-BW-L-S-2C

EDM Compact Type 2 Freescale i.MX6 Solo 1Ghz + 512MB RAM + 4GB iNAND + Gigabit LAN + 2 CAN + 802.11abgn + Bluetooth 4.0
EDM Compact Type 2 Freescale i.MX6 Duallite 1Ghz + 1GB RAM + 4GB iNAND + Gigabit LAN + 2 CAN + 802.11abgn + Bluetooth 4.0
EDM Compact Type 2 Freescale i.MX6 Dual 1Ghz + 1GB RAM + 4GB iNAND + Gigabit LAN + 2 CAN + SATA + 802.11abgn + Bluetooth 4.0
EDM Compact Type 2 Freescale i.MX6 Quad 1Ghz + 2GB RAM + 4GB iNAND + Gigabit LAN + 2 CAN + SATA + 802.11abgn + Bluetooth 4.0

Optional Accessories

EDM-ANT-P150-A138-045D-2450-BK
EDM-HS-CP12-20-05-01
EDMCONNECTORKIT

EDM antenna kit containing U.FL to SMA patch cable + 4.5 dB, 2.4/5 GHz, black color antenna.
EDM Compact 12 mm passive heatsink + 20*20 mm thermopad with 0.5 mm thickness for Lidded Freescale CPUs + mylar.
10 EDM AS0B821-S78B-7H connectors + 40 standoff's + 40 screws.

How to create a Custom Partnumber (MOQ's apply)

EDM-CF1-IMX6Q10-R1GB-Ni4G-BW-L-S-2C-TE-xxxx

EDM
EDM Type
Formfactor of Module
Chipvender
CPU type
CPU cores
CPU speed
Memory
Storage
Wireless LAN
Network LAN
SATA
CANbus
Temperature
Customer ID code

Embedded Design Module
Pin definition of EDM Type 1 or Type 2
C = Compact; S = Standard; X = Extended
F = Freescale
for example : i.MX6
S = Single core; U = DualLite; D = Dualcore; Q = Quadcore
10 = 1GHz; 08 = 800MHz
R512 = 512MB; R1GB = 1GB; R2GB = 2GB
Ni4G = iNAND 4GB; N512 = 512 NAND Flash (iNAND is only possible in Commercial and Extended temperature. For Industrial Temperature only NAND Flash is possible.
None = no wireless communication; W = WiFi; BW = Bluetooth + WiFi (only available in commercial and extended temperature)
None = no Ethernet; L = 1000Gbps Ethernet LAN
None = no SATA; S = SATA (only on i.MX6 Dual or i.MX6 Quad
None = no CANbus; 1C = 1 CANbus; 2C = 2 CANbus
None = Commercial Temp (0~60C); TE = Extended Temp (-20~70C); TI = Industrial Temp (-40~85C); TEC = Extended Temperature Certified; TIC = Industrial Temperature Certified
xxxx = special order code for custom softwrae loading or BOM option

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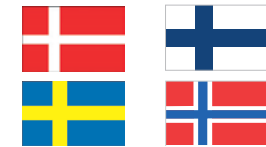
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