

Themis RES-32DCO Rugged Enterprise Server

New AMD Dual-Core Opteron based 3U Server with 1000MHz Hyper Transport Bus

Themis' new RES-32DCO, a 3 Rack Unit (3U) Dual-Processor server, combines the robust design of it's Rugged Enterprise Server (RES) family with the latest, fastest multiple dual core 64-bit processing power. The rugged RES-32DCO reflects Themis' extensive expertise designing high performance systems for use in demanding environments. This new system combines the newest AMD Dual-Core Opteron architecture, the latest nVidia chipset, along with Themis' advanced thermal and mechanical design techniques to achieve I/O configuration flexibility and high reliability in shock and vibration environments of up to 25G.

The RES-32DCO can be configured with one or two AMD Dual-Core Opteron Series 2000 processors running at up to 2.8GHz. Featuring up to six IO controller expansion slots, extensive high speed I/O, and multiple storage options, the RES-32DCO allows users versatile configurability and system expansion. The RES-32DCO is easily expanded through the addition of commercially available, off the shelf networking cards, I/O, peripherals and other value-added options to meet current and future system requirements.

AMD Dual-Core Opteron and nVidia Server Chipset offer Extensive I/O and Unmatched 64-bit Performance!

The RES-32DCO's fast AMD Dual-Core Opteron processor provides innovative technologies such as AMD's exclusive Direct Connect Architecture, Hyper Transport[™] technology, Simultaneous 32 and 64-bit computing, and AMD PowerNow![™] technology. The RES-32DCO offers outstanding system compute and I/O performance, dependability, and value. It's expansion versatility provides ample headroom for integration with current and future server platforms.

The new nVidia MCP55-Pro, IO55, and NEC 720400 chipset represents the latest in server architecture, providing the highest possible performance and scalability by using Hyper Transport Technology. The MCP55-Pro is the central hub for all data passing through the core system elements and delivers high bandwidth across a 1000MHz Hyper Transport bus, including the IO55 dedicated I/O processor and the NEC 720400 PCI-Express to PCI-X bridge.

Themis RES-32DCO Features:

- Designed for High Reliability in harsh operating environments
- · Rack-optimized design for unique user requirements
- HDD/CD-RW/DVD-RW/Floppy storage options
- Extensive use of Specially Coated Aluminum and Stainless Steel fasteners provide for Light Weight, Excellent Corrosion Resistance, and Durability

RES-32DCO Specifications:

- One or two Dual-Core AMD Socket F Opteron processors up to 2.8GHz with 2MB L2 Cache
- Up to 32GB registered DDR2 400 SDRAM memory (or)
- Up to 16GB registered DDR2 667 SDRAM memory
- nVidia MCP55-Pro, IO55, and NEC 720400 Chipset
- Rear panel access and I/O:
- Two (2) Gigabit Ethernet Ports (RJ45)
- One (1) RS-232 Serial Port (DB9)
- One (1) Parallel (ECP/EEP) Port
- PS/2 Keyboard and Mouse Ports
- Two (2) USB 2.0 Ports
- Power connector and switch
- Line In/Out, Microphone In (3.5mm Jacks)
- PCI Expansion slots:
- One (1) 64-bit 133 MHz PCI-X (3.3V) Slot
- One (1) 64-bit/100 MHz PCI-X (3.3V) Slot
- Four PCI-Express (two x16 slots, one x8 slot, one x4 slot)

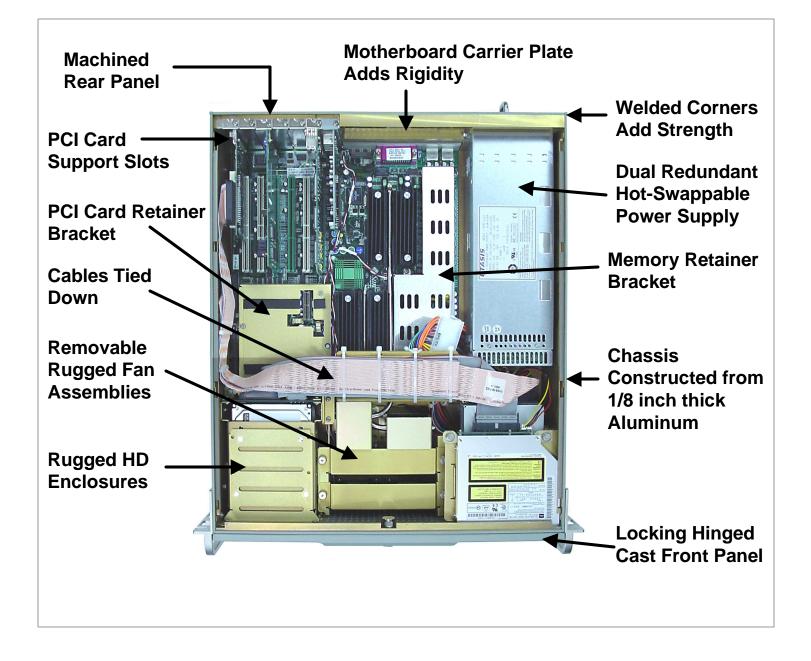
- Suspend to RAM and Wake-on-LAN system management
- Modular design for easy upgrade and service
- Optional rack-mount slides
- Zero-Channel RAID Support
- Linux, Windows®, and Solaris® Support
- High Definition 7.1 Channel Audio
- IPMI v2.0 support
- Front panel incorporates the following:
- Up to Five (5) removable Ultra320 SCSI or SATA-2 Drives - DAT/DDS Tape Drive (optional)
- CD-RW/DVD-RW Drive (optional)
- Floppy Drive (optional)
- Status LEDs, reset switch
- Airflow direction: Front to Rear
- Operating Shock: up to 25G @ 20 ms (MIL-901D)¹
- Operating Vibration: 0.9G (rms) from 10 2000Hz¹
- Operating Temperature: 0°C 50°C
- Humidity: up to 90% non-condensing
- Dual redundant fans
- Power Supply: Dual redundant, N+1 hot swappable110/220 VAC (460 Watt) autoranging power supplies (50/60Hz, 400Hz)
- Safety: UL 1950, CSA 950
- RFI/EMI: FCC class B
- Dimensions (HWD): 3U (133 mm) x 17" (431.8mm) x 20" (508 mm)

¹when using optional solid state HDD





RES Internals – What Makes Them So Rugged?





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