

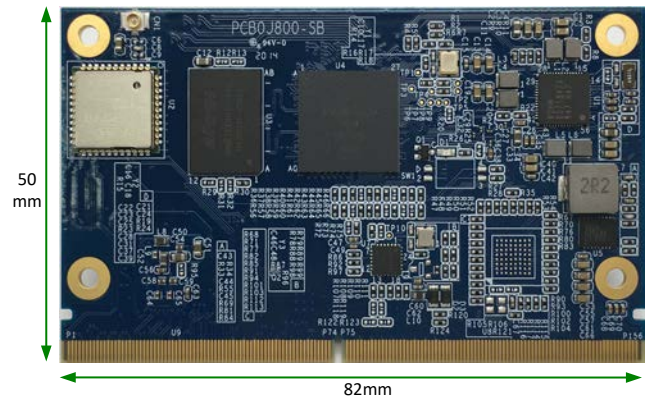
J800

SMARC 2.0 module with NXP i.MX8M-mini Processor

Overview

The J800 is a series of NXP iMX8M-mini ARM Cortex-A53 computer module compliant with SMARC 2.0 specifications and form factor. It is a flexible, high performance and low-cost computer platform designed for general embedded applications such as in-vehicle computer, KIOSK, digital signage, industrial computer or HMI.

J800 is intended for customers to quickly design their baseboards for a variety of applications without complicated design efforts.

