

EDM1-CF-IMX6SX



Main Features

- ARM Cortex-A9 Single core + ARM Cortex M4
Freescale i.MX6 SoloX EDM Type 1 compact System-on-Module.
- Dual gigabit LAN and optional WiFi/BT connectivity.
- Support for Android, Linux, Yocto and MQX realtime OS



| | | | | | | | | | | | | | |
|----------------|-----|------|------|---------------------|-------------------------|-------------------------------------|-------------|--------------|----|-----------|-------------------------------------|-------------------|------|
| Power 5 VDC | LAN | TTL | | 2 nd LAN | | 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.MX6SoloX @ 1Ghz |
| Technology | ARM Cortex-A9 single core + ARM Cortex M4 |
| PMIC | Freescale MMPF0100 |
| System Memory | up to 2GB DDR3 |
| Storage | eMMC (default 4GB) QSPI (default 256MB) optional NAND Flash (MOQ apply) |
| Debug Interface | JTAG Interface by thruhole |
| FPC Connector | ADC Signals |

Connectivity

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|-----------|------------------------------------|
| Network | Two (2) Atheros AR8031 Gigabit LAN |
| WiFi | Broadcom BCM4330 802.11bgn |
| Bluetooth | Broadcom BCM4330 BT 4.0 |

I/O Interfaces

| | |
|-------------|---|
| Storage | 1x SDIO / MMC |
| Expansion | 1x PCIe 2.0 |
| Display | 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 |

Video

| | |
|--------|---|
| GPU 3D | Vivante GC400T 17Mtri/s 133Mpxl/s |
| PXP | Open GL ES 2.0 Image re-sizing, rotation, overlay and CSC Pixel Processing Pipeline |

Audio

| | |
|-------------|---------------------------------------|
| Interface | I ² S (2 channel), S/P DIF |
| Audio Codec | on EDM Carrier Board |

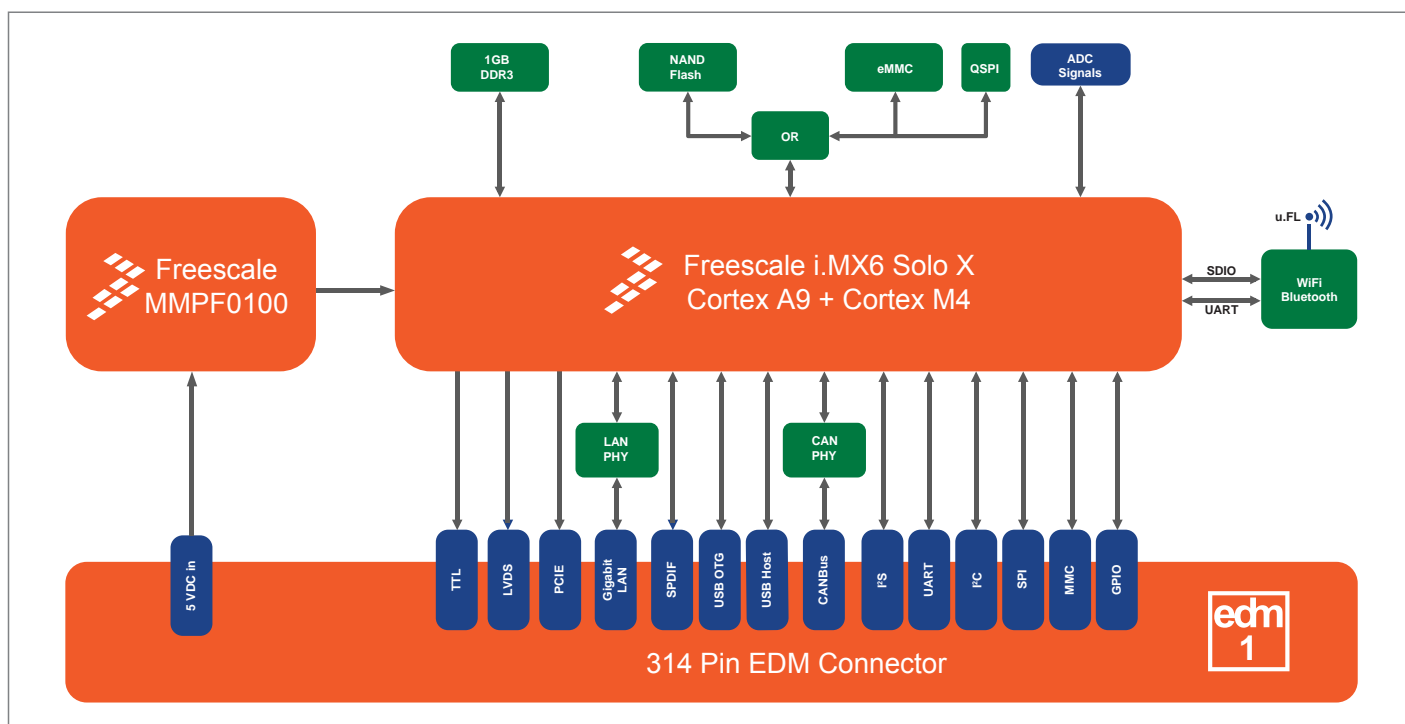
Power Specifications

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|-------------|--------------|
| Input power | 5 VDC +/- 5% |
|-------------|--------------|

Operation Systems

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|------------------|--|
| 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 $\frac{5}{8}$ x 2 $\frac{3}{8}$ inch) |
| MTBF | >100,000 hours |
| Weight | 20 grams |
| Shock | 50G / 25ms |
| Vibration | 20G / 0-600 Hz |

Ordering Information

EDM1-CF-IMX6X10-R1GB-NI4G-2L-2C

EDM Compact Type 1 Freescale i.MX6 SoloX 1Ghz + 1GB DDR3 + 4GB eMMC + 2 Gigabit LAN + 2 CAN

EDM1-CF-IMX6X10-R1GB-NI4G-BW-2L-2C

EDM Compact Type 1 Freescale i.MX6 SoloX 1Ghz + 1GB DDR3 + 4GB eMMC + Gigabit LAN + 2 CAN + 802.11 bgn + Bluetooth 4.0

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

Dimensions

(units in mm)

