SBS Technologies, Inc.

Power•4e
VMEbus with Front Panel I/O
Single Board Computer

Features:

- **PowerPC 604R @ 300MHz**

- **64-256MB EDO DRAM**

- **512KB L2 CACHE**

- **8.5MB FLASH**

- **8K RTC/NVRAM**

- **10BaseT/100BaseTX ETHERNET**

- **SCSI-20 Fast**

- **Two RS-232C Serial Ports**

- **PMC Slot**

- **Single VMEbus Slot Width**
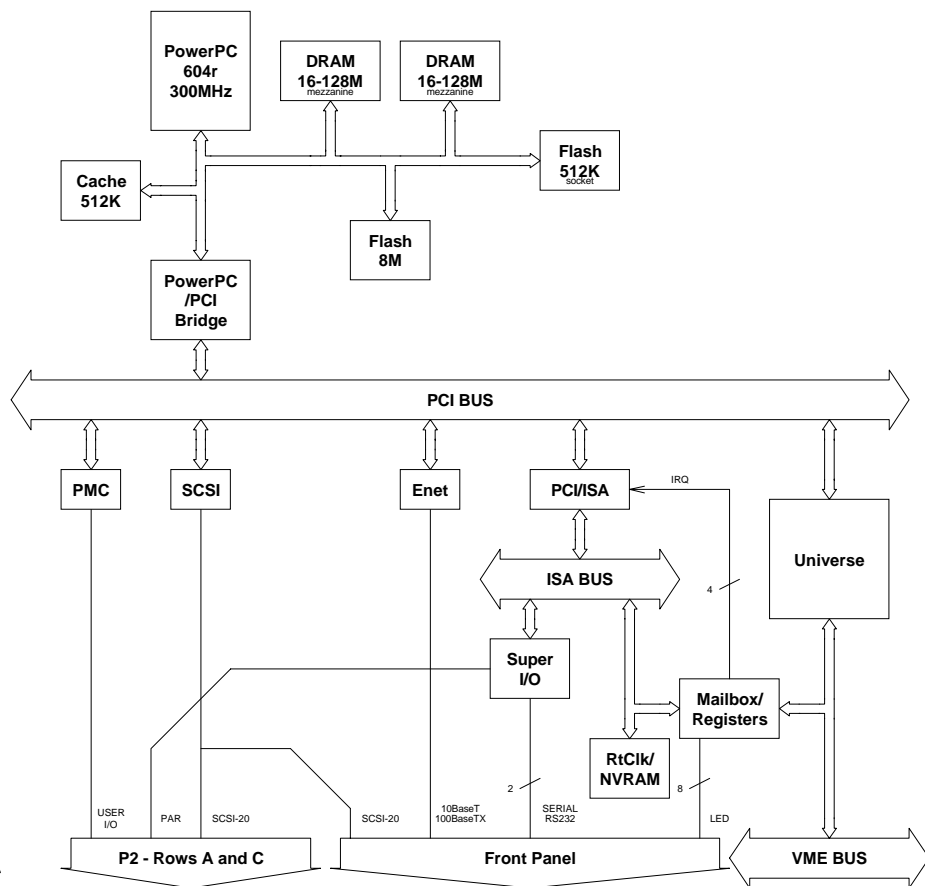
- **Built-In Test (BITe)**

