

# EDM2-ELF



## Main Features

- Develop your mobile embedded device quickly with the Elf EDM Carrier Board which features a variety of sensors and interconnects.
- HDMI, TTL and LVDS display interfaces.
- Communication by dual PCI Express (with SIM cardslots).
- Dual CAN Bus, Dual UART, USB and 8 GPIO's for Industrial control.



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 x2	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

System on Module EDM Type 2 compact form factor

### Expansion

Expansion Slots 2x mini-PCIe + SIM cardslot  
(for 3G communication)

### I/O Interfaces

Connector	1x SATA 1x micro SD cardslot (SDIO) 1x Gigabit LAN 2x USB 3.0 Host 1x micro USB 3.0 / 2.0 OTG 1x UART (RS-232/422/485)
Header	2x CAN Bus 1x UART (RS-232) 2x SPI 8x GPIO 2x I <sup>2</sup> C Manufacturing pins

### Video

Connector	1x HDMI 2 channel LVDS 18/24 bit
-----------	-------------------------------------

### Audio

Codec	Jumper selectable: Freescale SGTL5000 (I <sup>2</sup> S), TI TLV320AIC23B (I <sup>2</sup> S)
Connector	1x 3.5 mm jack Stereo Audio in 1x 3.5 mm jack Stereo Audio out 1x 3.5 mm jack Microphone S/PDIF
Speaker	2W amplified speaker connectors

