

miriac[®] MPX-LS1046A

based on NXP QorIQ LS1046A CPU

Product Description



miriac MPX-LS1046A System on Module

Feature Overview

- NXP QorIQ LS1046A CPU: 4 ARM[®] Cortex[®] A72 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, LS1048A, LS1088A
- 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 1x QSGMII at 5Gbps
- max. 5x SGMII interface at 1Gbps
- max. 2x SGMII interface at 2,5Gbps
- max 1x XFI interface (10GbE)
- 3x USB 3.0 Host /Client /OTG support
- 1x SDHC
- other interfaces: 2x I²C, 2x DUART, 1x SPI, 1x JTAG
- temperature sensor

- All on board supply voltages are monitored by a separate μ -controller. Control of on board voltages and the reset logic offer a wide spectrum of custom functionality, even low level safety functions.

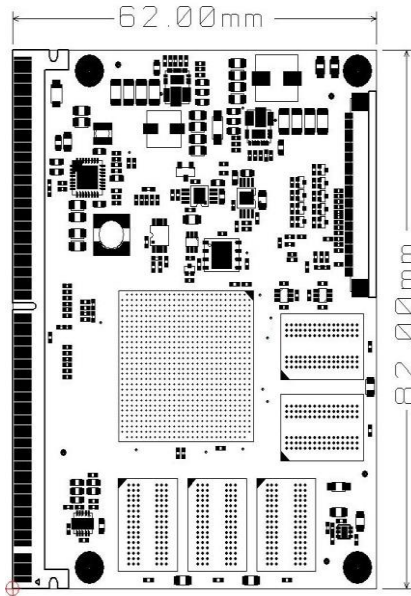


Fig. 1 miriac MPX-LS1046A SoM Layout

Software Support

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

Order Number	Description	Status
855604	miriac ® MPX-LS1046A SoM, LS1046A@1.2GHz, up to 2GB 64 Bit DDR ECC RAM, up to 512MB Flash memory	available
855607	miriac ® MPX-LS1046A SoM, LS1046A@1.6GHz, up to 4GB 64 Bit DDR ECC RAM, up to 512MB Flash memory	available
855913	miriac ® SBC-LS1046A Development Kit for MPX-LS1046A, incl. order# 855604, Carrier, Linux BSP, accessories	BoO

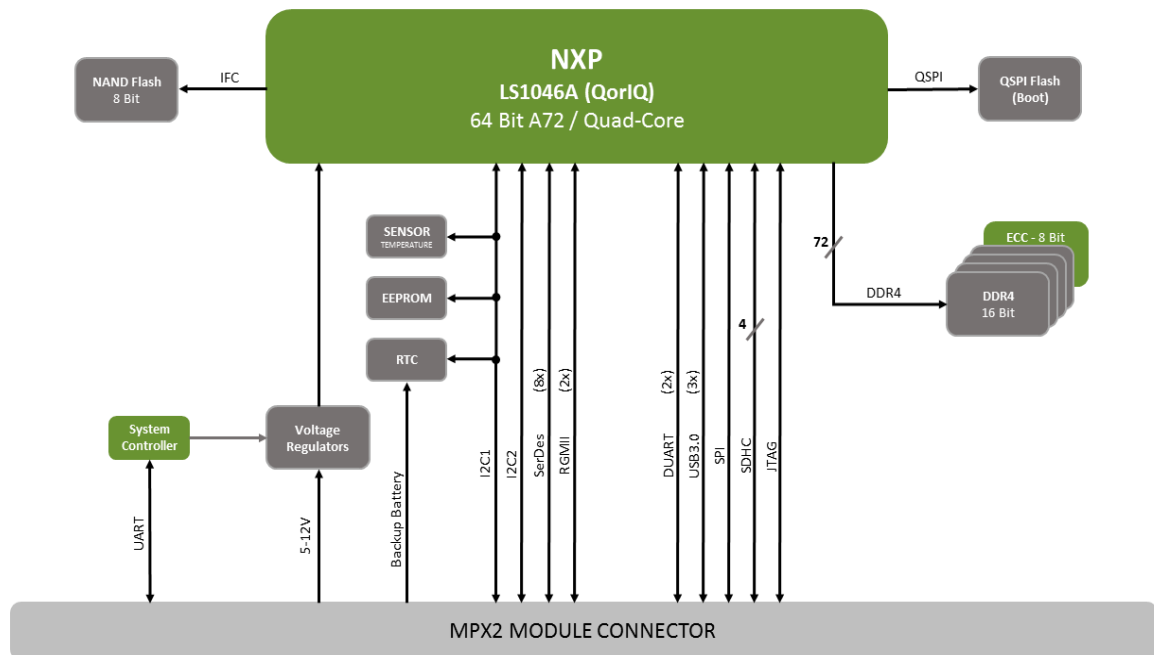


Fig. 2 miriac MPX-LS1046A Block Diagram

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

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