



Develop your mobile embedded device quickly with the Fairy 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	TTL	GPMC	FS 2nd	SPDIF	CANBus x2	SD	SPI x2	UART x2	Buttons + GPIO	RSVD
		LVDS	HDMI	PCIe x2	SATA 1st	USB OTG	USB Host	I ² S 1st			RTC

Core System

System on Module EDM Type 1 compliant

Video

Display 1x HDMI
1 channel LVDS 18/24 bit
RGB TTL 24 bit

Touch

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

Audio

Codec Jumper selectable:
Freescale SGTL5000 (I²S),
TI TLV320AIC23B (I²S)
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

Sensors

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

Expansion and Connectivity

Expansion Slots 2x mini-PCIe + SIM cardslot
(for 3G communication)
Ethernet 1x Gigabit LAN
USB 2x USB 3.0 Host
1x micro USB 3.0 / 2.0 OTG

Storage

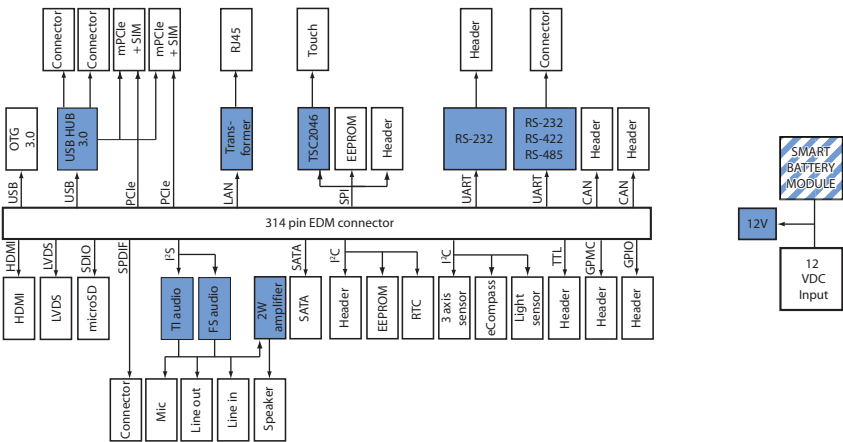
Connector 1x SATA
1x micro SD cardslot (SDIO)

Communication and Control

Header 2x CAN Bus
1x UART (RS-232)
1x UART (RS-232/422/485)
2x SPI (shared with EEPROM)
2x I²C (shared with EEPROM)
8x GPIO
Local Bus
Reserved / manufacturing pins

Power Specifications

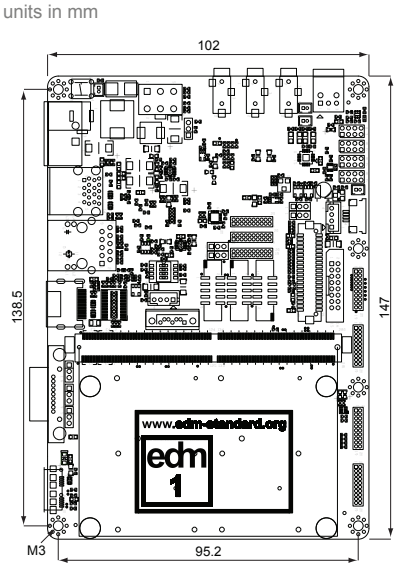
Input Power 12 VDC
or Smart Battery



Mechanical and Environmental

Temperature Commercial 0° to 60° C
Extended -20° to 70° C
Industrial: -40° to 85° C
Humidity 10-90%
Module Connector 314 pins MXM3
Form Factor 3.5" Form Factor
Dimensions 147 x 102 mm
(5 3/4 x 4 inch)
MTBF >100,000 hours
Weight 115 grams
Shock 50G / 25ms
Vibration 20G / 0-600 Hz

Dimensions



Ordering Information

EDM1-FAIRY-START EDM Type 1 Evaluation Board including Cablekit and Adaptor
EDM1-FAIRY 3.5" Form Factor Carrier Board for EDM Type 1 System-on-Modules.

The Fairy design files including schematics and gerber files are available to design your own EDM Carrier Board.

Mouser Electronics

Authorized Distributor

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