### Touch

Controller	TSC2046 (4 wire by SPI)
Connector	4 wire touch panel

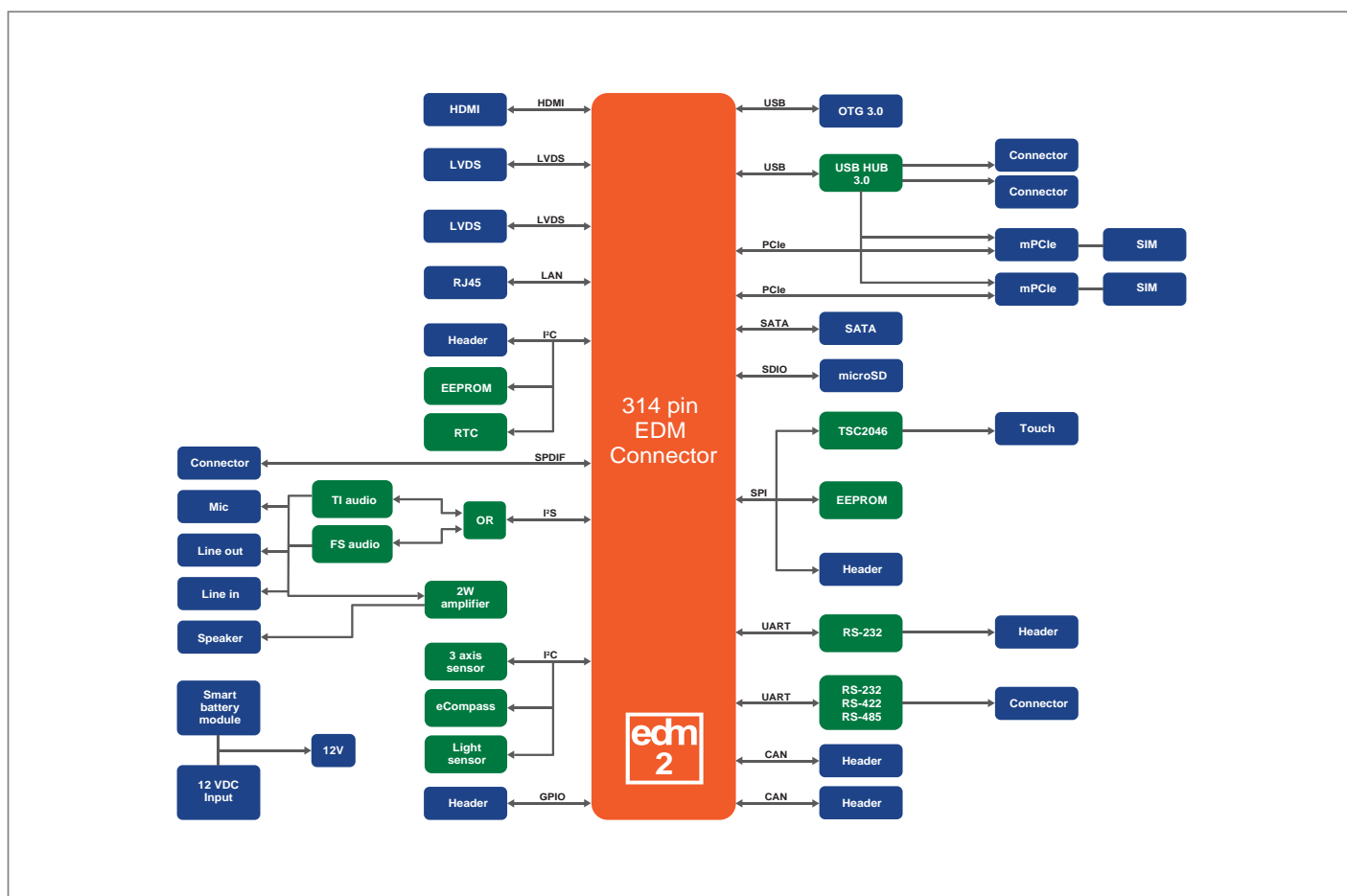
### Sensors

3-axis Movement	ST Microelectronics LIS331DLH
Light Sensor	Intersil ISL29023IROZ-T7
Compass	Freescale MAG3110FCR1
Real Time Clock	Maxim integrated DS1337+

### Power Specifications

Input power	12 VDC
Battery	Smart battery connector

## Block Diagram



## Environmental and Mechanical

Temperature	Commercial : 0° to 60° C Extended : -20° to 70° C Industrial : -40° to 85° C
Humidity	10 to 90%
Module Connector	314 pins MXM3
Form Factor	3.5" Form Factor
Dimensions	147 x 102 mm (5¾ x 4 inch)
MTBF	>100,000 hours
Weight	115 grams
Shock	50G / 25ms
Vibration	20G / 0-600 Hz

## Ordering Information

### EDM2-ELF

3.5 inch form factor Elf carrier board for EDM type 2 system-on-modules

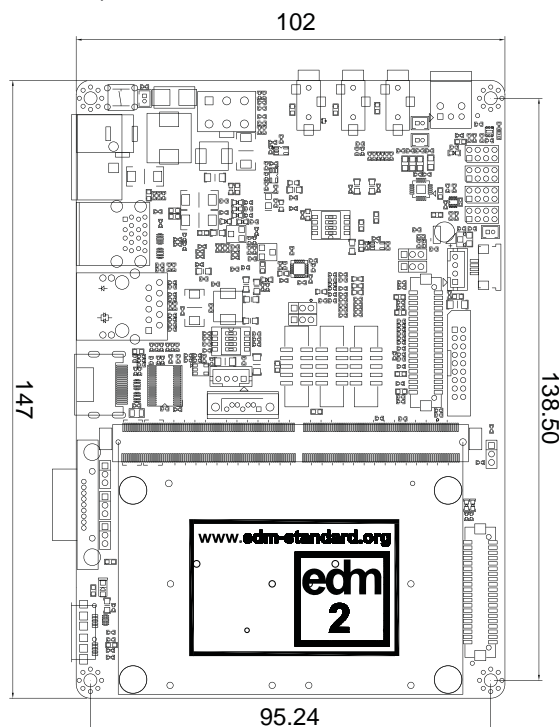
### EDM2-ELF-START

Elf EDM type 2 evaluation board including cablekit and adaptor

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

## Dimensions

(units in mm)



# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TechNexion:](#)

[EDM2ELF](#)