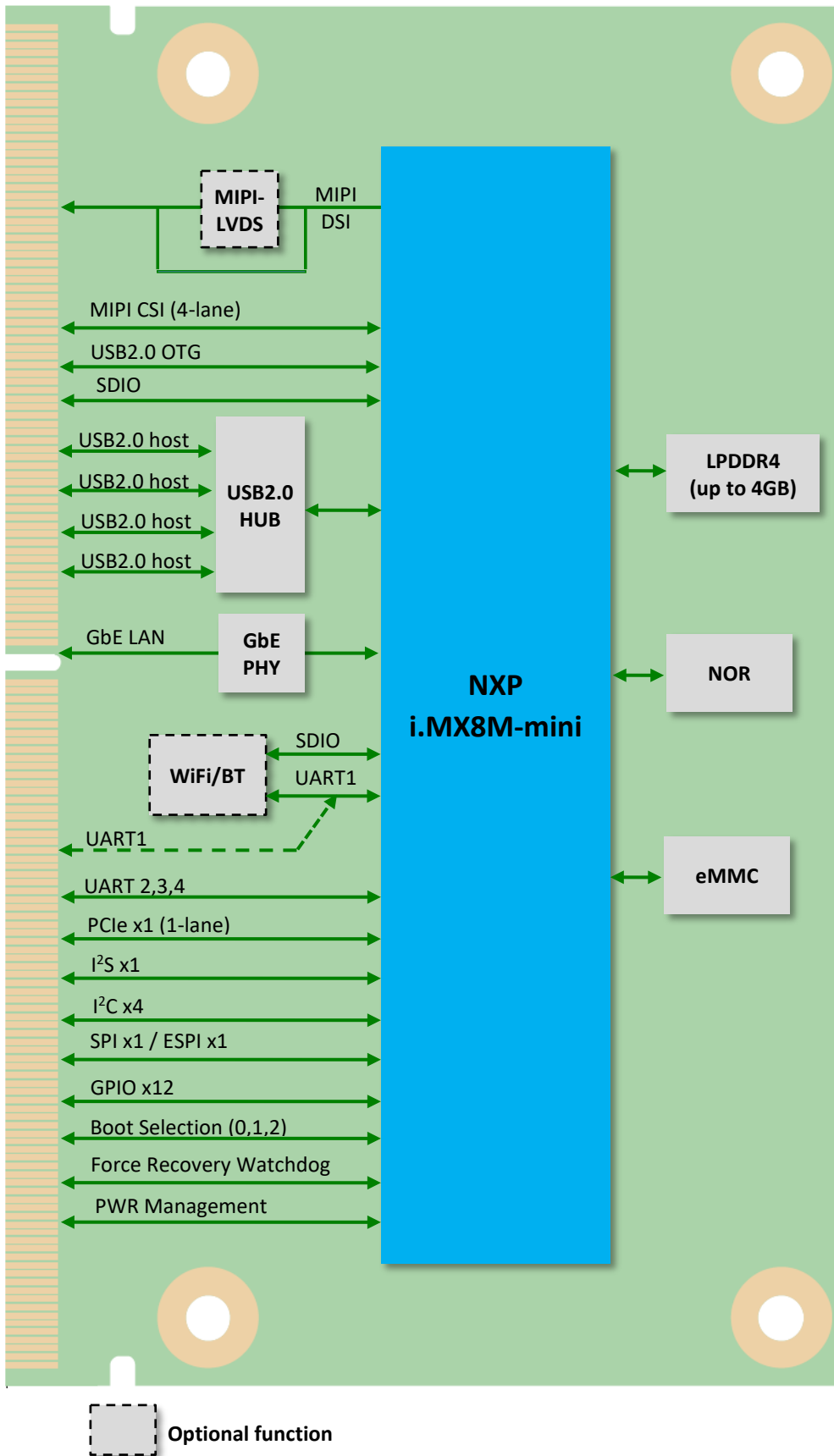


J800 Specifications

- SMARC 2.0 form factor (82x50mm) and specifications
- OS: Android, Linux
- CPU: NXP i.MX8M-mini Quad-core ARM Cortex-A53
- LPDDR4: 2GB (**optional** 4GB)
- eMMC storage: 8GB (or larger)
- Wide operating temperature
- (**optional**) WiFi 802.11b/g/n/ac + Bluetooth 4.2
- SMARC interfaces:
 - MIPI DSI x1 or (**optional**) dual channel LVDS
 - MIPI CSI x1 (4-lane)
 - USB2.0 OTG x1 / USB2.0 host x4
 - SDIO x1
 - Gigabit Ethernet (MAC and PHY) x1
 - PCIe x1 (1-lane)
 - UART1: 4-wire, shared with wifi/bt
 - UART2/UART4: 2-wire (TXD/RXD)
 - UART3: 4-wire (TXD/RXD/RTS/CTS)
 - GPIO x12
 - I²S x1 / I²C x4 / SPI x1 / ESPI x1
 - Watchdog / Power Management



