

Advme7511

PowerPC G4 Board

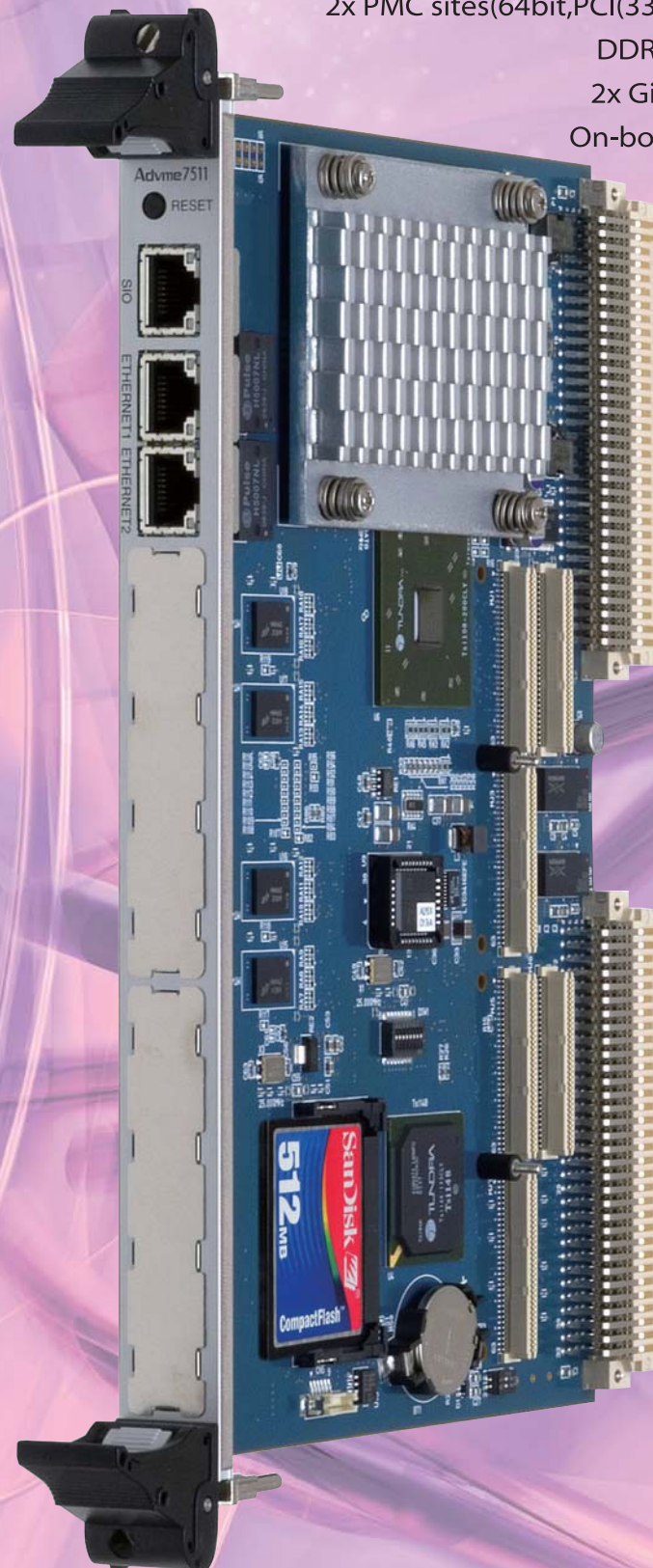
Freescale PowerPC 7448 G4 processor running at 1.0GHz & 1.4GHz
Tundra Tsi148 is used as VME interface, 2eSST VMEbus protocol with maximum transfer rate (320MB/s) is supported.

