

EDM1-FAIRY-IMX6



Main Features

- TechNexion EDM1-FAIRY-IMX6 platform can be applied in a wide range of applications ranging from simple IoT devices to applications with high level of complexity.
- Featuring NXP i.MX6 DualLite or Quad processor that runs up to 1GHz per core, based on the ARM Cortex-A9 architecture, delivered in advanced process.
- Software source code at your fingertips: Android, Linux, Yocto and Ubuntu.



Specifications

Core System

Processor	NXP i.MX6 DualLite NXP i.MX6 Quad
Processor Speed	1GHz
Architecture	ARM Cortex-A9
PMIC	NXP MMPF0100
Memory	1GB DDR3
Storage	8GB eMMC
System on Module	EDM SOM
Debug Interface	JTAG Interface by Through-hole

Connectivity

Network LAN	1x Atheros AR8035 Gigabit LAN
Wi-Fi/Bluetooth	Qualcomm QCA9377 802.11 a/b/g/n/ac + BT (BR+EDR+BLE)
Antenna	MHF4 connector

Expansion Interfaces

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

Internal Display	1x 24-bit TTL RGB signals (expansion header) 1x single channel LVDS (expansion header)
Expansion Headers	CAN GPIO I ² C I ² 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
SD Cardslot	1x microSD cardslot

Video

Graphic Engine	Vivante GC880 (DualLite) Vivante GC2000 (Quad)
Video Decode	1080p30 + D1 (DualLite) 1080p60 H.264 (Quad)
Video Encode	BP/Dual 720p

Audio

Audio Codec	NXP SGT5000 TI TLV320AIC23B
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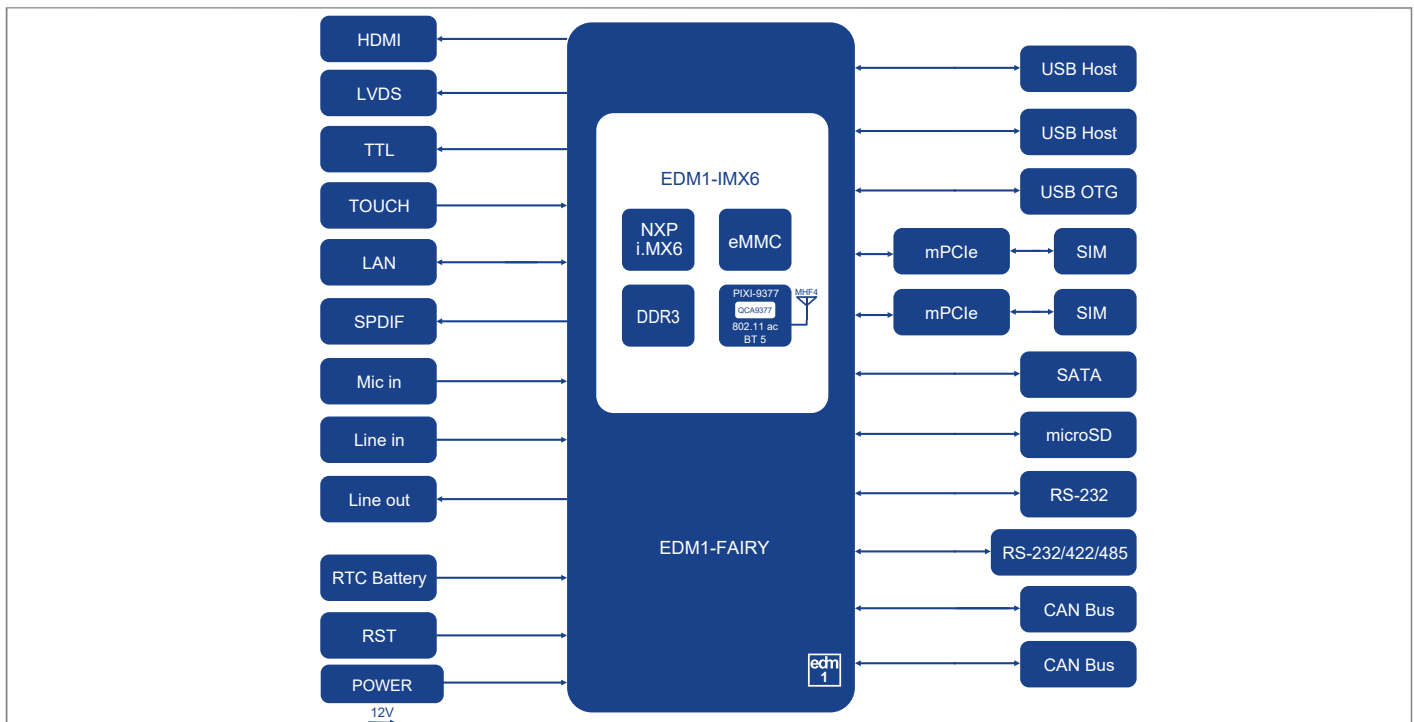
Sensors

3-Axis Movement	STMicroelectronics LIS331DLH
Light Sensor	Intersil ISL29023IROZ-TZ
Compass	NXP MAG3110FCR1
RTC	maxim integrated DS1337+ with backup battery

Power Specifications

Power Input	12V DC +/-5%
Power Connector	2-pin 5.08mm Terminal Block 2EHDRM-02P
Power Consumption	Depending on Configuration

Block Diagram



Operation Systems

Standard Support

Linux
Yocto
Ubuntu
Android

Environmental and Mechanical

Enclosure Material	Metal
Dimensions	161 (W) x 110 (H) x 40 (D) mm
Weight	510 grams
Temperature	Commercial: 0° to +50° C
Relative Humidity	10 to 90 %
MTBF	50 000 Hours
Shock	15G half-sine 11 ms duration
Vibration	1 Grms random 5-500Hz hr/axis

Certification and Compliance

Certification	Compliant with CE / FCC / RoHS / REACH directives
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Ordering Information

EDM1-FAIRY-IMX6DL-SYSTEM

NXP i.MX6 DualLite Development Board with 1GB DDR3, 8GB eMMC and Wi-Fi + BT wireless connectivity including MHF4 antenna, and female DC Power to terminal block adapter in a convenient assembled metal enclosure.



EDM1-FAIRY-IMX6Q-SYSTEM

NXP i.MX6 Quad Development Board with 1GB DDR3, 8GB eMMC and Wi-Fi + BT wireless connectivity including MHF4 antenna, and female DC Power to terminal block adapter in a convenient assembled metal enclosure.

