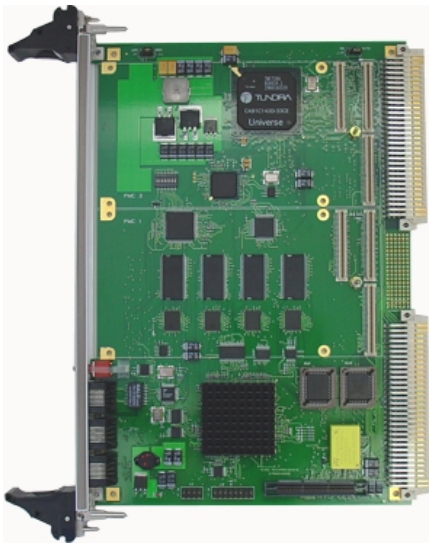
TVME8400 PowerPC based CPU Board with two PMC Slots

Application Information

The TVME8400 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 TVME8400 provides two PMC slots (32 bit, 33 MHz PCI) with VME64x P2 backplane I/O, Fast Ethernet, FLASH memory, System Memory, NVRAM/RTC and a PCI Expansion Connector (32 bit, 33 MHz PCI).



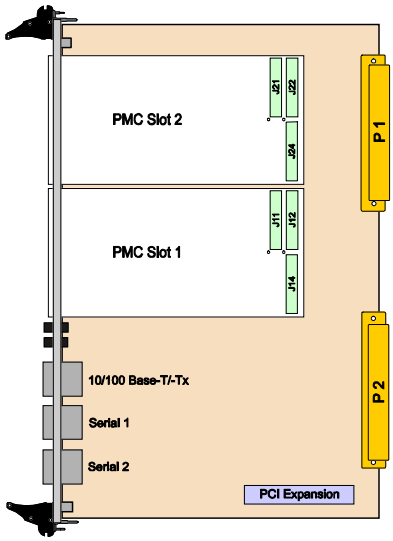
The combination of the MPC8245 processor and the PMC slots plus the PCI Expansion capability provides a powerful CPU and a modular I/O solution for applications in process control, telecommunication, medical systems and traffic control.

Software support for the TVME8400 CPU board is available for VxWorks, Linux, and LynxOS. A PMON Bug Monitor is installed on the TVME8400.

For First-Time-Buyers the Engineering Documentation TVME8400-ED is recommended. The Engineering Documentation includes user manual, schematic, assembly drawing and data sheets.

Technical Information

- MPC8245 CPU: 300 MHz PowerPC G2 Core, 16 KB / 16 KB L1-Cache, four programmable timers
- TVME8400-10x: 64 MB SDRAM (64 bit wide)
  TVME8400-20x: 256 MB SDRAM (64 bit wide)
- Two 32-pin PLCC sockets for up to 1 MB firmware FLASH memory
- 8 MB FLASH memory (64 bit wide)
- Two PMC Slots (32 bit, 33 MHz PCI) with VME64x P2 I/O
- PCI Expansion Card Connector (32 bit, 33 MHz PCI, e.g. for using 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:
  TVME8400-10x / -20x: 0°C to 55°C (forced air cooling)
  TVME8400-10x-ET / -20x-ET: -40°C to +85°C (forced air cooling)



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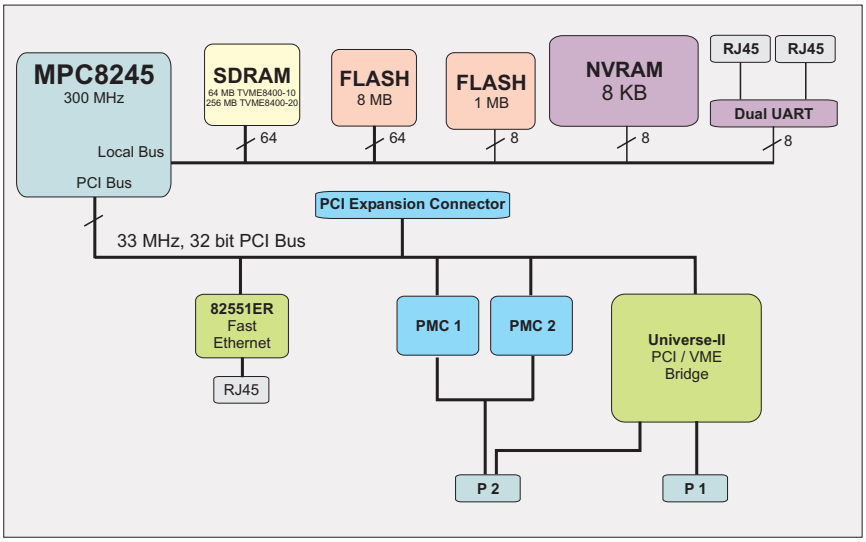

Block Diagram TVME8400

Order Information

RoHS Compliant

TVME8400-10R	MPC8245-300 MHz, 64 MB SDRAM, 1 + 8 MB Flash, Fast Ethernet, 2 PMC Slots with VME64x P2 I/O, IEEE1101 Handles, Operating temperature range: 0°C to 55°C (forced air cooling)
TVME8400-20R	MPC8245-300 MHz, 256 MB SDRAM, 1 + 8 MB Flash, Fast Ethernet, 2 PMC Slots with VME64x P2 I/O, IEEE1101 Handles, Operating temperature range: 0°C to 55°C (forced air cooling)
TVME8400-10R-ET	Same as TVME8400-10R but operating temperature range -40°C to +85°C (forced air cooling)
TVME8400-20R-ET	Same as TVME8400-20R but operating temperature range -40°C to +85°C (forced air cooling)

None RoHS Compliant

TVME8400-10	None RoHS compliant version of TVME8400-10R
TVME8400-10-ET	None RoHS compliant version of TVME8400-10R-ET
TVME8400-20	None RoHS compliant version of TVME8400-20R
TVME8400-20-ET	None RoHS compliant version of TVME8400-20R-ET

Documentation

TVME8400-DOC	User Manual, includes documentation for PMON Bug Monitor
TVME8400-ED	Engineering Documentation (User Manual, Schematic, Assembly Drawing, Device Documentation)

Software

TVME8400-SW-40	VxWorks Board Support Package
TVME8400-SW-70	LynxOS Board Support Package
TBSP001-SW-80	Linux Board Support Package

For other operating systems please contact TEWS.

Related Products

TVME020-TM	2 Slot PIM Carrier 6U VME64x Rear I/O Transition Module
TVME230	PCI Expansion Card for 4 IndustryPacks, IEEE1101 Handles or Standard Handles

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