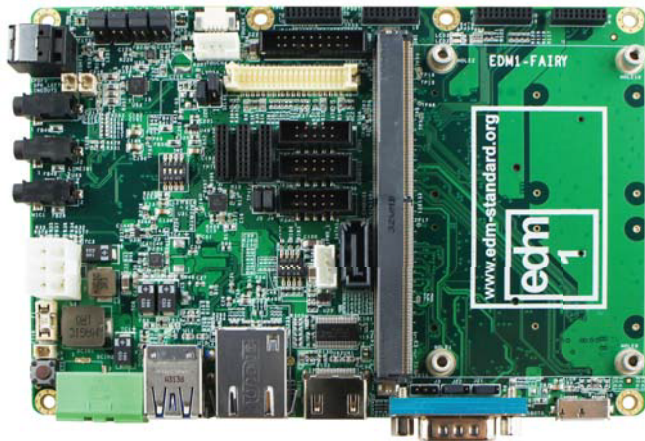


# EDM1-FAIRY



## Main Features

- Develop your mobile embedded device quickly with the EDM1-FAIRY Carrier Board which packs a robust set 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	LAN	TTL		GPMC		I <sup>2</sup> S 2 <sup>nd</sup>	SPDIF	CAN x2	SD	SPI x2	UART x2	Buttons + GPIO	RSVD
		LVDS	HDMI	PCIe x2	SATA 1 <sup>st</sup>	USB OTG	USB				I <sup>2</sup> S 1 <sup>st</sup>		I <sup>2</sup> C x2

## Specifications

### Core System

Board-to-Board Connector	EDM connector (314-pin MXM3)
Compatible SOM	EDM Type 1

### Expansion Interfaces

Expansion Slots	2x mini-PCIe with SIM cardslot
-----------------	--------------------------------

### Internal Headers

Internal Display	1x 24-bit TTL RGB signals (expansion header) 1x single channel LVDS (expansion header)
Expansion Headers	CAN GPIO I <sup>2</sup> C I <sup>2</sup> S RS232 SATA SPI

### External Connectors

External Display	1x HDMI
Audio Connectors	1x 3.5mm jack Microphone 1x 3.5mm jack Stereo Audio in 1x 3.5mm jack Stereo Audio out S/PDIF (optical)
Network	1x RJ45
USB	1x USB 2.0 OTG 2x USB 2.0 Host
Serial	1x RS-232/422/485
Buttons	1x Reset
SD Cardslot	1x microSD cardslot

### Audio

Audio Codec	NXP SGTL5000
Audio Interface	TI TLV320AIC23B
Speaker	I <sup>2</sup> S (2 channel) Audio speaker connector (stereo) (2W pre-amplified)

