

Server Solution



Thunder h2000M
S3992



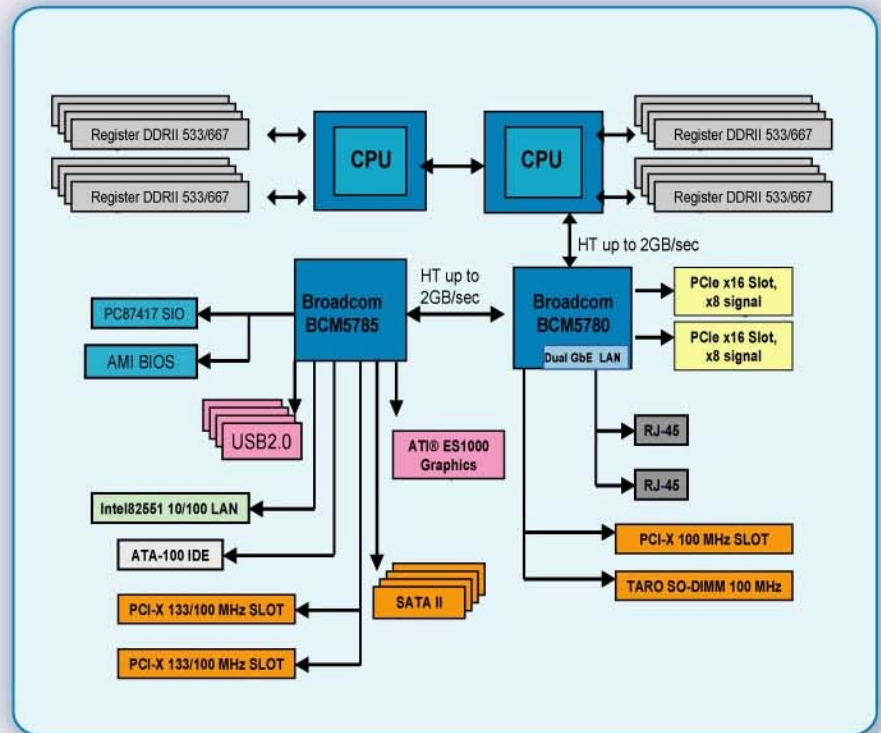
Dual-Core AMD Rev.F Opteron™ 2000 series

- Dual uPGA 1207-pin sockets support AMD Opteron™ Rev. F 2000 Series processors
- Broadcom BCM5780 (HT-2000) + BCM5785 (HT-1000) chipset
- Total sixteen(16) 240-pin 1.8-Volt DDRII DIMM sockets. Support DDRII 533/667MHz Registered memory
- (2) x16 PCI Express slots (w/ x8 link)
- (3) PCI-X 64-bit 133/100MHz slots + (1) PCI 32-bit 33MHz slot
- (2) GbE LAN + (1) 10/100 FE LAN
- (1) PCI-X TYAN TARO™ SO-DIMM slot supports U320 SCSI or SAS/SATA II/SATA

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TOP View



S P E C I F I C A T I O N S

Processors

- Two uPGA 1207-pin ZIF sockets
- Support up to two AMD Optron™ Rev.F2000 series Santa Rosa processors (Dual Core)
- Series Santa Rosa processors (including dual core processors)
- Integrated 128-bit DDR Memory Controller

Chipset

- ServerWorks BCM5780(HT2000) + BCM5785(HT1000) chipset
- National PC87417 Super I/O chip

Memory

- 128-bit dual channel memory bus
- Total sixteen(16) 240-pin 1.8-Volt DDRII DIMM sockets (8 on CPU1 and 8 on CPU2)
- Supports up to DDRII 667MHz
- Registered, ECC module supported

Expansion Slots

- (2) PCI Express x16 slots (each w/ x8 signal)
- (2) PCI-X 133/100MHz slot
- (1) PCI-X 100MHz slot
- (1) PCI 32-bit 33MHz, v2.3 compliant slot
- One (1) Tyan i\$TARO™ SO-DIMM socket

System Management

- (2) EMC6D103 H/W monitor chips
- Eight (8) 3+1-pin fan headers support tachometer monitoring, six (6) of them with smart FAN control
- Temperature and voltage monitoring
- Watchdog timer support

Integrated I/O

- One floppy connector
- One IDE connector

- Four USB 2.0 ports (2 at rear, 2 via cable)
- Two COM port (1 at rear, 1 via cable)
- Tyan 2 x 9 front-panel pin header
- Tyan 2 x 6 front-panel pin header for LAN/ID LED
- Tyan 2 x 7 pin header (2.0mm) for FAN tachometer and PWM.
- 2 x 25 connector for optional Tyan IPMI SMDC

Back Panel I/O ports

- Stacked PS/2 Mouse & Keyboard ports
- Stacked 2 USB ports and 1 10/100 RJ45 ports
- One 9-pin COM port
- One 15-pin VGA port
- Two side-by-side RJ-45 ports

Integrated Video Controller

- ATI ES1000 controller
- 32MB DDR frame buffer

Integrated Enhanced IDE Controller

- Single-channel master mode supports up to two IDE devices
- Supports IDE drives and ATAPI-compliant devices

Integrated SATA Controller

- Supports four SATA-II ports running at 1.5Gb/s
- RAID 0/1/5/10 supported

Integrated LAN Controller

- Dual GbE LAN (from BCM5780)
 - Embedded in BCM5780
 - Two 10/100/1000 RJ-45 LAN ports w/ LED
- One Intel i82551QM fast Ethernet controller
 - One 10/100 RJ-45 LAN port w/ LED
 - Operating on 32bit/33MHz PCI bus

Optional modules

- M3291, IPMI 2.0 Remote System Mgmt card
 - Renesas H8S2167 BMC controller
 - BT, KCS, Logging support
 - IPMI-over-LAN
 - Remote power on/off and reset
- M7901/M7902, Ultra 320 SCSI TARO card
 - Adaptec AIC-7901/7902 single/dual-channel Ultra320 SCSI controller
 - Adaptec HostRAID 0, 1, 10 supported
- M9000 SAS/SATA II TARO card
 - Adaptec AIC-9405/9410 SAS controller
 - Supports up to 4-port (M9000-5) and 8-port (M9000-10) SAS & SATA running at 3.0Gb/s
 - Adaptec HostRAID 0, 1 & 10 supported

BIOS

- AMI BIOS on 8Mbit LPC Flash ROM
- ACPI 2.0 and SRAT support
- PXE via Ethernet, USB device boot
- SMBIOS 2.3.1, BBS 1.1 compliant
- Headless Operation via serial console redirect
- 48-bit LBA Support

Form Factor

- Extended ATX footprint (13 1/2" x 12 1/2")
- EPS12V/ATX12V universal power connectors

Power

- Onboard dual 4-phase VRM
- EPS12V/SSI v3.51 (24 + 8) power connectors

Regulatory

- FCC Class B (DoC)
- European Community CE (DoC)

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