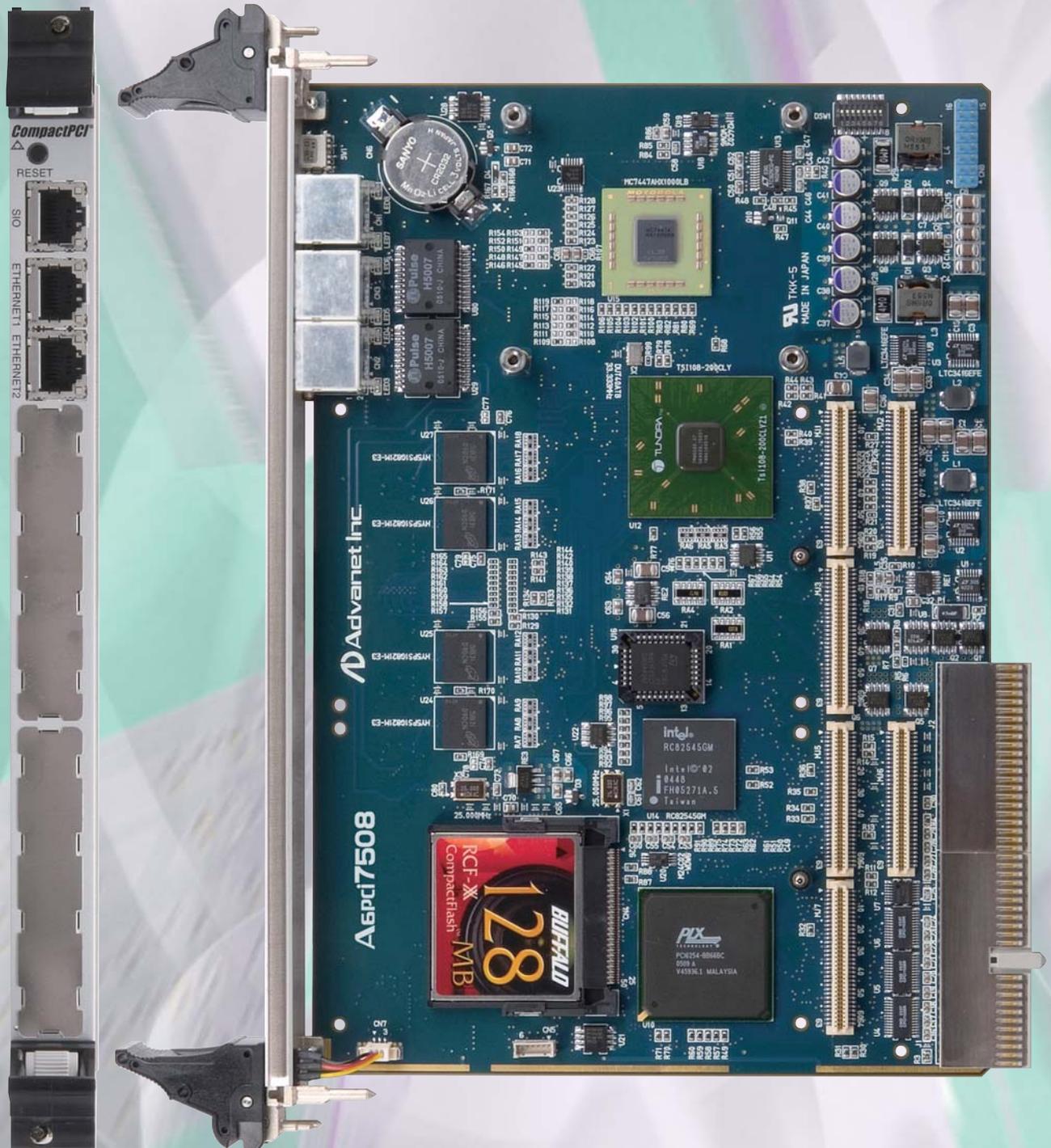


Aspci7508

PowerPC G4 CPU Board



PowerPC G4 CPU Board

Features

The A6pci7508 is a 6U size single slot width high performance Compact PCI single board computer with an onboard Power PC G4 MPC7447A processor by Freescale.

