

MEN Micro, Inc.

PO Box 4160 • Lago Vista, TX 78645-4160

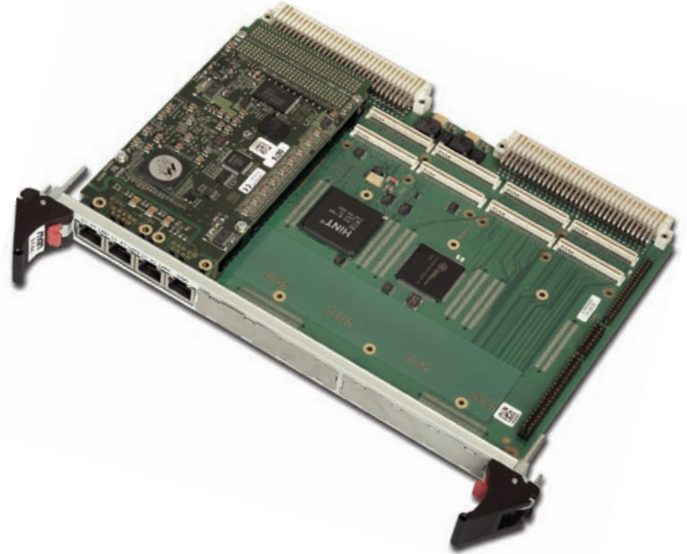
Tel: 512-267-8883 • Fax: 512-267-8803

www.menmicro.com**VME64 PowerPC SBC**

The A14 is an advanced, PowerPC-based, VMEbus SBC for embedded applications. With full VME64 support it can be used as a master or as a slave. The A14 has a proprietary high-speed VMEbus interface with 1 MB SRAM for VMEbus slave access and communication between the onboard processor and another VMEbus master. The A14 features a 1 GHz MPC8540 PowerPC processor, which is available for the industrial temperature range (-40 °C to +85 °C). The A14 is equipped with socketed, fast DDRAM with ECC for data storage, NAND Flash for program storage, and non-volatile FRAM. The A14 has two Gigabit Ethernet ports, one fast Ethernet and one COM interface, all with front panel access via four RJ-45 connectors. Additional interfaces available on the MPC8540 are routed to the rear I/O connector. And, as an option, four UARTs are accessible via MEN's SA-Adapters for front or rear connection.

Additional functionality, including graphics, touch screen, CAN, binary I/O, and others, can be configured in the A14's FPGA. Physical interfaces for the FPGA are available via SA-Adapters on the front panel or on a transition module in the rear. The FPGA behaves like a standard PCI component. VHDL functional code for the FPGA is available from MEN. Internally, the FPGA is connected via the standard Wishbone bus. The FPGA functions are loaded in less than 200 ms when the system is powered up and FPGA functionality can be updated dynamically during operation.

In addition, the A14 can support two 64-bit/66 MHz PMC mezzanine cards with front and/or rear I/O (PIM). The A14 is supplied with MEN Monitor (MENMON), a type of BIOS from MEN for bootstrapping operating systems (from disk, Flash, or a network), for hardware testing, and for debugging applications when not running a full operating system.

**FEATURES:**

- Single board computer with 800 MHz to 1 GHz MPC8540 PowerPC
- e500 PowerPC core with integrated Floating Point Unit (FPU) and Memory Management Unit (MMU)
- Single slot 64-bit VMEbus master or slave
- Up to 2 GB of DDRAM with ECC
- NAND Flash and FRAM
- Graphics supported via an onboard FPGA or PMC card
- Two GB Ethernet ports and one Fast Ethernet port
- As many as six serial communications lines
- Parallel ATA for onboard hard disk
- Configurable FPGA for additional application-specific I/O
- Two PMC slots onboard
- MEN Micro's MENMON BIOS for PowerPC SBCs