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 card slot

Internal Headers
- Internal Display: 1x 24-bit TTL RGB signals (expansion header)
- Internal Display: 1x single channel LVDS (expansion header)

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 card slot

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 SGTL5000, TI TLV320AIC23B

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

**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.