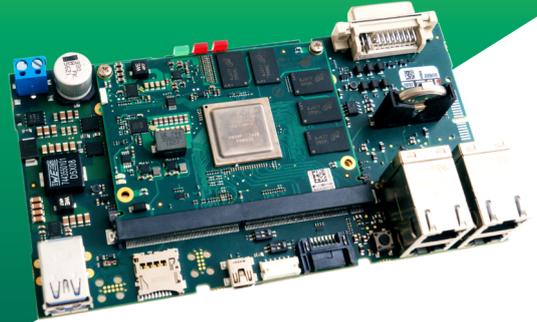


miriac® SBC-LS1046A

Single Board Computer based on NXP® QorIQ® LS1046A CPU

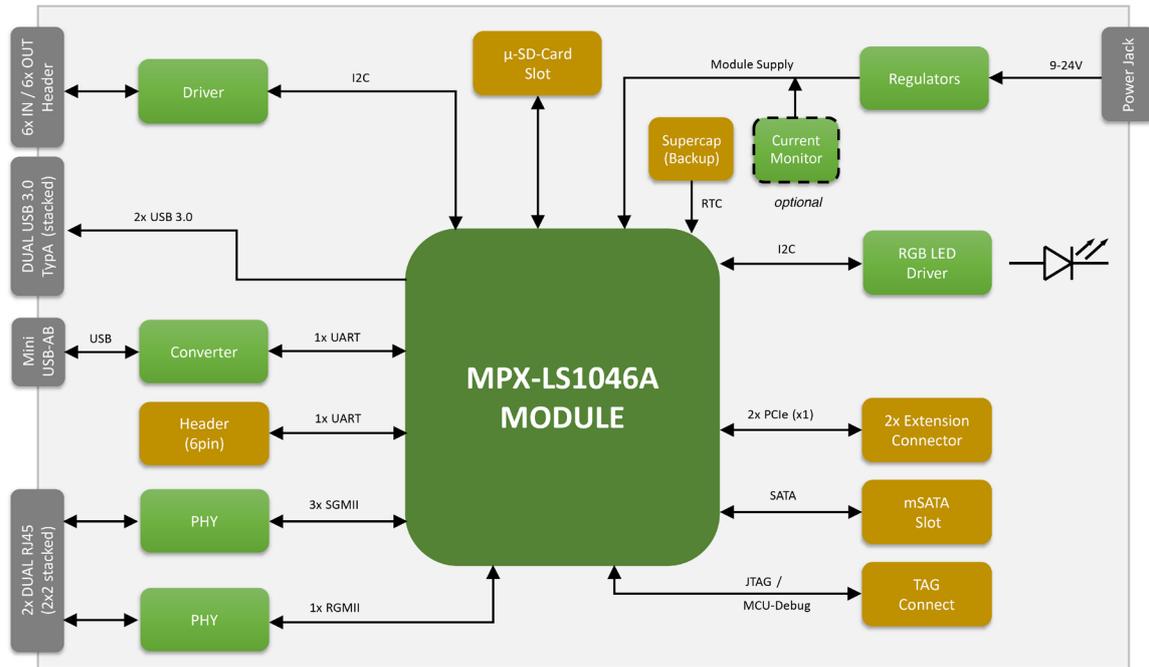
- Up to 8 GB 64-bit soldered DDR4 ECC RAM at 2100 MTp/s
- Hybrid 32-bit mode to support legacy software
- Temperature sensor
- All on board supply voltages are monitored by a separate μ -controller



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The miriac SBC-LS1046A Single Board Computer is a NXP® QorIQ® LS1046A quad core Arm® Cortex®-A72 based complete system solution by MicroSys. NXP's LS1046A and LS1026A (two cores) 64-bit high performance CPUs offer integrated packet processing acceleration and high speed peripherals for up to 10 GbE (4x 1GbE on this SBC), PCIe Gen3, SATA 3.0 and USB 3.0 for a wide range of Industry 4.0 applications.





SBGL.S1046A: Version 2.0:02017-09-29

Features

CPU

Architecture	Arm® Cortex®-A72
Processor	NXP® QorIQ® LS1046A CPU: 4 Arm® Cortex®-A72 64-bit cores at up to 1.6 GHz core frequency
DRAM	Up to 8 GB 64-bit DDR4 ECC RAM at 2100 MT/s

Memory

Flash	Up to 2 GB SLC NAND Flash & up to 64 MB QuadSPI Flash
Flash Card	Yes
Boot Flash	QSPI, SD/MMC, NAND Flash

Ethernet

1GbE	4x
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High Speed IO

USB 3.0	2x
miniUSB	1x debug
PCIe	1x PCIe via extension connector, optional: 1x PCIe via edge card connector
SATA	1x

IO

UART 1x TTL

GPIOs 6x in / 6 out

JTAG Debug Interface Yes

miniPCle 1x

mSATA 1x

Operating Condition

Power Supply Voltage Single 9-24 V DC input supply voltage range

RTC Yes

RTC-Buffer CR2032 battery

Temperature 0 °C to 70 °C

Mechanical

Dimensions 86 mm x 157 mm

Software / Additional

Software Support

- Linux
- VxWorks (on request)
- Others (on request)

Additional

- Compatible variants available with QorIQ® LS1023A, LS1043A, LS1048A, LS1088A
- Temperature sensor
- 4x RGB LED
- Dev Kit for immediate start up, e.g. power supply, cables (optional)

Our standard product versions offer what we consider to be the optimum configuration in terms of performance, price, usage and TDP. The product features lists specify the maximum range of functions per interface. However, not all interfaces or functions are always available in parallel. Flexible SERDES multiplexing is one of the reasons for this. In addition, we provide multiple memory expansion options and are also happy to accommodate specific customer wishes. So do not hesitate to contact us directly to discuss your desired configuration.

Order Info

Name	Code	Description	Status
miriac® SBC-LS1046A	855917	4 Arm Cortex® A72, 1.6 GHz, 4 GB DDR4 w ECC, 16 MB NOR Flash, 512 MB NAND Flash, -40 °C to 85 °C, w/o SEC	active
Development Kit basic for miriac® MPX-LS1046A	8559	<ul style="list-style-type: none">• miriac® MPX-LS1046A• CRX05• incl.BSP and accessories	active
Development Kit pro for miriac® MPX-LS1046A	8564	<ul style="list-style-type: none">• miriac® MPX-LS1046A• CRX06-TSN• incl.BSP and accessories	active

Take a look at related products



miriac® MPX-LS1046A



miriac® SBC-LS1046A-TSN



CRX06-TSN