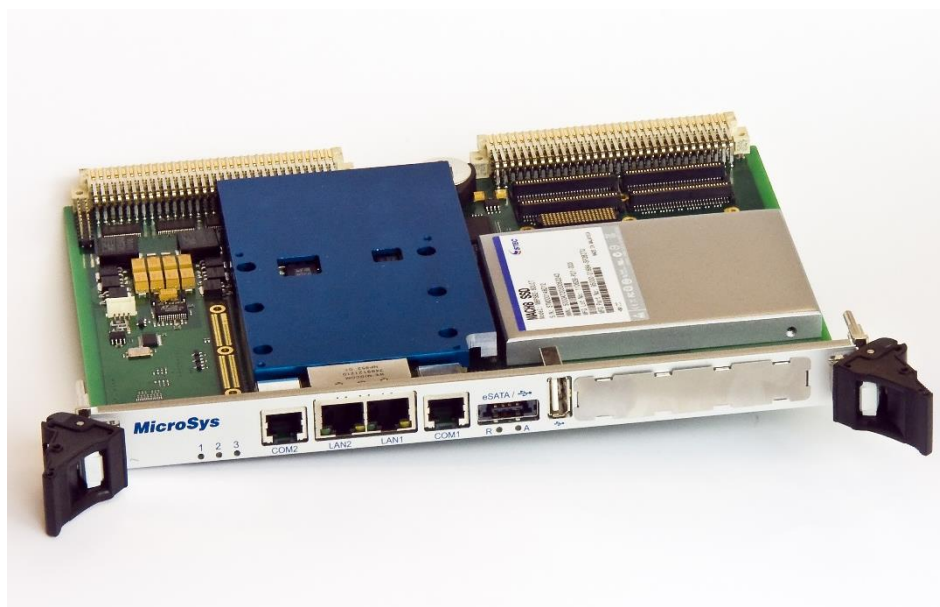# miriac^{TM} VME1013/1022
VMEbus CPU boards
Product Overview

Introduction

The **miriac^{TM}** VME1013/1022 boards are members of the MicroSys 6U VMEbus board solutions, based on the Freescale QorIQ Power Architecture. They address applications from low performance and power requirements up to high performance multi core usage profiles, requiring additionally display and/or audio interfaces.

The VME1013/1022 boards are operated by a QorIQ P1013 single or P1022 dual core processor.

They enhance a P1013/1022 solution by a LCD (display interface unit), audio (I^2S) and VoIP (TDM) interface. The boards are specified for rugged and harsh environmental conditions and versions for the extended temperature range of -40°C to +85°C are available on request.

Mass storage options like an on board SATA-connector for SATA compatible 2,5"devices and a microSD-card interface are available. Via the front panel eSATA and other I/O-functions, like 2 x USB and two GB Ethernet connectors with 1588 time stamping are easily accessible.

Additional I/O functions are provided by a PMC/XMC slot and by a local bus extension, to add custom I/O like CAN, ARINC, display, audio, etc…Furthermore, a temperature compensated system clock is integrated, providing a highly accurate and reliable time base.
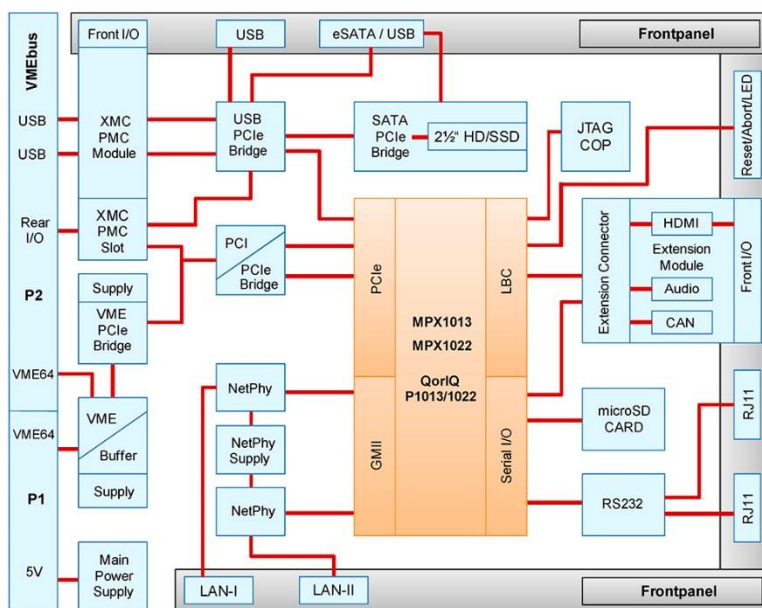
Fig. 1   Block diagram

Fig. 2: Optional configurations
(with or without mountable drive)

Technical Data

General

- 6U VMEbus CPU Board, 2eSST VME-Bus interface
- conforms to VMEbus specification ANSI/IEEE STD1014-1987- and ANSI/VITA 1-1994
- QorIQ P1013 or P1022 CPU, up to 1.0 GHz core speed
- up to 2 GB DDR2-soldered ECC RAM and up to 512 MB NAND Flash memory

Front Panel I/O

- 2x 10/100/1000 Mbit Ethernet
- eSATA
- 2 x USB
- 2 x RS232 RJ11
- HDMI

On Board I/O

- PMC/XMC 64bit connector
- interface for memory mapped I/O modules, e.g. ARINC, display, audio, other, via front panel
- microSD card connector
- SATA interface for standard 2,5" on board mountable mass storage devices
- 16 pin JTAG/COP interface
- CAN interface

Other

- various boot options
- CPU temperature monitoring
- single 5 V operation

Operating Temperature

- 0°C to +70°C
- optional -40°C to +85°C

Software Support   Linux, Microware® OS-9, VxWorks, others on request

Order #	Description	Status
839203	miriac VME1013 single board computer with MPXP1013 SoM@1.2GHz, **1 GB** ECC RAM (DDR2), 256MB NAND Flash memory	StI
839204	miriac VME1022 single board computer with MPXP1022 SoM@1.2GHz, **2 GB** ECC RAM (DDR2), 256MB NAND Flash memory	StI

StI: 'Stock Item' – normally available ex stock

BoO: Build on Order – will be built after order received

You are interested in a different variant?

You are very welcome to contact us!

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