

# miriac<sup>®</sup> MPX-LS1088A

## based on NXP QorIQ LS1088A CPU

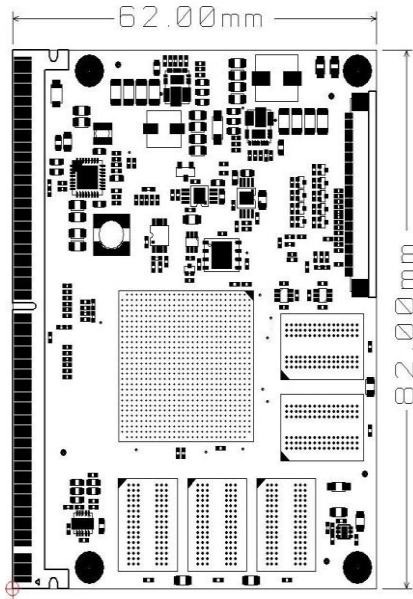
### Product Description



#### miriac MPX-LS1088A System on Module

##### Feature Overview

- NXP QorIQ LS1088A CPU: 8x Cortex-A53 64-bit cores at up to 1.6 GHz core frequency
  - new cost effective MPX-2 System on Module form factor, connecting to a standard edge connector (MXM3.0 socket)
  - variants available with QorIQ LS1023A, LS1043A, LS1046A, LS1048A
  - up to 8GB 64 Bit DDR4 ECC RAM at 2100 MT/s
  - up to 2GB SLC NAND Flash & up to 64MB QuadSPI Flash
  - parallel Ethernet interface: configurable as 2x RGMII max
  - IEEE Std. 1588 support
  - max. 8x SerDes lanes at 10 Gbps, configurable in different options:
  - max 3x PCIe 3.0 at 8Gbps (supporting x4 lane operation)
  - max 1x SATA 3.0 at 6Gbps
  - max 2x QSGMII at 5Gbps
  - max. 8x SGMII interface at 1Gbps
  - max. 2x SGMII interface at 2,5Gbps
  - max 2x XFI interface (10GbE)
  - 2x USB 3.0 Host /Client /OTG support
  - 1x SDHC
  - other interfaces: 2x I<sup>2</sup>C, 2x DUART, 1x SPI, 1x TDM, 1x JTAG
  - temperature sensor
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- All on board supply voltages are monitored by a separate  $\mu$ -controller. Control of on board voltages and the reset logic offer a wide spectrum of custom functionality, even low level safety functions.

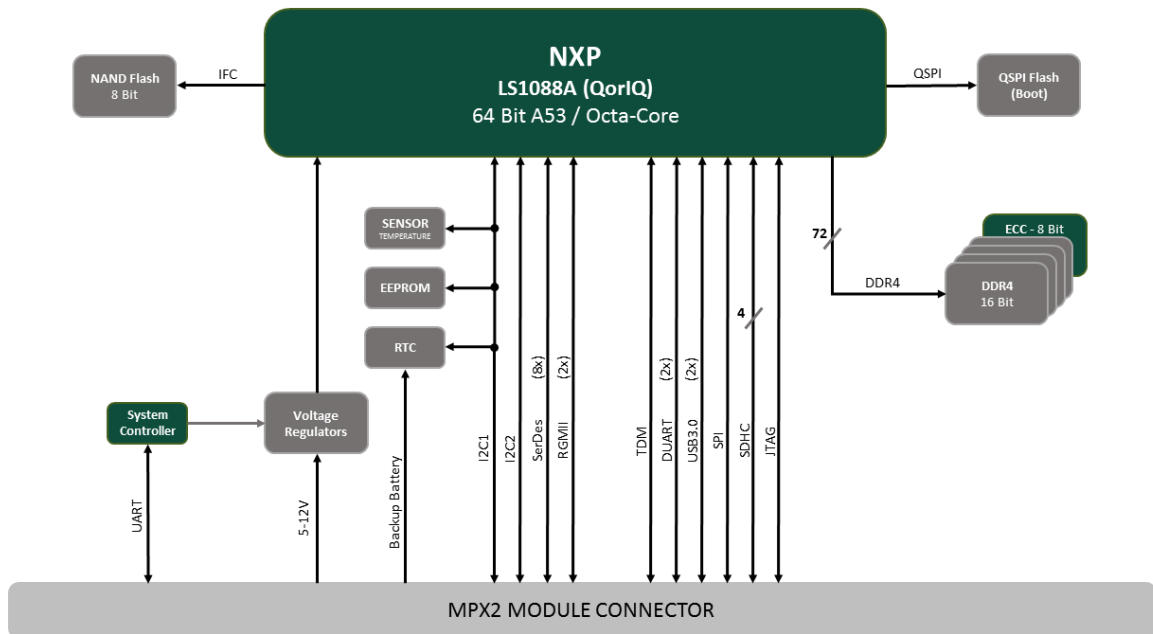


**Fig. 1 miriac® MPX-LS1088A SoM Layout**

#### Software Support

- Linux,
- Microware OS-9,
- others on request

Order Number	Description	Status
855603	<b>miriac®</b> MPX-LS1088A SoM, LS1088A@1.4GHz, 4GB 64 Bit DDR ECC RAM, up to 512MB Flash memory	Q2 2018
855606	<b>miriac®</b> MPX-LS1088A SoM, LS1088A@1.6GHz, Encryption, 4GB 64 Bit DDR ECC RAM, up to 512MB Flash memory	Q2 2018
855911	<b>miriac®</b> SBC-LS1088A Development Kit for MPX-LS1088A, incl. order# 855603 (1.4GHz, 4GB DDR4 (64Bit), ECC, 512 MB Flash), Carrier Board, Linux BSP, accessories	Q2 2018



**Fig. 2 miriac® MPX-LS1088A Block Diagram**

You are interested in more information? You are very welcome to contact us.

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