# TYAN

AMD
Opteron

# Server Solutions
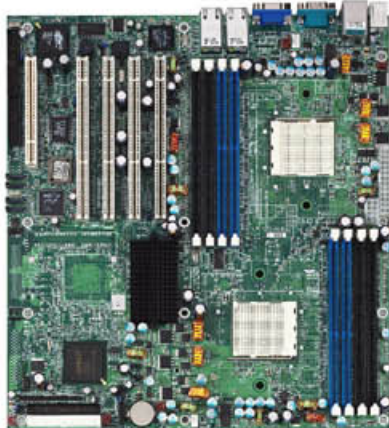
## Thunder K8SD Pro

**S2882UG3NR-D**
**S2882G3NR-D**

### High-end 2-way AMD Opteron™
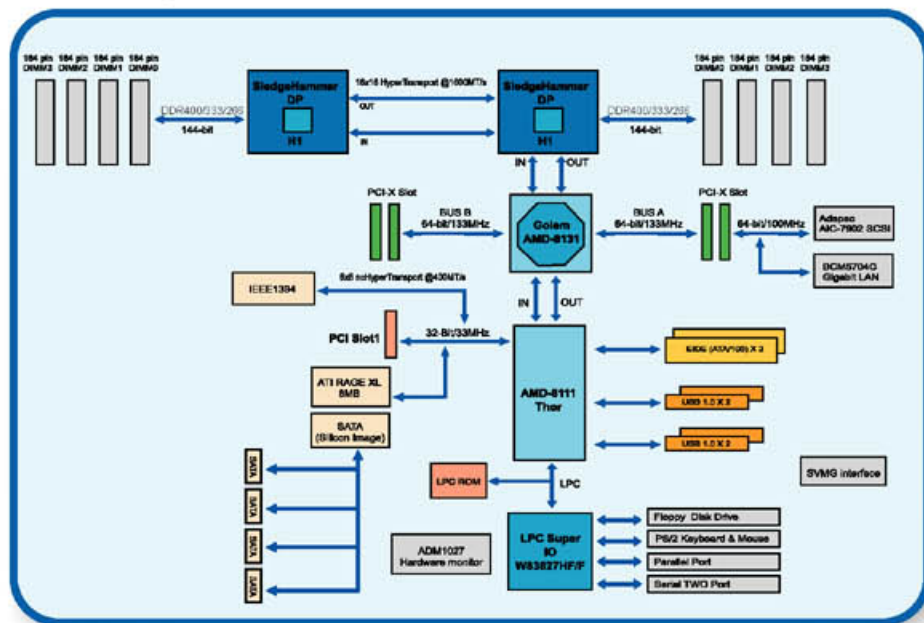### Single-/Dual-core processor based Server

- Supports up to two Single-/Dual-Core AMD Opteron™ processors

- Dual Channel SCSI w/ ZCR support (optional)

- Three Ethernet LOM; two GbE LAN, one Fast Ethernet

- Integrated Serial ATA RAID w/RAID 0, 1, 0+1 support

- Integrated ATI® RAGE™ XL graphics controller

- IPMI remote management through Tyan SMDC (optional)

## Block Diagram



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

## Processors
- Dual PGA 940-pin ZIF sockets
- Supports up to two AMD Opteron™ 200 Series processors (including dual core processors)
- 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
- Analog Devices ADM1027 Hardware Monitoring IC

## System Management
- Two 3+1-pin CPU Fan header w/ tachometer input and smart fan control(PWM)
- Five 3-pin system Fan headers w/ tachometer input , three of them w/ smart fan control (PWM)
- One 2-pin Chassis Intrusion header
- Temperature, voltage and fan monitoring
- Watchdog timer

## Memory
- 128-bit dual channel memory bus
- Total eight 184-pin 2.5-Volt DDR DIMM sockets (4 on CPU1 and 4 on CPU2)
- Supports PC1600, PC2100, PC2700 & PC3200 DDR
- Registered, ECC/Non-ECC module supported
- Single/Dual/Quad-Rank memory supported

## Expansion Slots
- 2 independent 64-bit PCI-X buses
  - Two 100/66/33 MHz PCI-X slots at PCI-X bus A
  - Two 133/100/66/33 MHz PCI-X slots at PCI-X bus B

## Back Panel I/O Ports
- Stacked PS/2 Mouse & Keyboard ports
- Stacked 2 USB 1.1 ports + 1 RJ45 10/100 Base-T port w/ activity LED
- One 9-pin UART Serial port
- One 15-pin VGA port
- Two RJ45 10/100/1000 Base-T ports w/ activity LED

## Integrated I/O
- One floppy connector supports up to two drives
- One 9-pin serial ports connector
- One 25-pin parallel port connector
- Four USB 1.1 ports
- Three front panel LAN activity LED connectors

## Integrated Enhanced IDE Controller
- Dual IDE channels support 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
- Silicon Image® Sil3114 SATA RAID Accelerator
- Supports S-ATA 1.0 Specification
- Supports 4 channel SATA port for up to four SATA devices
- Supports RAID 0, 1, 10
- Connected to legacy 32-bit 33MHz PCI bus

## Integrated LAN Controllers
- Total three LOM
- Broadcom® BCM5704C dual-channel GbE LAN controller connected to PCI-X bus A
- Intel® 82551QM 10/100 LOM operating at 32bit/33MHz PCI bus

## Integrated Dual Channel SCSI (manufacturing option)
- Adaptec® AIC7902W Dual-Channel U320 SCSI controller
- Connects to PCI-X bus A
- Adaptec® ZCR card support

## Intelligent Platform Management Interface Header
- Tyan Server Management Daughter card (Optional) supports features listed below via IPMI header
  - QLogic™ Zircon Baseboard Management Controller (BMC)
  - 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
- AMI® BIOS 8.0 on 4Mbit LPC Flash ROM
- Supports APM 1.2 & ACPI 1.0
- Power Management S1, S4 and S5 support

## Form Factor
- Extended ATX footprint (13" x 12")
- EPS12V/ATX12V universal power connectors

## Regulatory
- FCC Class B (Declaration of Conformity)
- CE (Declaration of Conformity)

# TYAN COMPUTER CORP.