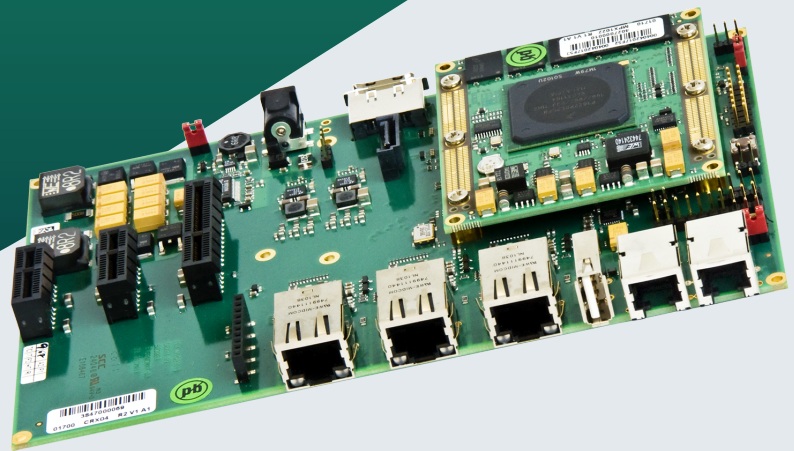**MicroSys**
Creating Embedded Systems

SBC Power Architecture

miriac® SBC1022

Single Board Computer based on NXP® QorIQ®
P1022

Highlights

- Up to 2 GB soldered DDR2 memory

- Two 208 Pin Zero Force Connectors, that make all I/O and bus signals available to the carrier board.

- LCD interface supporting a display of 1280 x 1024 P @ 60 MHz, 24 bits per pixel

NXP Gold Partner

Product Description

The miriac® SBC1022 Single Board Computer is a member of a family of Freescale QorIQ® P2/P1 series based complete system solutions by MicroSys. The single board computer is a fast means to implement rugged designs with the aim to withstand extreme and harsh environments. In addition the SBC1022 offers a LVDS interface for embedded graphics applications on a low power consumption envelope.
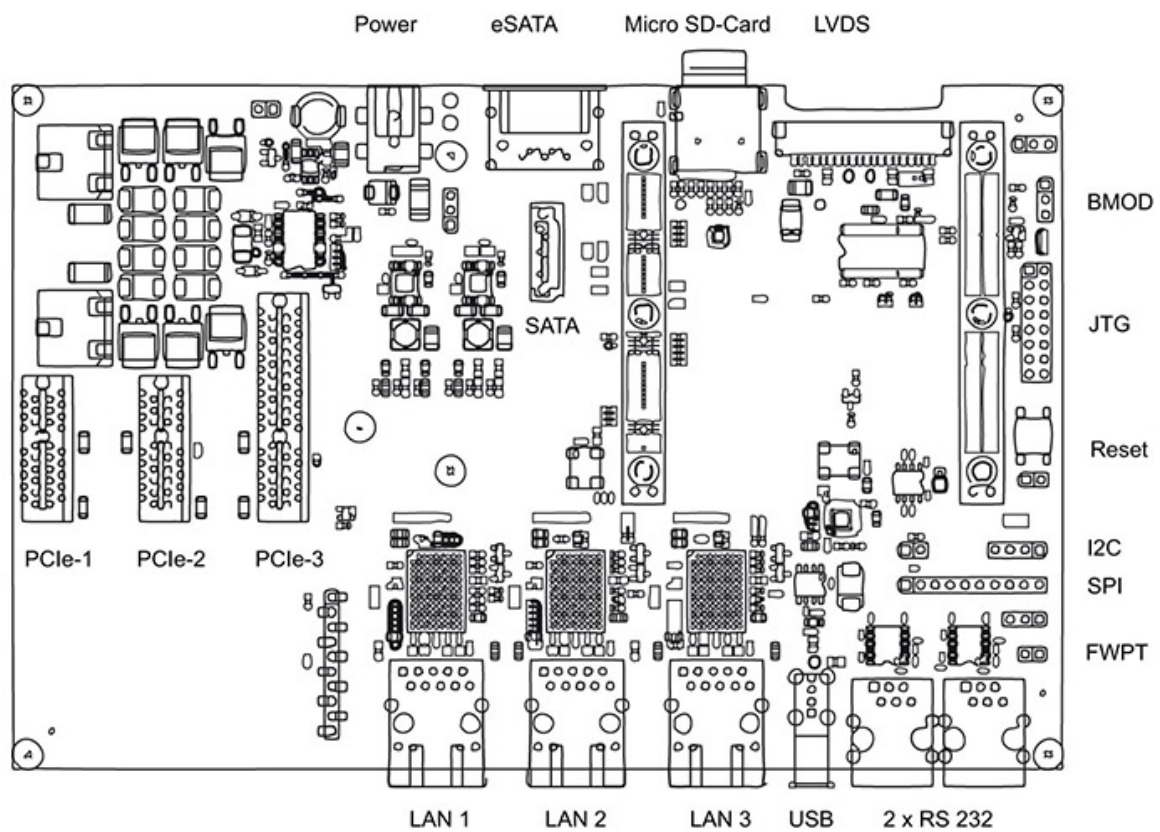
Features

CPU	
Architecture:	PowerPC
Processor:	NXP® QorIQ® P1022 CPU, dual 500v2 core @600 - 1055MHz, 256kB L2 Cache with ECC, also configurable as SRAM and stashing memory
Memory	
Flash:	up to 512MByte NAND Flash
Flash Card:	1x SD Card Slot
Graphic	
Graphics Controller:	LCD interface supporting a display of 1280 x 1024P @ 60MHz, 24 bits per pixel
High Speed IO	
USB 2.0:	1x USB 2.0
SATA:	2x SATA
Operating Condition	
Power Supply Voltage:	Single +12 V power input
Software / Additional	
Software Support:	Linux
	Microware OS-9
	VxWorks
	QNX
	others are avialable on request

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

Power   eSATA   Micro SD-Card   LVDS

BMOD

JTG

SATA

Reset

I2C

SPI

FWPT

PCIe-1   PCIe-2   PCIe-3

LAN 1   LAN 2   LAN 3   USB   2 x RS 232

miriac® SBC1022

Order Info

Name	Code	Description	Status
miriac® SBC1022	839606	2 QorIQ® e500v2, 1.0 GHz, 2 GB DDR2 w ECC, 4 MB NOR Flash, 256 MB NAND Flash, 0 °C to 70 °C, w/o SEC	EOL
	839613	miriac® SBC1022 development kit, incl. order #839606, Linux BSP, accessories	EOL