# miriac<sup>™</sup> VME2020 VMEbus CPU board

**Product Overview** 



# Introduction

The miriac<sup>TM</sup> VME2020 board is a member of the MicroSys 6U VMEbus board solutions, based on the Freescale QorlQ Power Architecture. The product family addresses applications from low performance and power requirements up to high performance multi core usage profiles.

The VME2020 board is operated by a QorlQ P2020 dual core processor. 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 SATAconnector 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, graphics, etc...Furthermore, a temperature compensated system clock is integrated, providing a highly accurate and reliable time base.

Variants with the P1013/1022 CPUs are available to enable additional functions, like graphics or audio for a single or dual core performance envelope.

Fig. 1 Block diagram

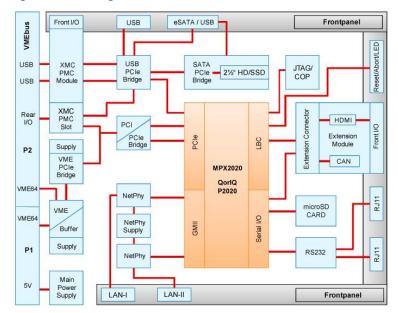


Fig. 2 Optional configurations (with or without mountable drive)



### **Technical Data**

### General

- 6U VMEbus CPU Board, 2eSST VME-Bus interface
- conforms to VMEbus specification ANSI/IEEE STD1014-1987and ANSI/VITA 1-1994
- QorlQ P2020 CPU, up to 1.33 GHz core speed
- up to 2 GB DDR2-soldered ECC RAM and up to 512 MB NAND Flash memory

# On Board I/O

- PMC/XMC 64bit connector
- interface for memory mapped I/O modules, e.g. ARINC, graphics, 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

## Software Support

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

# Front Panel I/O

- 2x 10/100/1000 Mbit Ethernet
- eSATA
- 2 x USB
- 2 x RS232 RJ11
- HDMI (processor option)

## Other

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

# **Operating Temperature**

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

	Order#	Description	Status
	839201	miriac VME2020 Single Board Computer with MPX2020 SoM@1.2 GHz,	StI
		1 GB ECC RAM (DDR2), 256MB NAND Flash memory	
	839202	miriac VME2020 Single Board Computer with MPXP2020 SoM@1.2GHz,	StI
		2 GB ECC RAM (DDR2), 256MB NAND Flash memory	

Stl: 'Stock Item' – normally available ex stock
BoO: Build on Order – will be built after order received

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You are interested in a different variant?
You are very welcome to contact us!

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December 2019