# **EDM1-GOBLIN**



#### **Main Features**

- Develop your mobile embedded device quickly with the Goblin 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 12 VDC	LAN		TTL		2 <sup>nd</sup> LA	<b>N</b>	I <sup>2</sup> S 2 <sup>nd</sup>	SPDIF	CANBus	CANBus x2 SD	SPI x2	UART x2	Buttons + GPIO	RSVD	
		LVDS	HDMI	PCle x2	SATA 1 <sup>st</sup>	USB OTG	USB Host	I <sup>2</sup> S 1 <sup>st</sup>	х2			l <sup>2</sup> C x2		RTC	:

## **Specifications**

**Core System** 

System on Module EDM Type 1 compact form factor

**Expansion** 

Expansion Slots 2x mini-PCle + SIM cardslot

(for 3G communication)

**I/O Interfaces** 

Connector 1x SATA

1x micro SD cardslot (SDIO)

2x 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

GPMC Header Manufacturing pins Video

**Audio** 

Connector 1x HDMI

1 channel LVDS 18/24 bit

RGB TTL 24 bit

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

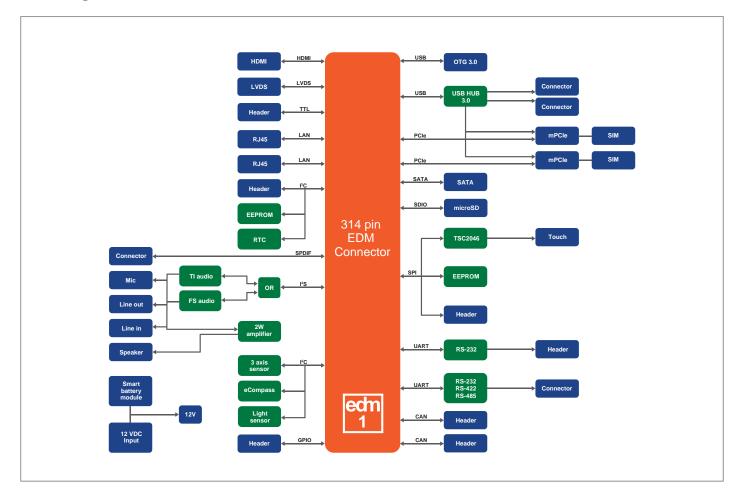
3-axis Movement ST Microelectronics LIS331DLH
Light Sensor Intersil ISL29023IROZ-T7
Compass Freescale MAG3110FCR1
Real Time Clock Maxim integrated DS1337+

**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**

## **EDM1-GOBLIN**

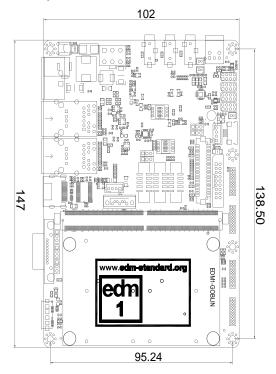
3.5 inch form factor Goblin carrier board for EDM type 1 system-on-modules

#### **EDM1-GOBLIN-START**

Goblin EDM type 1 evaluation board including cablekit and adaptor

#### **Dimensions**

(units in mm)



2015-05. All specifications are subject to change without notice.

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