



## HPC & Cluster Computing 1U Server Platform



### Transport GX28

B2881G28S4H  
B2881G28U4H  
Dual AMD® Opteron™



#### Key Feature

- Industry 1U rack-mountable chassis
- Supports 8th generation 64-bit AMD Opteron™ 200 series processor
- (4) Hot-Swappable HDD bays support
  - B2881G28S4H supports SATA
  - B2881G28U4H supports Ultra 320 SCSI
- (8) DIMMs, supporting up to 16GB ECC, registered DDR400/333/266 memory capacity
- (2) Gigabit Ethernet LAN ports
- (2) 64-bit, 100/133MHz PCI-X expansion slots on riser card
- Slim CD-ROM drive pre-installed
- Smart auto fan speed control
- EPS-12V 1U 400W power supply with PFC

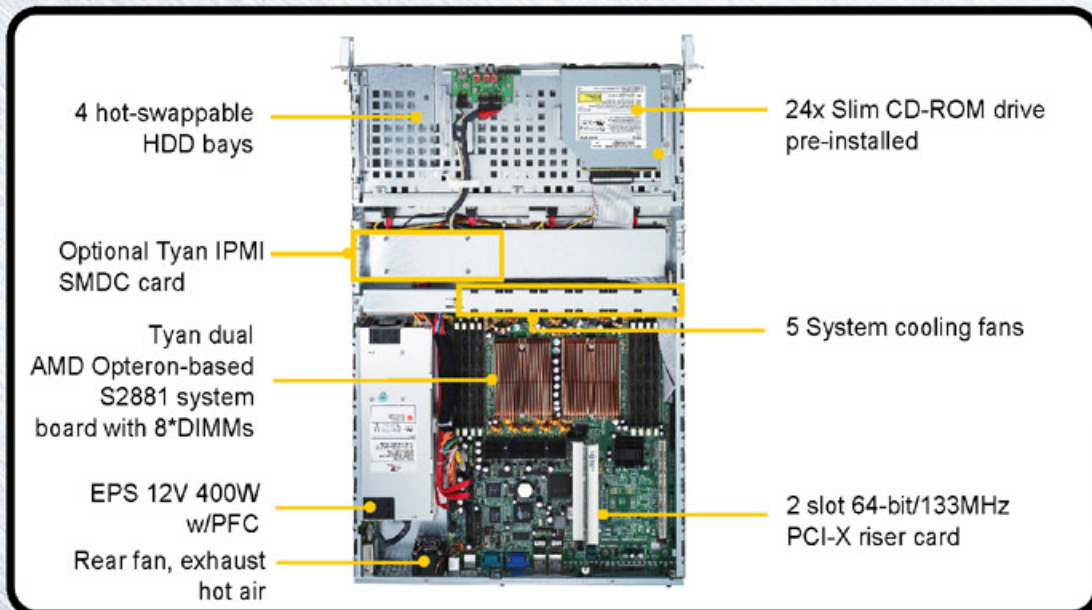
#### Target Usage

- Compute-intensive graphics applications and memory-bound applications:
  - 3D rendering engine
  - Scientific modeling
  - CAD/CAM
- Streaming media servers/Video servers
- eCommerce servers

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▼ TOP View



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

### Enclosure

- Industry 19" rack-mountable 1U chassis
- HDD bays
  - 4 external 3.5" HDD bays
- (1) slim CD-ROM bay
- Dimension:
  - D 26.5 x W 17 x H 1.7 inch (670x432x43mm)

### Processors

- Dual PGA 940-pin ZIF sockets
- Supports one or two AMD® Opteron™ 200 series processors

### 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

### Memory

- 128-bit dual channel memory bus
- (8) 184-pin 2.5-Volt DDR DIMM sockets
- Supports up to 16 Gigabyte Registered DDR
- Supports ECC type memory modules
- Supports DDR400/333/266 memory module

### Expansion Slots

- (2) 64-bit, 100/133MHz PCI-X slots
- Support 2 full height/half length cards

### Back I/O Ports

- Stacked PS/2 Mouse & Keyboard ports
- Stacked 2 USB 1.1 ports
- (1) 9-pin UART Serial port
- (1) 15-pin VGA port
- (2) RJ45 connectors

### Front Panel Features

- I/O
  - (1) USB 1.1 ports
  - LED indicators
  - (1) IDE channel activity LED
  - (2) LAN LEDs
  - Power LED
- Switch
  - Power
  - Reset

### Integrated Storage Controller

- Dual channel IDE
- Silicon Image SI3114 4-port S-ATA RAID controller for B2881G28S4H
- Adaptec AIC-7902 dual channel Ultra 320 SCSI controller for B2881G28U4H

### Storage

- Hard Disk Drives
  - Model B2881G28S4H: Support 4 hot-swappable SATA HDD bays with RAID 0, 1 and 10
  - Model B2881G28U4H: Support 4 hot-swappable Ultra320 SCSI HDD bay with Adaptec ZCR supporting
- Pre-installed slim type 24x CD-ROM drive

### Networking

- (2) Gigabit Ethernet ports (Broadcom® BCM5704C dual-channel GbE LAN controller connected to PCI-X bridge), with teaming feature support

### Video

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

### Motherboard

- TYAN Thunder K8S Pro Dual AMD Opteron™ system board
  - S2881G2NR for B2881G28S4H
  - S2881UG2NR for B2881G28U4H
- Extended ATX footprint (13" x 12")

### BIOS

- AMI® BIOS 8.0 on 4Mbit LPC Flash ROM
- Supports ACPI 1.0b & 2.0
- Power Management S1, S4 and S5 support

### Server Management

- Optional Tyan SMDC (remote server management kit), IPMI 1.5 compliant
- System fan speed control

### Power Supply

- EPS 12V, 1U, 400W with PFC

### System Cooling

- 6\*40x40x28 ball-bearing fans
- 2 passive CPU copper heatsinks
- Special-designed air duct

### Regulatory

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

Part Number	HDD Tray Type	Hot-swap HDD Support	HDD Backplane Support
B2881G28S4H	4 Removable	Yes	4-port-Serial ATA
B2881G28U4H	4 Removable	Yes	4-port-Ultra320 SCSI

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