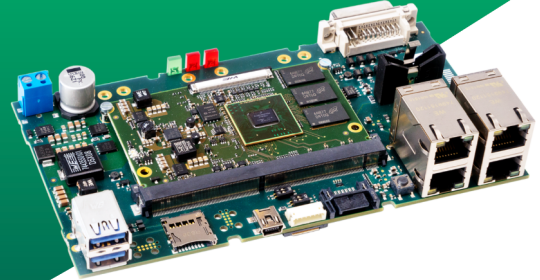


## miriac® SBC-LS1043A

Single Board Computer based on NXP® QorIQ® LS1043A

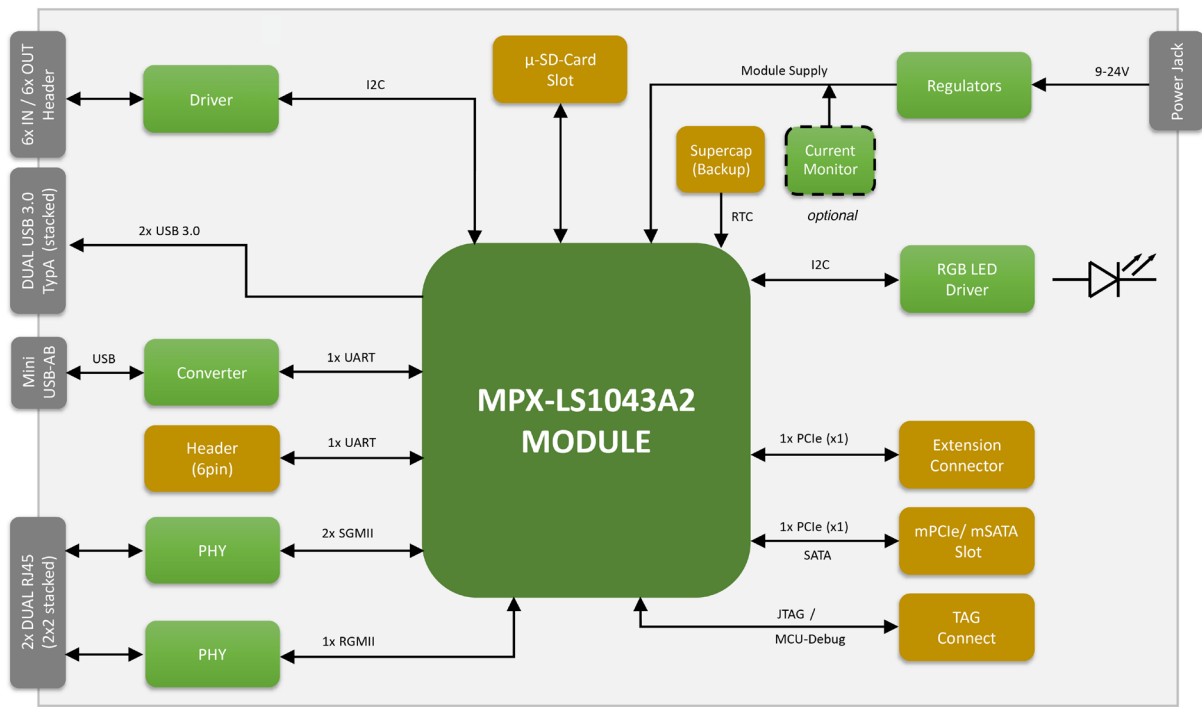
- Up to 4 GB 32-bit DDR4 ECC RAM at 1600 MTps
- Hybrid 32-bit mode to support legacy software
- Temperature sensor
- All on board supply voltages are monitored by a separate  $\mu$ -controller



[Home](#) / [Products](#) / [SBC](#) / [Arm® Architecture](#) / **miriac® SBC-LS1043A**

The miriac® SBC-LS1043A Single Board Computer is a NXP® QorIQ® LS1043A quad core Arm® Cortex®-A53 based complete system solution by MicroSys. NXP's LS1043A and LS1023A (two cores) CPUs deliver greater than 10 Gbps of performance in a flexible I/O package supporting fanless designs. This SoCs are purpose-built solutions for small-form-factor networking and industrial applications with BOM optimizations for economic low layer PCB, lower cost power supply and single clock design.





SBGLS1043A2: Version 2.0-02017-09-29

Features

**CPU**

Architecture	Arm® Cortex®-A53
Processor	NXP® QorIQ® LS1043A CPU: 4 Arm® Cortex®-A53 64-bit cores at up to 1.6 GHz core frequency
DRAM	Up to 4 GB 32-bit DDR4 ECC RAM

**Memory**

Flash	Up to 2 GB SLC NAND Flash & up to 16 MB SPI Flash
Flash Card	Yes
Boot Flash	QSPI, SD/MMC, NAND Flash

**Ethernet**

1GbE	3x
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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

miniPCIe 1x

mSATA 1x

## Operating Condition

Power Supply Voltage Single 9 to 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, LS1046A, 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.

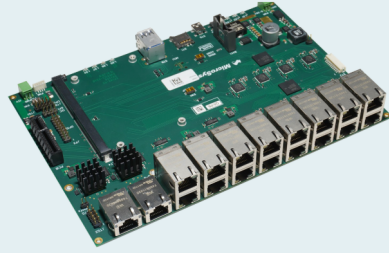
## Order Info

Name	Code	Description	Status
miriac® SBC-LS1043A Single Board Computer	854201	LS1043A@1.4 GHz, 1 GB DDR4 RAM, 512 MB Flash memory	active
miriac® SBC-LS1043A Starter Kit	855914	for MPX-LS1043A, incl. order# 855605 (1 GHz, 2 GB DDR4 (32-bit), 512 MB Flash), Carrier Board, Linux BSP, accessories	active
Development Kit pro for miriac® MPX-LS1043A2	8564	<ul style="list-style-type: none"><li>• miriac® MPX-LS1043A2</li><li>• CRX06-TSN</li><li>• incl.BSP and accessories</li></ul>	active

## Take a look at related products



miriac® MPX-LS1043A



CRX06-TSN