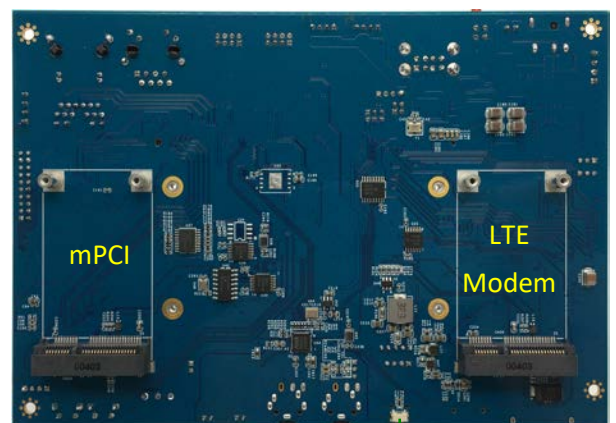
J800 Block Diagram



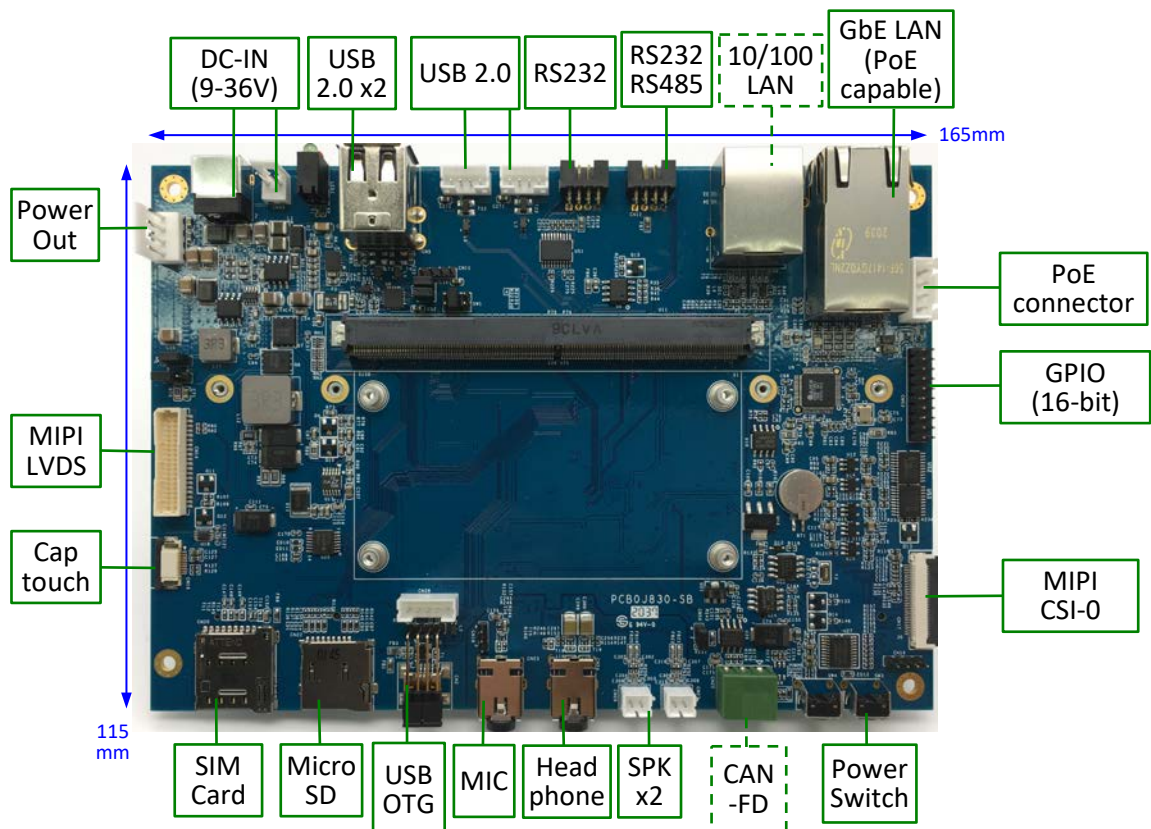
J830 : Base Board for J800 module

J830 Specifications

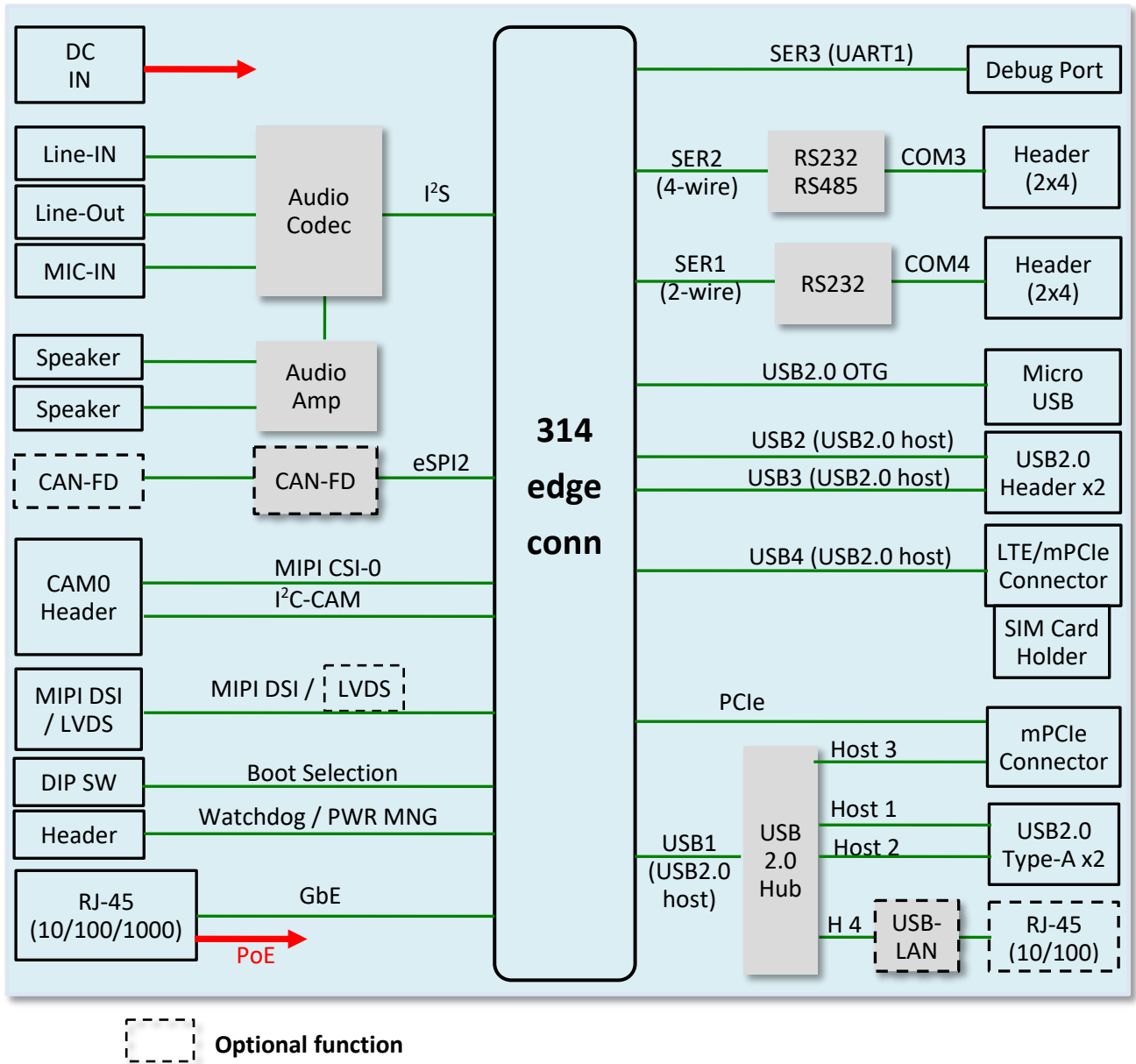
- PCB size: 165mm x 115mm
- 9-36V DC input with **(optional)** over-voltage protection
- MIPI DSI or **(optional)** dual LVDS connector x1
- Capacitive touch screen interface (I²C) x1
- Gb Ethernet RJ-45 x1
- Audio connectors (Line-IN, Line-Out, MIC, Speaker)
- MIPI CSI camera interface x1
- USB2.0 Host x4 / USB2.0 OTG x1
- mini-PCIe connector x1
- LTE modem connector x1 / SIM slot x1
- MicroSD Card slot x1
- RS232 (or RS485) x1
- GPIO x16
- RTC / SPI / I²C / LED / Power Output
- **(optional)** 10/100M Ethernet RJ-45 x1
- **(optional)** CAN bus (CAN FD) x1
- **(optional)** MCU for power control x1
- **(optional)** PoE module x1



Reset Switch



J830 Block Diagram



Order Information:

Part No.	Descriptions
J800	SMARC module: i.MX8M-mini Quad-core, 2GB LPDDR4, 8GB eMMC, MIPI-DSI interface
J830	Baseboard (without option functions) for J800 module
CB-8M	J800 module + J830 Baseboard

** Contact us for option functions (4GB DDR, 32GB eMMC, LAN2, LVDS, etc.)

Last Update: Sept, 2021



IC Nexus Co.

6F-1, No. 3-2 Park Street, Nan-Kang Dist., Taipei, Taiwan

Email: sales@icnexus.com.tw www.icnexus.com.tw