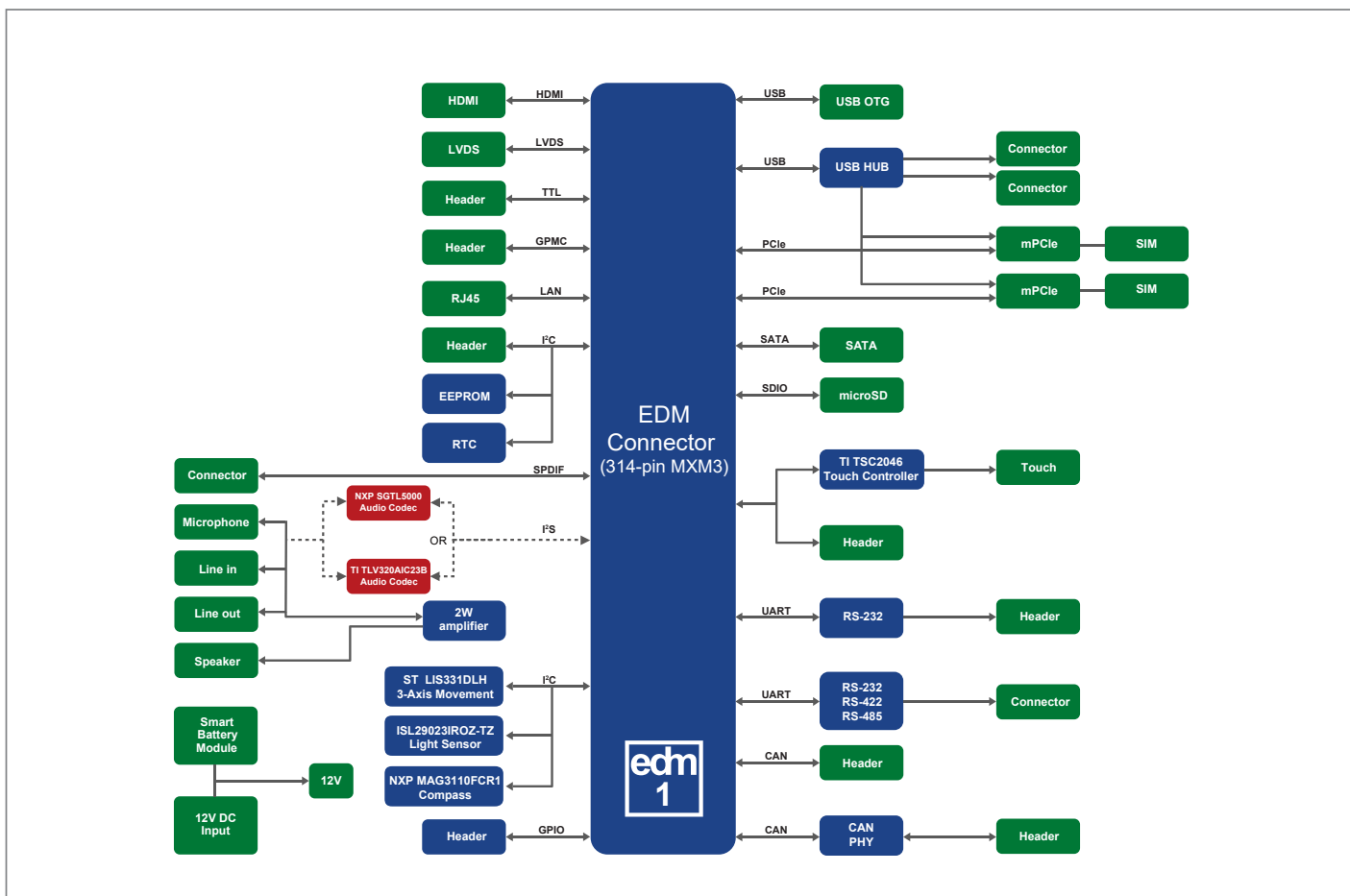
### Sensors

3-Axis Movement	STMicroelectronics LIS331DLH
Light Sensor	Intersil ISL29023IROZ-TZ
Compass	NXP MAG3110FCR1
RTC	maxim integrated DS1337+ 2-pin header battery connector

### Power Specifications

Power Input	12V DC +/-10%
Power Connector	2-pin 5.08mm Terminal Block 2EHDRM-02P
Power Consumption	Depending on Configuration

### Block Diagram



### Environmental and Mechanical

Dimensions	147 x 102 mm
Form Factor	3.5"
Weight	115 grams
Temperature	Commercial: 0° to +60° C
Relative Humidity	10 to 90 %
MTBF	>100 000 Hours
Shock	50G/25ms
Vibration	20G/0-600Hz
Certification	Compliant with CE / FCC / RoHS / REACH directives

### Ordering Information

EDM1-FAIRY-XXXXX

	Code	Description
Startkit	-	Board Only
	START	Evaluation Kit

#### EDM1-FAIRY

FAIRY EDM Type 1 Carrier Board

#### EDM1-FAIRY-START

FAIRY EDM Type 1 Evaluation Board including cablekit and adaptor

\* Feel free to contact us for customization requests.

### Dimensions

(units in mm)