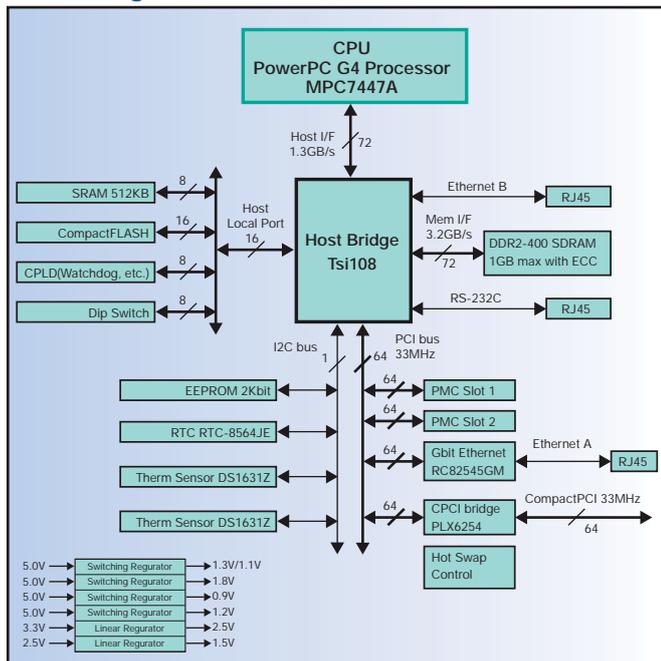
The operating clock of the MPC7447A, which is the CPU, is 1 GHz, and it has an internal 64KB L1 cache and a 512 KB L2 cache. The main memory consists of the latest DDR2-SDRAM, and supports CPU and I/O power across a powerful 3.2 GB/s bandwidth. It also supports ECC, enabling correction of single bit data errors, combining high reliability with performance.

As a front panel I/O, the A6pci7508 is equipped with 1 ch RS-232C serial ports, 2 ch gigabit Ethernet, one onboard CompactFLASH socket, and two PMC (PCI Mezzanine Card) slots.

The A6pci7508 can use either a Compact PCI system slot or a peripheral slot. It automatically recognizes the type of slot, and changes the bridge IC operating mode and whether or not there is a terminating resistor accordingly. While it goes without saying that it can be used as a single central CPU, multiple CPU boards can be added in response to increased processing loads.

You can choose from a CPU operating clock of either 600 MHz or 1 GHz, and the memory sizes of 512 MB or 1 GB. The A6pci7508 can handle a wide range of customer requirements.

Block diagram



Specifications

CPU	Freescale MPC7447A Select either 600MHz/1GHz (optional at time of shipment) L1 cache: 32KB+32KB, L2 cache: 512KB
Host bridge	Tundra Tsi108
Memory	Boot ROM:512KB FLASH memory Main memory:Onboard SDRAM supports DDR2-400 Select from either 512MB or 1GB (optional at time of shipment) Provided with ECC function that can automatically perform single bit correction out of 64 bits Backup SRAM:512KB SRAM Serial EEPROM:2Kbit I2C-EEPROM
Front panel I/O	Serial port:TIA/EIA-232E standard start-stop synchronization 8-pin modular connector Ethernet A:Uses Intel RC82545GM 10/100/1000Base-T,8-pin modular connector Ethernet B:Uses onboard Tsi108 MAC and external PHY 10/100/1000Base-T,8-pin modular connector
Onboard I/O Peripherals	PMC×2, CompactFLASH Realtime clock (Epson RTC-8564JE)
External bus I/F	Bridge chip PLX PCI6254 When using system slot: Transparent bridge When using peripheral slot: Non-transparent bridge Signaling levels: 3.3V or 5V (optional at time of shipment) 64-bit data bus/33MHz
RAS function	Watchdog timer, CPU internal/board temperature monitor
Power requirements	DC5.0V±5%, DC3.3V±5% DC5.0V max 4A (When CPU is 1 GHz, not including PMC) DC3.3V max 2A(As above)
Board size	6U single slot width

Please consult us regarding your specific custom requirements

