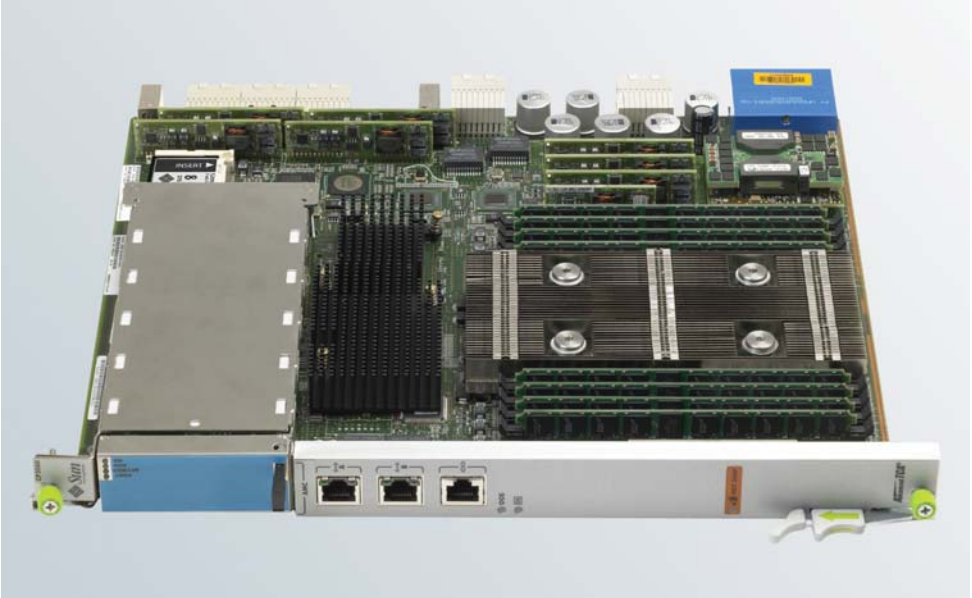
Netra™ CP3060 UltraSPARC® T1 ATCA Blade



Highlights

- Four-, six-, or eight-core UltraSPARC® T1 processor with four threads per core
- Three MB L2 cache
- Four DDR2 memory channels for maximum thread utilization
- Eight DDR2 DIMM sockets supporting configurations up to 16 GB
- Flexible I/O with AMC I/O and RTM expansion
- CompactFlash socket to support high-capacity user flash
- ATCA management support using a Pigeon-Point IPMC providing redundant Intelligent Platform Management Interface (IPMI)

The Netra™ CP3060 UltraSPARC® T1 ATCA Blade features Sun's latest UltraSPARC T1 multicore processor, supporting chip multithreading, built-in security facilities, and the multiple high-speed interconnect fabrics needed for next-generation network computing on Zone 2 (PICMG 3.0/3.1), Zone 3 (RTM), and AMC (AMC.1 and.3). The blade may also be preintegrated and validated with the Netra™ CT 900 ATCA system and the Netra™ System Management and High Availability software suites—a complete system solution speeding time to market.

A unified architecture for ATCA

Network equipment providers (NEPs) face the challenge of providing customers the ability to increase average revenue per user, rapidly deploy, and reduce OPEX/CAPEX. These needs drive NEPs from traditional proprietary systems to COTS-based solutions. The move to COTS is frequently complicated by the difficulty of managing and integrating multivendor components and different software using a bifurcated architecture. The Netra CP3060 UltraSPARC T1 ATCA Blade allows NEPs to leverage ATCA standards and chip multithreading (CMT) technology to create a unified architecture for both Control Plane and Data Plane functions. Scaling performance with threads eliminates costly memory sprawl within network elements and is a unique benefit of the blade.

ATCA performance scaling

Using the ATCA packet-switched interconnect, applications can also vertically scale within a shelf or even a rack. With 32 threads per blade and an available 12 payload slots per shelf, users will have 384 execution units per shelf and 1,152 execution units per rack.

With the Netra CP3060 UltraSPARC T1 ATCA blade, NEPs can now develop common platform ATCA solutions. A unified architecture and scalable execution-unit performance allows for sustainable software, single FRU strategy, stable OPEX/CAPEX model, and simplified system management.

Netra CP3060 UltraSPARC T1 ATCA Blade Specifications

Processor options

- Four-core, six-core, eight-core UltraSPARC T1
- One GHz per core
- Four strands (threads) per core

Main memory

- DDR2—up to 16 GB
- Four GB configurations-four VLP DDR2 DIMMs, four x one GB over two memory channels
- Eight GB configurations-eight VLP DDR2 DIMMs, eight x one GB over four memory channels
- 16 GB configurations-eight VLP DDR2 DIMMs, eight x two GB over four memory channels

Cache

- 16 KB instruction cache
- Eight KB data cache
- Three MB L2 cache

Network

- Dual 10/100/1000Base-T Ethernet base fabric interfaces
- Dual SERDES interface as extended fabric (10/100/1000Bx)

System management

Memory Chipkill-Correct (RAID-M)

Thermal management; low power mode, throttling, thread control

PICMG 3.0 base specification (dual IPMI for shelf management communications)

Two asynchronous serial ports RJ-45

Front panel LEDs; three LEDs, plus hot-swap status LED

Netra System Management Software Suite, OpenHPI, Netconsole, SNMP, etc.

I/O expansion

- AMC.3 SATA with Qualified 80 GB AMC Hard Drive
- Qualified eight GB Compact Flash
- x8 PCI-E (AMC.1)
- x8 PCI-E (RTM)
- RTM with one asynchronous serial port RJ-45 and one 10/100BaseT port

Operating systems and tools support

- Solaris™ 10 OS
- Sun Studio 11; optimizing compilers, graphical debug, Dprofiler
- CoolTools for UltraSPARC T1: Trace, tuning, optimize, etc.

CT900 platform software validation

- Netra™ System Management Suite
- Netra™ High-Availability Suite

Dimensions

- Single-slot ATCA (PICMG 3.0)
- Height: Eight-U, 322.25mm
- Depth: 280mm
- Width: 30mm

Environment

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

Nonoperating temperature: -40°C to 70°C

(-40°F to 158°F), up to 93 percent relative humidity noncondensing, 38°C (100.4°F) max. wet bulb

Learn More
For more details about Netra CP3060 UltraSPARC ATCA Blades, visit: sun.com/atca.

Acoustic noise: Declared noise emissions in accordance with ISO 9296: 7.0 B (operating and idling)

Cooling: Available upon request

Seismic: Meets GR-63-CORE requirements for earthquake risk Zone 4

Measured power: 8 C/16 GB memory, no AMC ~ 135 W

Safety and ergonomics

cULus, TUV GS, CB scheme with all national differences CE, CCC, GOST R, S-MARK

UL/CUL-UL 60950, CSA C22.2 No. 950 CB Scheme-IEC950 with all country deviations, TUV GS-EN60950 (CE) and EN29241 Ergonomics GOST R

Regulatory compliance: Class A FCC, CE, VCCI, BSMI, C-Tick, MIC, CCC, GOST

Telecom environment certification: Telcordia SR 3580, NEBS Level 3

Warranty

One year, return to Sun

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