SMARC-iMX8M

SMARC 2.0 Module with NXP i.MX8M Cortex-A53 Series Processors

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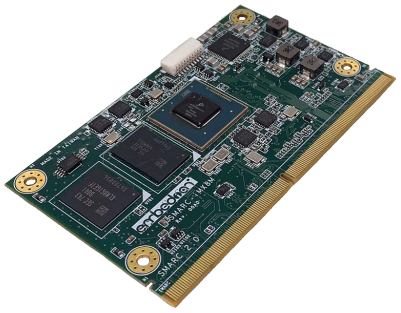
Features

- Dual, quad-lite or quad core NXP i.MX8M series Processor
- 1.5GHz ARM Cortex-A53
- Real-time 266Mhz Cortex-M4 co-processor
- Up to 4GB LPDDR4-3200 memory, 16GB eMMC



Specifications

Display and video Support

- UltraHD 4K Display
- 4Kp60 HEVC/H.265 decoder
- HDMI 2.0a/eDP/DP
- Dual channel LVDS Display

Networking

- 10/100/1000Mbps Ethernet

High Speed Interfaces

- 2 x PCIe
- 2 x USB 3.0

Camera

- Dual MIPI CSI2 Serial Input (2-LANE and 4-LANE)

Power

- 3.0V ~ 5.25V DC ± 5%

Form Factor

- SMARC Specifications v2.0

Dimension

- SMARC half size module, 82mm x 50mm

Other I/O Interfaces

- 5 x USB (1 x USB 2.0 OTG, 2 x USB 3.0 and 2 x USB 2.0)
- 2 x I2S
- 5 x I2C
- 1 x SPI, 1 x QSPI
- 4 x UARTs (2 ports with CTS/RTS)
- 12 x GPIO
- 1 x SDIO
- 2 x CAN
- Watchdog
- RTC

Power Consumption

- Typical 3~3.5W

Operating Temperature

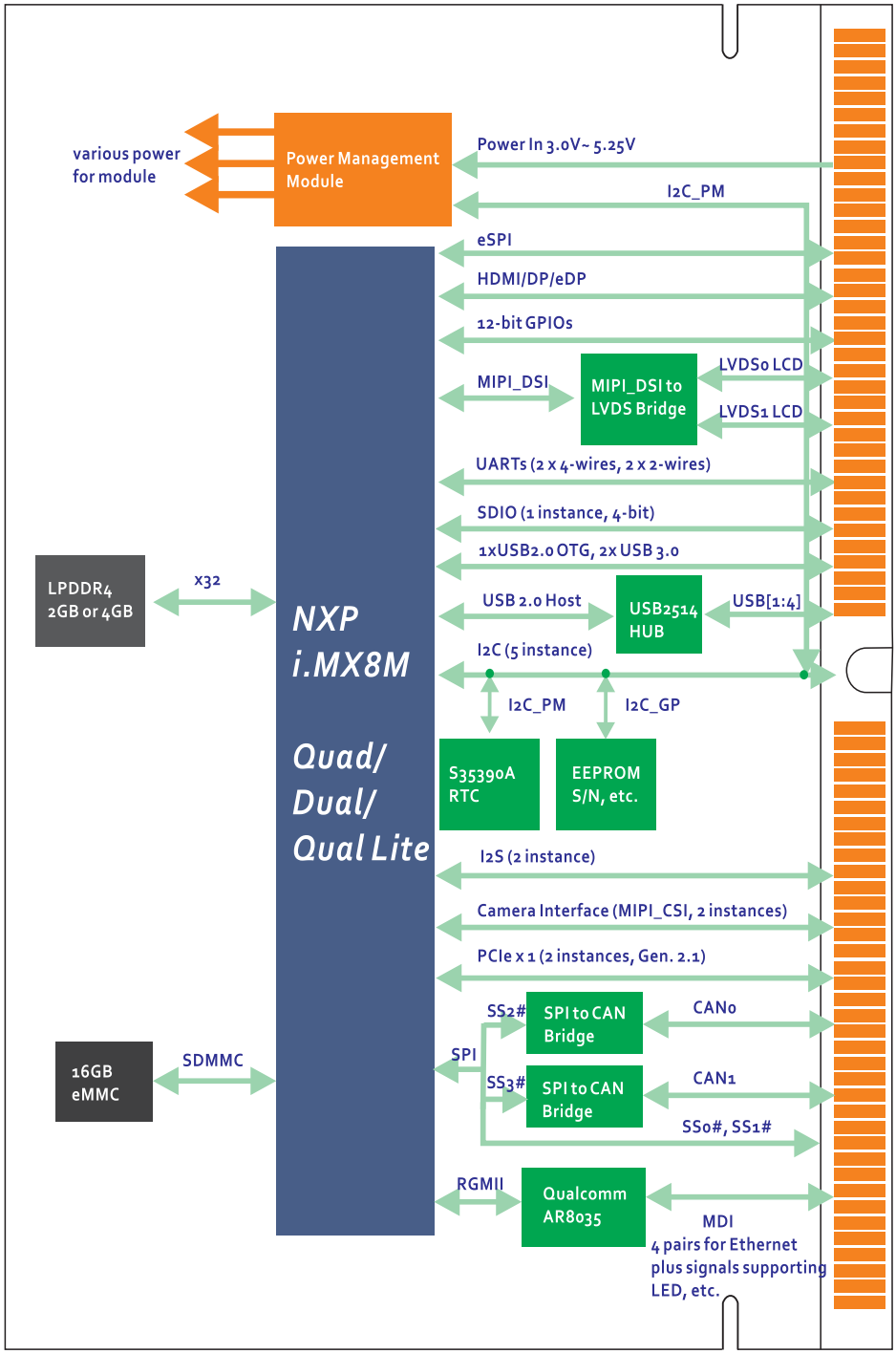
- Standard: 0°C ~85°C
- Industrial: -40°C ~85°C (For 4GB LPDDR4, -30°C ~ 85°C)

