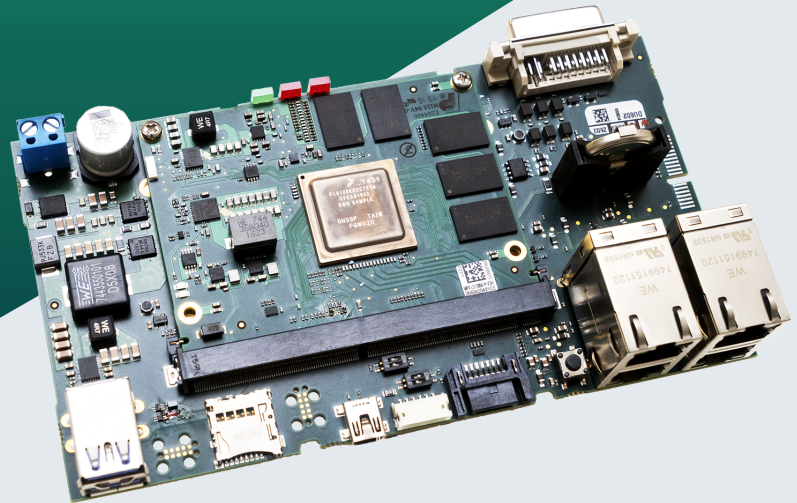


SBC Arm® Architecture

miriac® SBC-LS1088A

Single Board Computer based on NXP® QorIQ® LS1088A CPU



Highlights

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





Product Description

The miriac® SBC-LS1088A Single Board Computer is a NXP® QorIQ® LS1088A eight core Arm® Cortex®-A53 based complete system solution by MicroSys. NXP's LS1088A and LS1048A (four cores) 64-bit high performance CPUs offer integrated packet processing acceleration and high speed peripherals including 10 Gb Ethernet, PCIe Gen3, SATA 3.0 and USB 3.0 for a wide range of Industry 4.0 applications.



Features

CPU	
Architecture:	Arm® Cortex®-A53
Processor:	NXP® QorIQ® LS1088A CPU: 8 Arm® Cortex®-A53 64-bit cores at up to 1.6 GHz core frequency
DRAM:	Up to 8 GB 32-bit DDR4 ECC RAM at 2100 MT/s
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:	4x
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
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, LS1043A, LS1046A, LS1048A - Temperature sensor

- 4x RGB LED

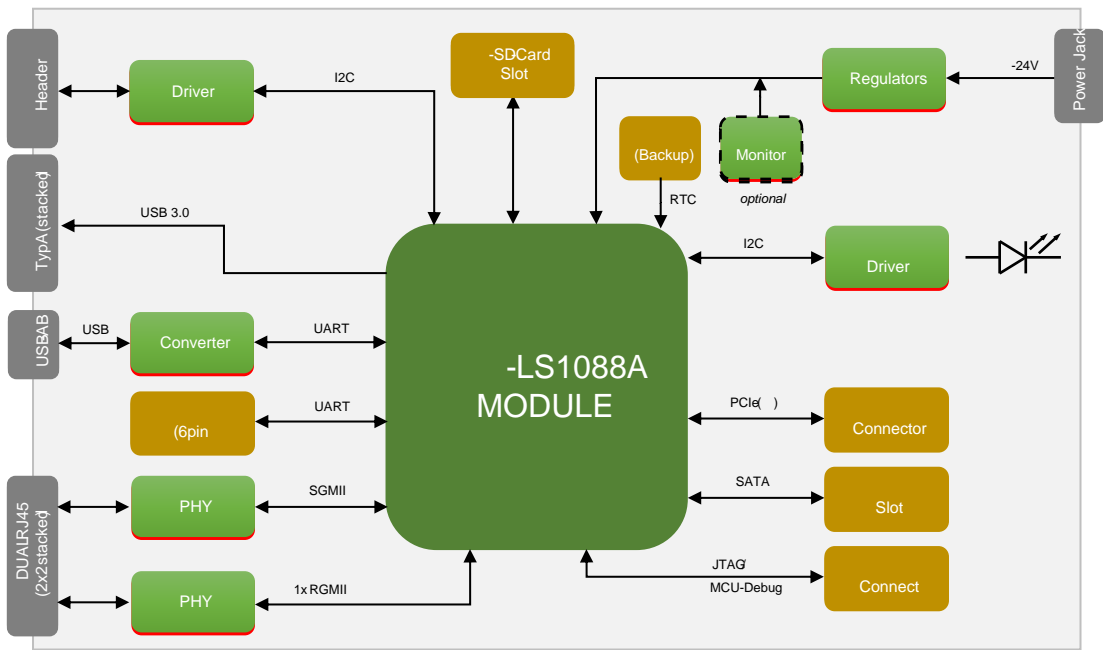
- Dev Kit for immediate start up, e.g. power supply, cables (optional)

General Note:

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.



Block Diagrams



SBQLS1088A: Version 2.0-020170929

miriac® SBC-LS1088A






Order Info

Name	Code	Description	Status
miriac® SBC-LS1088A SBC	855902	LS1088A@up to 1.4 GHz, 4 GB DDR4 RAM, 512 MB Flash memory	active
miriac® SBC-LS1088A Starter Kit	855911	for MPX-LS1088A SoM, includes order# 855902, Linux BSP, accessories	active



Related Products

Name	Description	Image
miriac® MPX-LS1088A	Multicore networking processor for high-performance communication	
CRX05		
CRX06-TSN	Carrier Boards	

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