

Sun Netra™ CP3260 ATCA Blade Server

UltraSPARC® T2 processor breakthrough
innovation on an ATCA blade



Highlights

- Six- or eight-core UltraSPARC® T2 processor with eight threads per core
- Chip multithreading (CMT) technology for massive throughput
- 10 Gigabit Ethernet commodity fabric lowers TCO and speeds time to market
- Extreme compute density per shelf and rack
- Machine virtualization drives radical consolidation
- Sun Netra™ Data Plane Software enables network processing
- The Solaris™ 10 Operating System (OS) for carrier grade availability
- Support for Sun's standards-based Advanced Rear Transition Modules (AdvancedRTMs) family for increased HDD density, SAN connectivity, and 10 GbE networking



An important part of Sun's continuing commitment to CMT-based computing for telecom, the Sun Netra™ CP3260 ATCA blade server is a second-generation telecom blade that meets AdvancedTCA standards and provides maximum performance for network infrastructure. A disruptive leap forward in ATCA blade performance and compute density per shelf, the Sun Netra CP3260 ATCA blade server is powered by the leading-edge UltraSPARC T2 processor and can handle numerous workloads — Control Plane, application server computing, Data Plane processing using Sun Netra Data Plane Software, media processing using mediaLib with eight floating-point units, and security processing using the built-in cryptos in each core.

Traditionally, these telecom workloads have been implemented using custom technologies such as FPGA, DSP, and NPUs in proprietary telecom form factors. When the Sun Netra CP3260 ATCA blade server is configured with LDoms machine virtualization technology, however, it can enable radical consolidation of many of these workloads using the Sun Unified Network Platform (SUN-P), a comprehensive architecture for network Control and Data Plane application development to help Network Equipment Providers (NEPs) develop and optimize solutions on Sun's telco platform.

The blade can be plugged into any of the user node slots of the Sun Netra™ CT900 ATCA blade server, or any ATCA/PICMG 3.0- and

3.1-compliant chassis. It supports the basic PICMG 3.0 system management features, functioning with the same compatibility and availability of other ATCA-compliant blades.

The Sun Netra CP3260 ATCA blade server is a single-blade solution that enables extreme compute density per shelf and rack. The server is powered by the highly integrated, low-power UltraSPARC T2 processor, with industry-leading memory capacity provided by its eight memory sockets. The server has a balanced I/O architecture through the use of new AdvancedRTM technology, which provides high-speed x8 PCIe, 10 Gigabit Ethernet, Gigabit Ethernet, and serial connections to Zone 3 in a standardized way.

Sun Netra CP3260 ATCA Blade Server Specifications

Processor options

Single-socket UltraSPARC T2 processor with eight cores and eight threads per core

Six-core processor options also available

Memory

Maximum memory: eight FB-DIMM memory sockets for 32 GB, dedicated CF-2 slot for high-capacity Flash memory up to 16 GB

4 MB L2 cache

I/O expansion

One AdvancedRTM I/O slot with AdvancedTCA system management and hot-swap support

The following modules are available from Sun:

- XCP32x0-RTM-HD-Z
Dual 146-GB SAS drives, 2-SAS egress, 1 GbE, one serial
- XCP32x0-RTM-FC-Z
Dual 4-Gbps FC HBA, 7 GbE, one serial (available early '08)
- XCP32x0-RTM-NT-Z
Dual 10 GbE, 3 GbE, one serial (available early '08)

Networking

Eight Gigabit Ethernet channels: two channels for base fabric (1 GbE — PICMG 3.0), two channels for extended fabric (10 GbE — PICMG 3.1, Option 9), three channels for Zone 3 (1 GbE — AdvancedRTM implementation-specific), one channel for front panel (1 GbE), one RS-232 serial port routed to the front and rear, two USB ports routed to the front panel

Operating system

Solaris 10 Operating System

System

Advanced Rear Transition Modules (AdvancedRTMs)

Sun Netra CT900 ATCA blade server 1 GbE and 10 GbE NEBS Level 3-certified systems

Contact Sun for third-party system qualification

Data Plane software

Sun Netra Data Plane Software Suite 11/07

Management software

Sun Netra™ ATCA System Management

High-availability software

Sun Netra™ High Availability Suite 3.0

PICMG compliance

The Sun Netra CP3260 ATCA blade server is compliant with PICMG 3.0 R2 and PICMG 3.1 Option 9 and can be plugged into any of the user node slots of the Sun Netra CT900 ATCA blade server — or any ATCA/PICMG 3.0- and 3.1-compliant chassis

Dimensions

Single-slot ATCA (PICMG 3.0)

Height	322.25mm, 8U
Depth	280mm
Width	30mm

Environment

Operating temperature	5° to 40° C (41° to 104° F) 5–85% relative humidity, noncondensing; short term -5° to 55° C (23° to 131° F) 5–90% relative humidity, noncondensing, but not to exceed 0.024 kg water/kg dry air (0.053 lb. water/2.205 lbs. dry air)
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Learn More

To learn more about the Sun Netra CP3260 ATCA blade server, go to: sun.com/netra, sun.com/netra/cp3260, and sun.com/atca

Nonoperating temperature	-40° to 70° C (-40° to 158° F), up to 93% relative humidity, noncondensing, 38° C (100.4° F) maximum wet bulb
Cooling	Available upon request
Seismic	Meets GR-63-CORE requirements for earthquake risk, Zone 4
Measured power	8 C/16 GB memory, no AdvancedRTM 200 W

Safety and ergonomics

- cULus 60950, CSA C22.2 No. 60950, CB Scheme-IEC 60950 with all national differences, EN60950 (CE), GOST-R
- Regulatory compliance: Class A FCC, CE, VCCI, BSMI, C-Tick, MIC, GOST, S-MARK
- Telecom environment certification: Telcordia SR 3580, NEBS Level 3

Warranty

One year, return to Sun

Sun Customer Ready program

Factory integration and testing with Sun and third-party components for fast, low-risk deployment