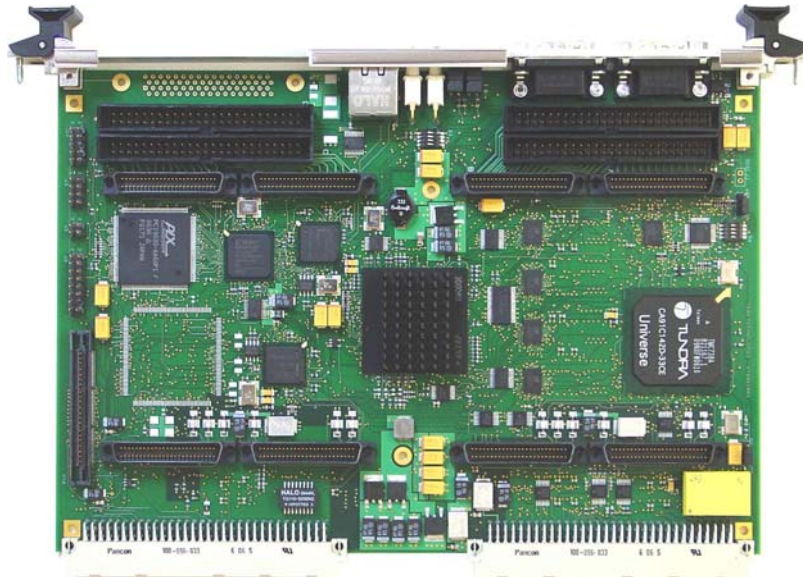# TVME8240A High Performance PowerPC based IndustryPack® Carrier

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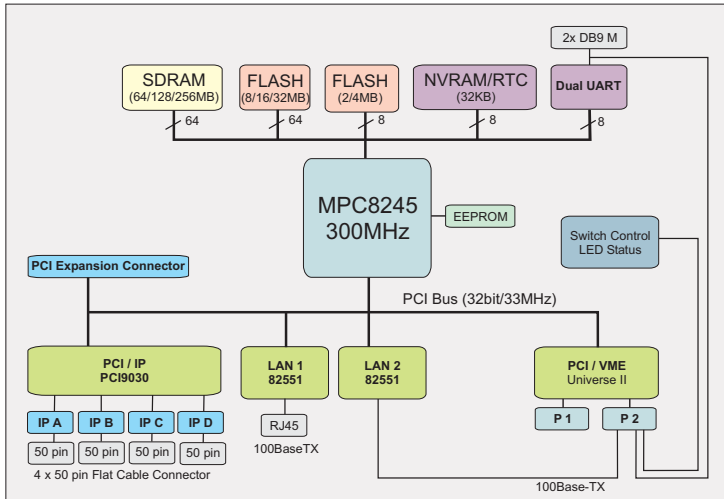
Software support for the TVME8240A CPU board is available for VxWorks, Linux, LynxOS, and OS-9. A PMON Bug Monitor is installed on the TVME8240A.

For First-Time-Buyers the Engineering Documentation TVME8240A-ED is recommended. The Engineering Documentation includes TVME8240A-DOC, schematics and data sheets of TVME8240A.
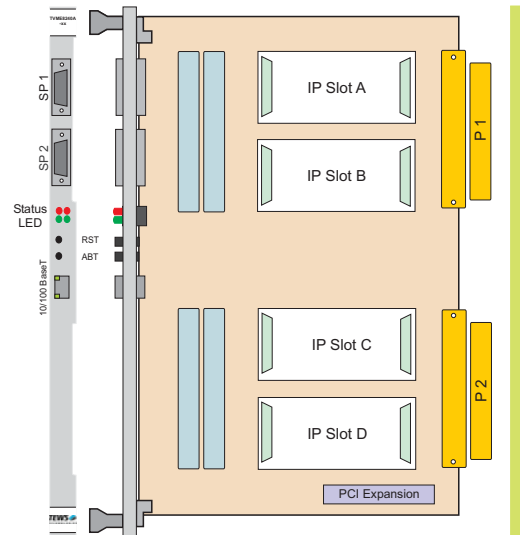
Technical Information

- Ο MPC8245 CPU: 300 MHz PowerPC 603e Core, 16 KB / 16 KB L1-Cache, four programmable timers
- Ο 64 MB or 256 MB SDRAM (64 bit wide)
- Ο 2 MB boot FLASH memory (firmware) (4 MB max option)
- Ο 8 MB or 32MB FLASH memory (64 bit wide)
- Ο Four IndustryPack slots (front panel I/O / double sized modules supported)
- Ο PCI Expansion Connector (33 MHz, 32 bit PCI / supports TVME230 IP Expansion Card or Motorola PMC-Span)
- Ο 10/100 Mbit/s Ethernet interface with 32 bit PCI DMA
- Ο 32 KB NVRAM and TOY clock with exchangeable battery
- Ο One asynchronous full modem RS232 port, one asynchronous simple RS232/RS422 port (programmable)
- Ο On board debug monitor
- Ο 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
- Ο Operating temperature range 0°C to 55°C forced air cooling.

TVME8240A

Block Diagram

Board Layout

Order Information

RoHS Compliant

TVME8240A-11R   MPC8245-300 MHz, 64 MB SDRAM, 2 + 8 MB Flash, Fast Ethernet front & back I/O,
4 IndustryPack slots with front panel I/O, Standard Handles

TVME8240A-21R   MPC8245-300 MHz, 256 MB SDRAM, 2 + 32 MB Flash, Fast Ethernet front & back I/O,
4 IndustryPack slots with front panel I/O, Standard Handles

None RoHS Compliant

TVME8240A-11   None RoHS compliant version of TVME8240A-11R
TVME8240A-21   None RoHS compliant version of TVME8240A-21R

Documentation

TVME8240A-DOC   User Manual, includes documentation for PMON Bug Monitor
TVME8240A-ED   Engineering Documentation (TVME8240A-DOC, schematics, assembly drawing, data sheets)

Software

TVME8240A-SW-10   OS-9 Board Support Package
TVME8240A-SW-40   VxWorks Board Support Package (includes VxWorks IP Carrier Software Support)
TVME8240A-SW-70   LynxOS Board Support Package (includes LynxOS IP Carrier Software Support)
TBSP001-SW-80   Linux Board Support Package (includes Linux IP Carrier Software Support)

For other operating systems please contact TEWS.

Related Products

TVME230   PCI Expansion Card for 4 IndustryPacks, IEEE1101 Handles or Standard Handles