- **VME64 Compliant**
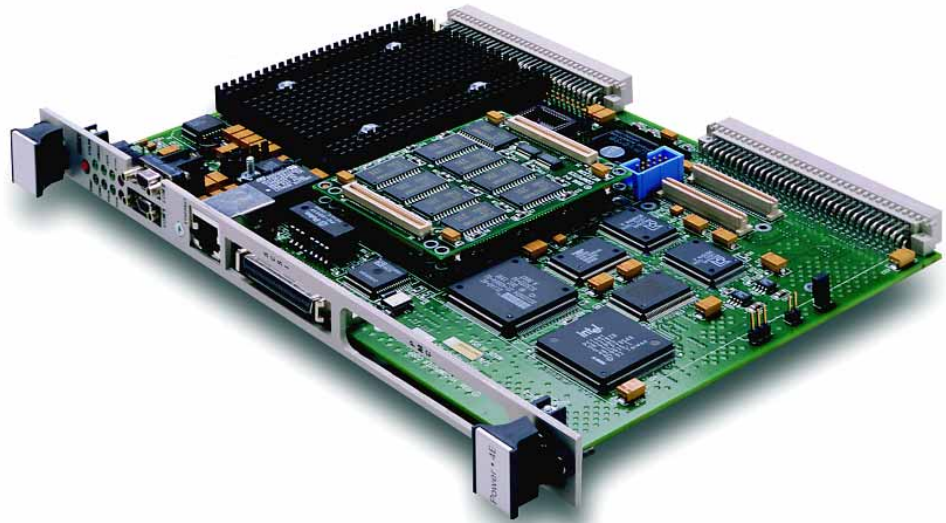
Power•4e ™ is a high performance VMEbus single board computer with front panel I/O. The Power•4e couples a 300MHz processor with a 512KB L2 cache and EDO DRAM to provide cost-effective performance in a single board computer.

A full complement of I/O capability makes the Power•4e the ideal solution for the systems integrator that needs high performance and a flexible I/O structure. The Power•4e provides front panel access to 10BaseT/100BaseTX ETHERNET, Fast SCSI-20, two RS-232C Serial Ports, and a PMC Expansion Slot. SCSI-20 and Parallel Port I/O are also routed to the P2 rear panel connector. The performance and I/O capability can meet the most demanding system requirements.

The Power•4e has a high performance VME64 Master/Slave compliant interface. The PMC expansion slot allows for I/O to the front panel or to the P2 connector.

The Power•4e is supported with a full range of real time operating systems and kernels, including: VxWorks, LynxOS, pSOS+ and OpenBSD/RT. An optional full Power On/Built In Test (BITe) is available.

Power•4e Block Diagram

Power•4e Specifications

General	Model	Power•4e
	Form Factor	6U VMEbus Single Board Computer
Processor	Clock Rate	300MHz PowerPC 604R
	L1 Cache	32KB Data/ 32KB Instruction
VMEbus	Controller	Tundra Universe II
	Configuration	Master/Slave A32/A24/A16,D32/D16/D*(EO),RMW
	Block Mode	Master/Slave BLT and MBLT D64/D32/D16 Transfers
PCIbus	Controller	MPC106
Memory	DRAM	64MB EDO DRAM, 256MB Maximum with Mezzanine
	L2 Cache	512KB Pipelined Burst SRAM - Write Through and Copy Back Modes
		64Kx72 9ns achieves 2-1-1-1 access times
	FLASH	512KB Boot Prom - 32 pin PLCC, socketed device
		8MB soldered on FLASH, 1M x 64 with 256KB sectors
	NVRAM/RTC	8K NVRAM and Real Time Clock with Battery Back Up (removable)
ETHERNET	Controller	DEC 21140 10BaseT/100BaseTx to RJ-45 on Front Panel
SCSI	Controller	Symbios 53C860 Fast-20 SCSI on Front Panel and P2
PCI/ISA	Bridge	Intel 82378ZB
Serial Ports	Controller	National PC87332, Dual Serial to Front Panel
	Type	RS-232 via Dual Micro-D, DB-9 Style Connectors
Parallel Port	Controller	National PC87332, Enhanced Parallel to P2
PMC Expansion		PMC connection allows IEEE 1386 compatible, single size PMC Modules
		I/O is routed via 3rd connector to P2
		Supported PMC's include: FDDI, 1553, SCSI, PCMCIA , Graphics and more
JTAG		JTAG Emulator / Debug port on board
Software	BITe	Built In Test (optional) is available
	O/S Support	VxWorks, LynxOS, pSOS+, OS-9 and OpenBSD/RT
Electrical	Power	+5VDC @ 25 Watts, +12VDC @ 0.1 Watts, -12VDC @ 0.1 Watts
Environmental	Temperature	0 to +55 Inlet Air Operating, -40 to +85C Non-Operating
	Cooling	Forced Air 100 LFM Minimum Required
	Humidity	10 to 95% Relative Humidity, Non-Condensing