Operating System

- Yocto Rocko (Linux 4.9.88_ga)
- Ubuntu 16.04 ARM64 LTS
- Android Oreo 8.1

modularized design | low power | wide temperature | extensive supports | cost effective | high performance | long lifecycle

Functional Diagram



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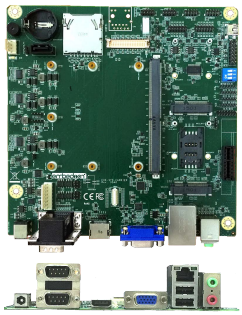
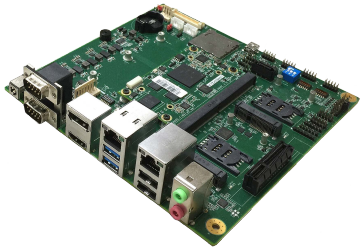
SMARC 2.0 Evaluation Carrier

Universal Development Board for all SMARC 2.0 Compliant Modules

Features

- SMARC 2.0 modules bring-up platform for s/w and h/w development
- SMARC 2.0 modules validation platform
- Customer evaluation platform
- Customer carrier design reference





Ordering Information

SMARC-iMX8M-W-XY-Z-C
(1 2 3 4)

- 1: D (dual-core CPU running up to 2 x 1.5GHz)
  L (quad-lite core CPU running up to 4 x 1.5GHz, No VPU)
  Q (quad-core CPU running up to 4 x 1.5GHz)
- 2: 2G (2GB LPDDR4 running up to 3200MT/s)
  4G (4GB LPDDR4 running up to 3200MT/s)
- 3: I (Industrial temperature, -40°C ~ 85°C if 2GB LPDDR4, -30°C ~ 85°C if 4GB LPDDR4)
- 4: C (Conformal Coating)

EVK-STD-CARRIER-S20

- SMARC 2.0 Evaluation Carrier and Accessaries

* Other configuration by request

About Embedian

Embedian pioneers the concept of an extremely small computer-on-module and single board computers with full implementation of major operating systems.
Established in 2006, now we are the leading supplier in this industry.

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