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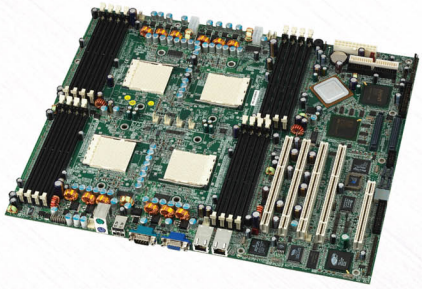
Server Solution



Thunder K8QS PRO

S4882

AMD 64 Opteron

Quad AMD Opteron™ Platform

- Supports up to four AMD Opteron™ processors
- Total of 16 DIMM sockets support up to 32 GB of DDR memory
- Dual channel U320 SCSI with ZCR support (optional)
- Two Broadcom based Gigabit Ethernet LAN ports
- Integrated Serial ATA RAID w/ RAID 0,1, 0+1 support (optional)
- Integrated ATI Rage XL graphics controller

(Specifications are subject to change without notice. Items pictured may only be representative.)

Thunder K8QS PRO

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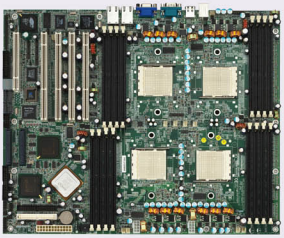
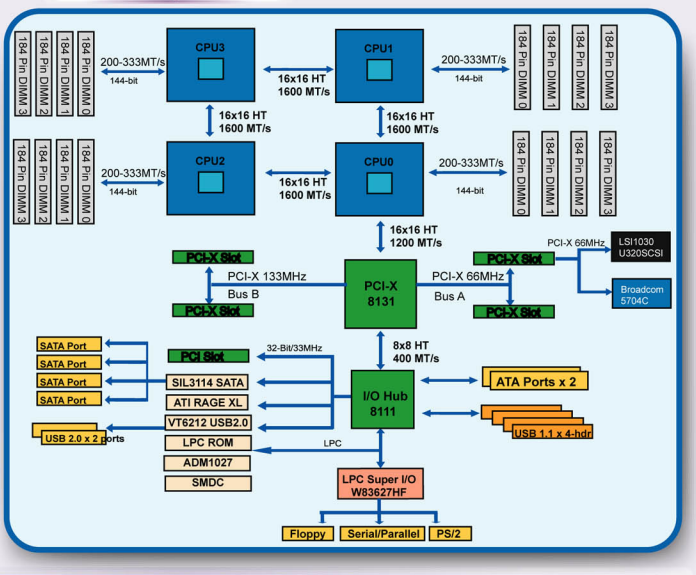


▲TOP View

Block Diagram



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

Processors
- Quad PGA 940-pin ZIF sockets
- Supports up to four AMD Opteron™ 800 series processors
- Four onboard 3-phase VRMs
- Integrated 128-bit DDR Memory Controller

Chipset
- AMD-8131™ HyperTransport PCI-X Tunnel
- AMD-8111™ HyperTransport I/O Hub
- Winbond W83627HF Super I/O chip
- Total five Hardware Monitoring IC:
- One ADM1027 and four LM63

Memory
- 128-bit dual channel memory bus
- Total sixteen 184-pin 2.5-Volt DDR DIMM sockets (4 on each CPU)
- Supports up to 32 GB Registered DDR
- Supports ECC and ECC with Chipkill type memory modules
- Supports PC1600, PC2100, PC2700 & PC3200 DDR

Expansion Slots
- Two independent PCI-X buses
- Two 64-bit 66/33 MHz (3.3-Volt) PCI-X slots from PCI-X bridge A
- Two 64-bit 133/100/66/33 MHz (3.3-Volt) PCI-X slots from PCI-X bridge B
- One legacy 32-bit 33MHz (5-Volt) PCI slot
- Total of five usable slots

Integrated I/O
- One floppy connector supports one device
- Two 9-pin serial ports (one connector and one header) and One 25-pin parallel port pin-header
- PS/2 mouse and keyboard connectors
- Four USB v1.1 front panel headers
- Two USB v2.0 connectors through VT6212

System Management
- Total nine 3-pin fan headers with tachometer monitoring
- Four fan headers with (PWM) speed control
- One 2-pin Chassis Intrusion header
- Temperature, voltage and fan monitoring

Integrated Enhanced IDE Controller
- Provides two IDE dual-drive ports for up to four EIDE devices
- Supports for UDMA 33/66/100/133 IDE drives and ATAPI compliant devices

Integrated PCI Graphics
- ATI® Rage™ XL PCI graphics controller
- 8MB Frame Buffer of video memory

Integrated Serial ATA Controller (manufacturing option)
- One Silicon Image SI3114 controller
- Four SATA 1.0 ports
- Supports up Four SATA drives
- Supports RAID 0,1,10

Integrated Dual Channel SCSI (manufacturing option)
- LSI 53C1030 U320 SCSI controller
- Dual-channel Ultra320 SCSI
- Connects to PCI-X Bridge A
- Supports LSI ZCR (Zero Channel RAID)

Integrated LAN Controllers
- Broadcom® BCM5704C dual-channel Gigabit Ethernet controller
  - Two RJ-45 LAN connectors with LEDs
  - Connected to PCI-X Bridge A
- Two Front Panel LED headers

Intelligent Platform Management Interface Header
- Tyan Server Management Daughter card (Optional)
- supports features listed below via IPMI header
- QLogic™ Zircon Baseboard Management Controller (BMC) based on powerful ARM7 technology
- Tailored for IPMI highest 1.5 Spec.
- Supports KCS and BT styles
- Flexible Windows and Linux based Management Solution
- Supports RMCP and SNMP protocols
- Supports ASF standard and EMP
- I²C serial multi-master controllers and UARTs
- Built-in IPMB connector
- Remote power on/off and reset support (IPMI-over-LAN)

BIOS
- Phoenix BIOS
- 4Mbit LPC Flash ROM
- Watchdog timer
- USB boot support
- 48-bit LBA Support
- Supports PXE via Ethernet
- ACPI 2.0 & 1.0B support

Form Factor
- SSI MEB footprint (13" x 16" / 330.2mm x 406.4mm)
- EPS12V power connectors
- One serial port and one VGA connector
- Stacked USB 2.0 (two) connectors
- Stacked PS/2 keyboard and mouse connectors
- Two RJ-45 side-by-side LAN connectors with LEDs

Regulatory
- FCC Class B (Declaration of Conformity)
- European Community CE (Declaration of Conformity)

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