Tundra Tsi108 is used as system controller
2x PMC sites(64bit,PCI(33/66MHz) /PCI-X(66/100MHz)

DDR2-SDRAM with ECC function

2x Gigabit Ethernet,1x Serial port

On-board Compact Flash available



PowerPC G4 CPU Board

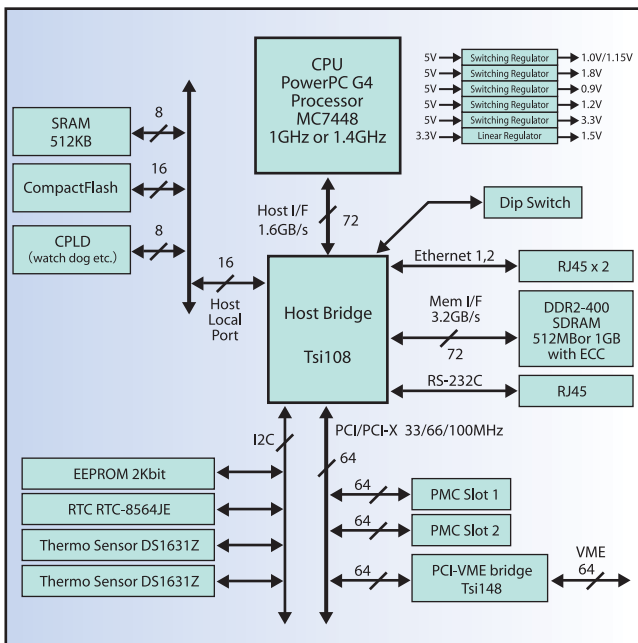
Overview

This board is a sophisticated VME bus single board computer (6 U size, 1 slot width) equipped with MC7448 processor (PowerPC G4), Tsi108 (system controller) and Tsi148 (PCI-VME bridge). CPU clock frequency (MC7448) is 1GHz or 1.4GHz and it has a built-in L1 cache (64k bytes) and L2 cache (1MB). It is equipped with DDR-SDRAM main memory, and supports CPU power and I/O power with the powerful bandwidth (3.2GB/sec). Memory capacity is 512MB or 1GB, and in either case, single-bit data errors support correctable ECC. It has both high efficiency and high reliability. It is equipped with a RS232C serial port (1 ch) and Gigabit Ethernet (2 ch) as front panel I/O, as well as an onboard CompactFlash socket and 2 onboard PMC (PCI/PCI-X) slots. The board's VME interface supports VME64x and 2eSST, and can use either the system slot or non-system slot of the VME bus. It supports automatic slot type recognition. It can be used as a single central CPU, but additional CPU boards can also be added depending on the processing load.



*The CompactFlash and memory module in the above photo are optional

Block diagram



Specifications

CPU

Freescale PowerPC G4 processor MC7448
1GHz or 1.4GHz (option at time of shipping)
L1 cache: 32KB/32KB, L2 cache: 1MB
heatsink : fanless
Host bridge: Tundra Tsi108

Memory

Boot ROM : 512KB Flash memory
Onboard SDRAM : 512MB or 1GB
(DDR400-capable, option at time of shipping)
Backup SRAM : 512KB (battery backup)
Serial EEPROM : 2Kbit I2C-EEPROM

Front panel I/O

Serial ports: TIA/EIA-232E standard, asynchronous,
1 port (8-pin modular connector)
Ethernet: 10/100/1000BASE-T Ethernet, 2 ch (8-pin modular connector)

Onboard I/O and peripheral

PMC I/F: IEEE 1386.1 compliant, 2 slots
CompactFlash: CF+ and Compact Flash Specification Revision 2.1 compliant
Real-time clock (battery backup)

External bus interface

Bus standard VME64x (ANSI/VITA 1.1)
and 2eSST (ANSI/VITA 1.5) compliant
Bridge chip: Tundra Tsi148
Address, Data width: A16, A24, A32, A64, D08, D16, D32, 64

Power supply: DC5V±5% (supplied by rack)
Board size: 6U, 1 slot width

Please consult us regarding your specific custom requirements

