

Features

- PowerQUICC II[®] MPC8270
- VMEbus interface 32bits
- 128 MByte SDRAM
- 16 MByte FLASH
- 1 MByte SRAM
- 3 x Fast Ethernet ports
- 4 x multi-protocol serial ports
- One 32-bit PMC slot
- RTC & 32 kByte SRAM battery backed up
- CompactFlash
- 2 x S-ATA hard disk drive



VSBC-6872 VME PowerQUICC II Single Board Computer is based on the MPC8270 processor. This processor is rated at 855 DMIPS @ 450 MHz and includes a very efficient SDRAM controller.

One of the key features of this device is the availability of a Quad Integrated Communications Controller (QUICC). It provides a dedicated module containing a RISC CPU and DMA channels for efficiently handling a wide range of standard or proprietary communications protocols.

VME interface

The VSBC-6872 board includes a 32-bit VME interface (rev C) :

- Master : A32/A24/A16/D32/D16/D8, RMW
- Requester : RWD, ROR, FAIR, programmable request level
- Slave : A24/A16/D32/D16/D8, RMW
- Arbiter : SGL, PRI, RRS,prog. timeout
- Handler : D8(O), IH(1-7)
- Interrupter : D8(O), ROAK, I(1-7)
- Bus Timer : BTO(16 to 112)
- Mailbox functionality
- 1 MByte - SRAM shared
- DMA channel¹

Storage features

The VSBC-6872 board provides two media storage possibilities :

- A dual S-ATA hard disk drive. ²
- A CompactFlash extension.

Network and serial communication links

The VSBC-6872 offers a variety of on-board I/O:

- Three integrated Fast Ethernet ports (10BASE-T / 100BASE-TX).
- One RS-232 console is available for user general purpose operations.
- One RS-232, one SPI bus, and one I²C serial links are available on an internal connector.
- Four RS-232 or RS422/485/V.35 serial ports available on the front panel.

Flexible I/O

The board also contains one 32-bit, 33/66MHz PMC³ (PCI Mezzanine Card) site. This site can be used for system I/O, supporting industry-standard PMC cards as interfaces to a wide variety of devices

Software

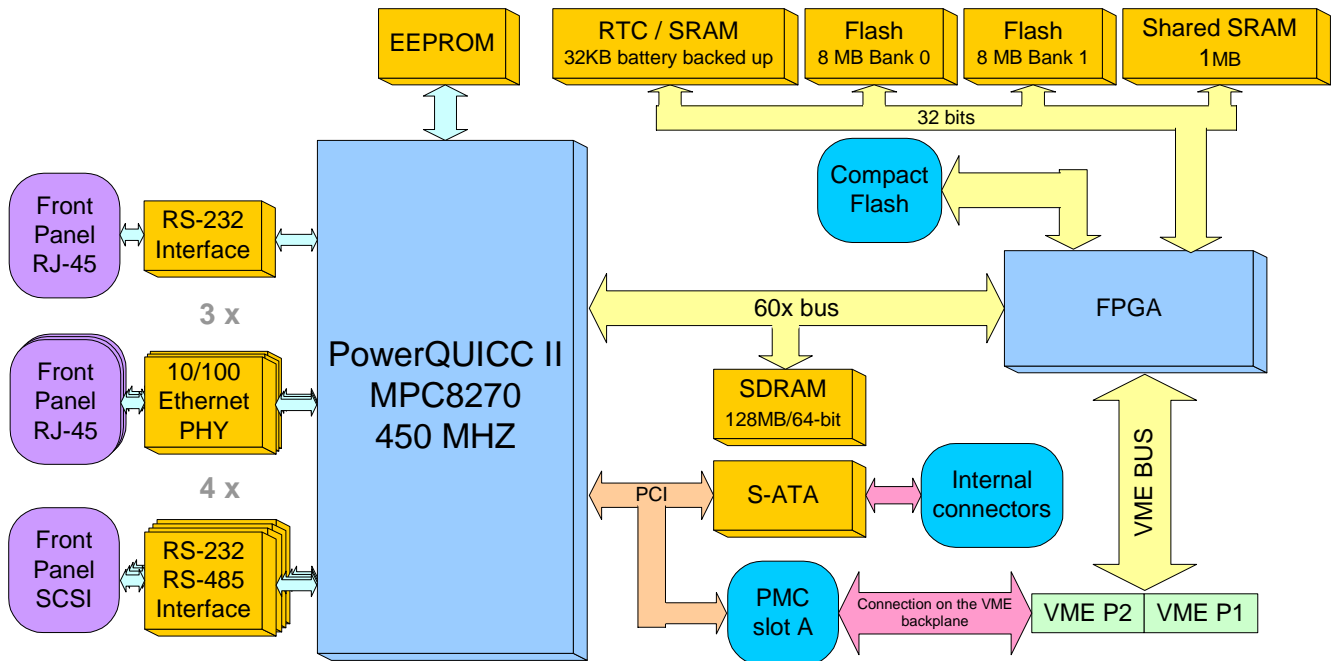
Developers can take advantage of the VSBC-6872's power and performance when running major real-time operating systems (RTOS) or when deploying applications based on the low-cost, open-source Linux[™] operating system. RTOS supported by the VSBC-6872 include VxWorks[®] and others on request.

Note 1 : The VME DMA channel is a functionality developed by Actis Computer. It allows data transfer between the shared SRAM and an address on the VME bus.

Note 2 : Not available in industrial temperature.

Note 3 : Dependant on the MPC8270 settings





Features

- Motorola PowerQUICC II[®] MPC8270
- 855 DMIPS @ 450 MHz
- Up to 256 MByte SDRAM
- Up to 32 MByte FLASH
- Up to 2MByte shared SRAM

Communication

- Three Fast Ethernet ports on the front panel
- One RS-232 console port on the front panel
- One RS-232 auxiliary serial port on an internal connector.
- Four high-speed serial port supporting RS-232/422/485 mode on the front panel.

Storage

- CompactFlash
- Dual S-ATA hard disk interface (S-ATA 1.0)

Peripherals

- Real-time clock & 32 kByte SRAM battery backed up
- I2C memory

JTAG port

One internal connector for direct access to the processor with third party tool.

VME interface

- Master : A32/A24/A16/D32/D16/D8
- Requester : RWD, ROR, FAIR, programmable request level
- Slave : A24/A16/D32/D16/D8
- Arbiter : SGL, PRI, RRS
- Handler : IH(1-7)
- Interrupter: I(1-7)
- Bus Timer : BTO()
- Mailbox functionality
- One DMA channel¹

IEEE1386.1 slot

- One 32-bit PMC slot
- Up to 66 MHz compatible³

Environmental

Operating

- Commercial : 0 to +70 °C
- Industrial : -25°C to +85°C

Non-operating : -40°C to 85 °C

Airflow requirement	10 CFM
Relative Humidity	0 to 90 % (non-cond.)
Altitude	0 to 10'000 ft

Environmental

Dimensions	6.3 in x 9.2 in
Power	TBD
Vibration	0.5G RMS 20-2000 Hz random
Shock	20 G, 11 ms, ½ sine

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