

TVME8300 High Performance PowerPC based IndustryPack® Carrier



Application Information

The TVME8300 VMEbus CPU board is based on the high integrated MPC8245 Power PC microprocessor with a G2 MPC603e CPU core, a powerful Memory controller and PCI interface.

The TVME8300 provides four IndustryPack slots with VME64x backplane I/O, Fast Ethernet, FLASH memory, and NVRAM/RTC.

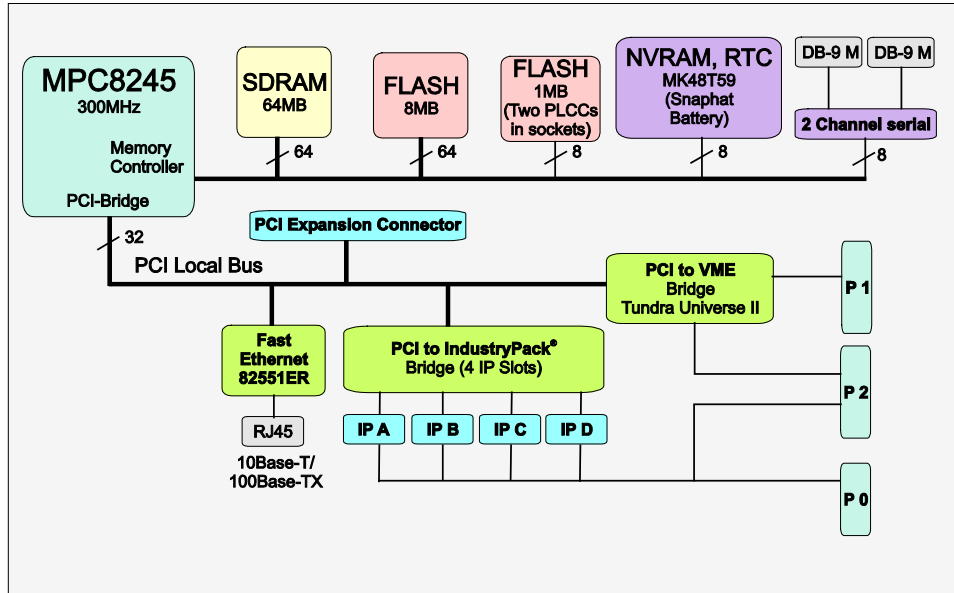
The combination of the MPC8245 processor and the IndustryPack slots provides a powerful CPU and a modular I/O solution for applications in process control, telecommunication, medical systems and traffic control.

Software support for the TVME8300 CPU board is available for VxWorks, Linux, and LynxOS. A PMON Bug Monitor is installed on the TVME8300.

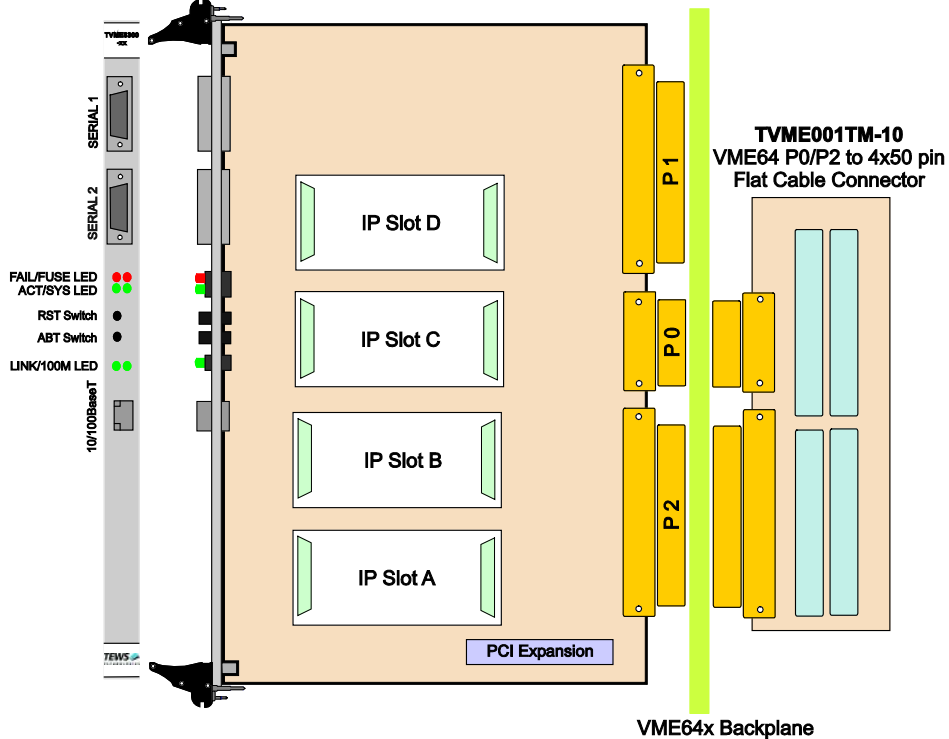
Two Transition Modules are available for easy access to all IP I/O lines from the VME64x P0 and P2 connector. The TVME001-TM provides four 50 pin ribbon cable connectors without front panel and the TVME002-TM provides four HD50 SCSI-2 type connectors located in the EMI front panel.

Technical Information

- MPC8245 CPU: 300 MHz PowerPC G2 Core, 16 KB / 16 KB L1-Cache, four programmable timers
- 64 MB SDRAM
- Two 32-pin PLCC/CLCC sockets for up to 1 MB firmware FLASH memory
- 8 MB FLASH memory
- Four IndustryPack slots (VME64x backplane I/O)
- PCI Expansion Card Connector (e.g. for TVME230 IP Expansion Card or Motorola PMC-Span)
- Fast Ethernet Interface (32-bit PCI DMA)
- 8 KB NVRAM/RTC (exchangeable battery)
- Two asynchronous RS232 ports
- On board debug monitor
- A32/D32/BLT64 VME bus Master/Slave interface with system controller function, high performance DMA supports VMEbus D64 and 32 bit PCI local bus memory burst, 4-Level requester, 7-Level interrupter and 7-Level VME bus interrupt handler
- Operating temperature range 0°C to 55°C forced air cooling.



Block Diagram



Board Layout

The Embedded I/O Company

Order Information

RoHS Compliant

TVME8300-10R 6U MPC8245-300MHz, 64 MB SDRAM, 1+8 MB Flash, 4 Slot IndustryPack, P0/P2 I/O, 1 x 10/100 Ethernet

For the availability of non-RoHS compliant (lead solder) products please contact TEWS.

Documentation

TVME8300-DOC User Manual, includes documentation for PMON Bug Monitor

Software

TVME8300-SW-40 VxWorks Board Support Package

TVME8300-SW-70 LynxOS Board Support Package

TBSP001-SW-80 Linux Board Support Package

For other operating systems please contact TEWS.

Related Products

TVME001-TM 6U Transition Module for VME64x IndustryPack Carrier, 50pin 180° ribbon cable connectors

TVME002-TM 6U Transition Module for VME64x IndustryPack Carrier, HD50 connectors

TVME230 6U 4 Slot IndustryPack Expansion Card for VMEbus CPU's, IEEE1101 Handles or Standard Handles