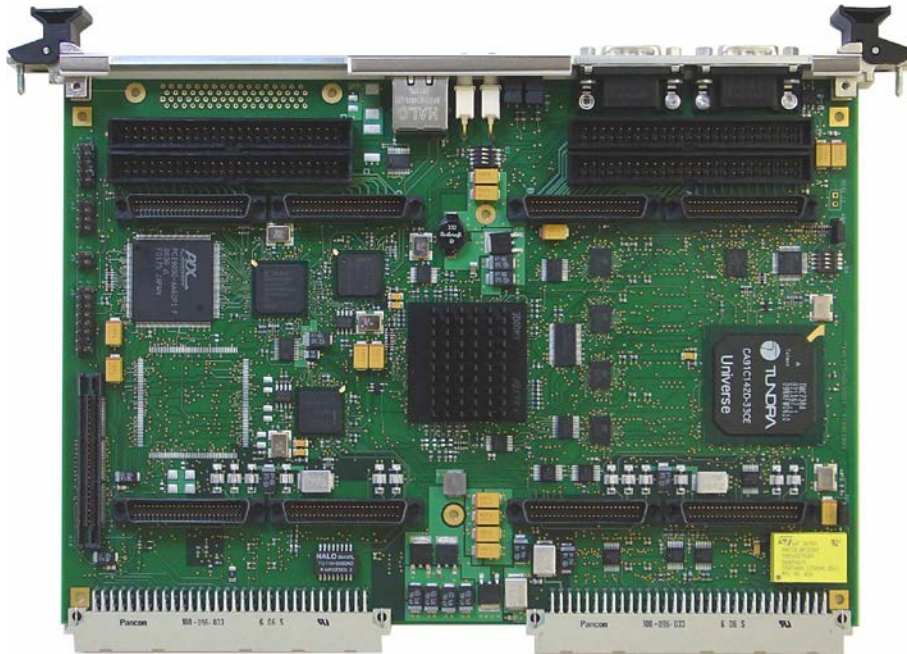# TVME8240A   High Performance PowerPC based IndustryPack® Carrier

Application Information

The TVME8240A VMEbus CPU board is based on the high integrated MPC8245 Power PC microprocessor with an MPC603e CPU core, a powerful Memory controller and PCI interface.

The TVME8240A provides 4 IndustryPack slots with front I/O, NVRAM/RTC, Fast Ethernet, and FLASH memory.
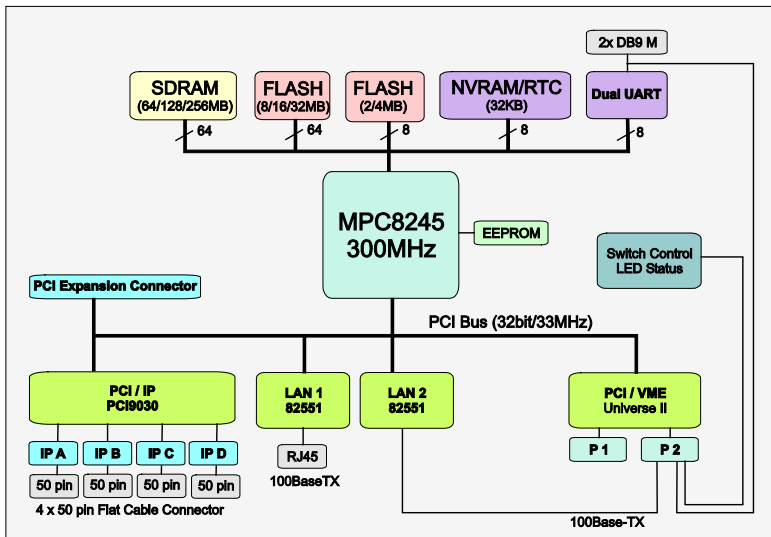
The combination of an MPC8245 processor and IndustryPack slots provide a powerful CPU and a modular I/O solution for applications in process control, telecommunication, medical systems and traffic control.

Software support for the TVME8240A CPU board is available for VxWorks, Linux, LynxOS, and OS-9. A PMON Bug Monitor is installed on the TVME8240A.
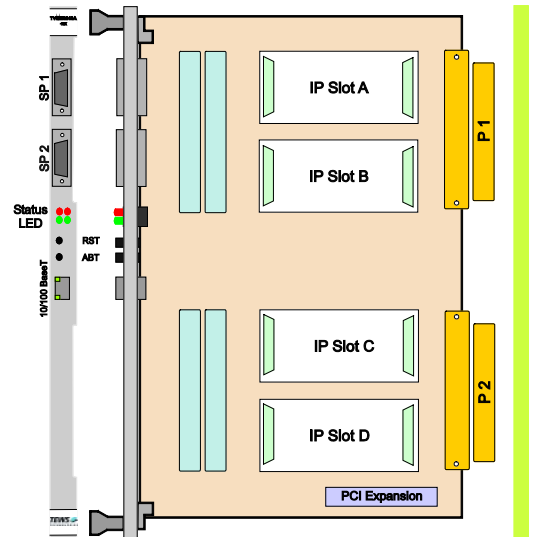
Technical Information

- ❍ MPC8245 CPU: 300 MHz PowerPC 603e Core, 16 KB / 16 KB L1-Cache, four programmable timers
- ❍ 64 MB or 256 MB SDRAM (64 bit wide)
- ❍ 2 MB boot FLASH memory (firmware) (4 MB max option)
- ❍ 8 MB or 32MB FLASH memory (64 bit wide)
- ❍ Four IndustryPack slots (front panel I/O / double sized modules supported)
- ❍ PCI Expansion Connector (33 MHz, 32 bit PCI / supports TVME230 IP Expansion Card or Motorola PMC-Span)
- ❍ 10/100 Mbit/s Ethernet interface with 32 bit PCI DMA
- ❍ 32 KB NVRAM and TOY clock with exchangeable battery
- ❍ One asynchronous full modem RS232 port, one asynchronous simple RS232/RS422 port (programmable)
- ❍ 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

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Block Diagram

Board Layout

Order Information

RoHS Compliant

TVME8240A-11R 6U, MPC8245-300MHz, 64 MB SDRAM, 2+8 MB Flash, 4 Slot IndustryPack Front I/O, 2 x 10/100 Ethernet

TVME8240A-21R 6U, MPC8245-300MHz, 256 MB SDRAM, 2+32 MB Flash, 4 Slot IndustryPack Front I/O, 2 x 10/100 Ethernet

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

Documentation

TVME8240A-DOC User Manual

Software

TVME8240A-SW-10 OS-9 Board Support Package
TVME8240A-SW-40 VxWorks Board Support Package
TVME8240A-SW-70 LynxOS Board Support Package
TBSP001-SW-80 Linux Board Support Package

For other operating systems please contact TEWS.

Related Products

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