

UltraSPARC® T2 cPCI Processor Blade



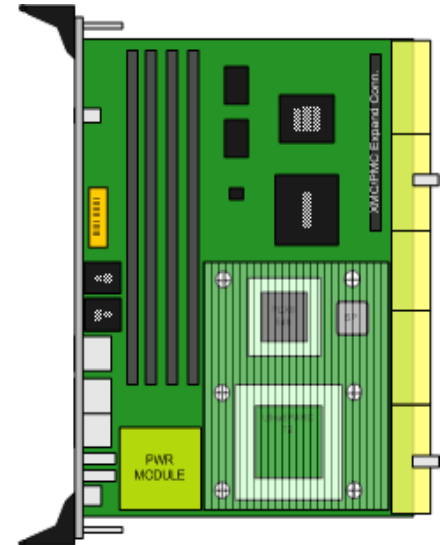
Product Datasheet - PRELIMINARY

ComputeNode™
Carrier-grade cPCI solutions

PDSi's **Sun-based CompactPCI UltraSPARC T2 Processor Blade (CPT2-S1)** provides a robust, high-performance general purpose compute platform for use in CompactPCI PICMG 2.16 compliant systems. This latest addition to PDSi's **ComputeNode™** family of carrier-grade CompactPCI solutions is built around the UltraSPARC® T2 architecture from Sun Microsystems, including a multi-threaded multi-core processor and server-grade chipset supporting fully-buffered DDR2 memory. This powerful blade offers the absolute highest performance and dependability in its class and provides a continuation platform for OEMs previously using CP2140 / 2160 SPARC blades from Sun.

The ComputeNode CPT2-S1 blade occupies two chassis slots and includes four memory sockets for up to 16GB of main memory. Two 1000Base-T Ethernet ports provide the PICMG 2.16-compliant fabric interfaces, and an optional on-blade USB Flash drive. Rear I/O is compatible with existing Sun CP2140 / 2160 RTMs.

The CPT2-S1 blade provides a convenient upgrade path for previous generations of SPARC-based OEM CompactPCI systems and applications. Extended availability from PDSi is assured as key components are supported by embedded roadmaps. PDSi can also provide customization, turnkey integration and support of cPCI systems, as well as extended warranty and repair services.



Key Features

- Server-grade CompactPCI compute blade
 - UltraSPARC T2, 1.0GHz, 4 cores, 32 threads
- Up to 16GB fully-buffered DDR2 667 memory
- 2 x 1Gb Ethernet links (Front panel)
- 2 x USB 2.0 (Front panel)
- Rear I/O interfaces
- Optional USB flash drive
- IPMC management
- Extended availability assured

The ComputeNode Family

PDSi's ComputeNode platforms are trusted by OEMs and ISVs to deliver mission critical solutions across the globe.

Typical applications include:

- Telco Servers
- Gateways
- Security Platforms
- VOIP Servers
- Network Controllers
- Digital Transcoding Systems





Processors	Sun UltraSPARC T2 <ul style="list-style-type: none"> o 4 core o 32 threads
Chipset	Sun proprietary
Memory	4 DIMM sockets (667 MHz) Up to 16GB DDR2 fully-buffered memory
NV Storage	Optional USB uDOC Flash drive, up to 8 GB
Serial	COM1 front, COM 2 to rear I/O
Expansion I/O	TBD

Front Panel - Standard

Ethernet	2 - Gigabit Ethernet RJ-45 ports
USB	2 - USB 2.0 Type A ports
LEDs	Hot-swap, OK, Alarm LEDs
Serial	1 - Serial RJ-45 port (COM1)

Rear I/O - Standard

USB	2 - USB 2.0 ports
Serial	COM2 port
PCI-e	1- PCIe x4
SATA/SAS	2 - SATA II ports/ 2 SAS ports
Network	1 – 10GbE XAUI
Other	IPMI, SMBus

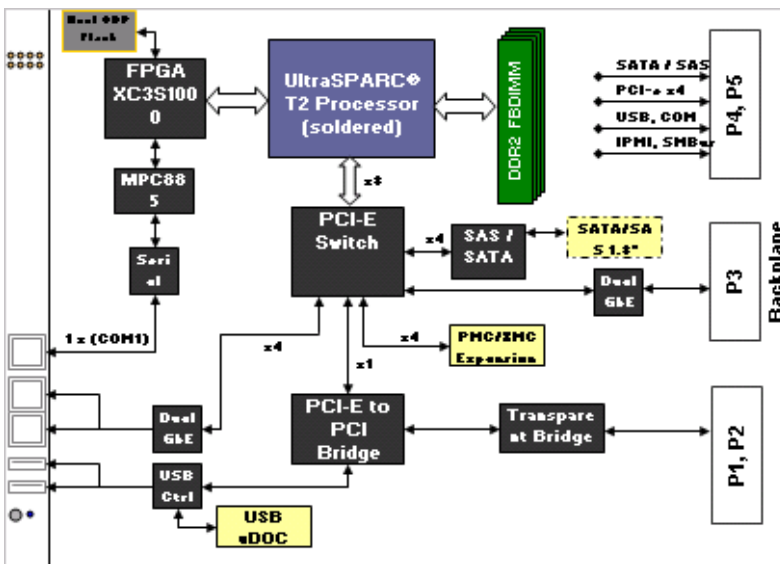
Switched Fabric Interface

Gb Ethernet	2 - 1000 Base-T
Compliance	PICMG 2.0, Rev 3 CompactPCI (Power and Form Factor only) PICMG 2.1, Rev 2 hot-swap PICMG 2.9, Rev 1 IPMI System Mgmt. PICMG 2.10, Rev 1 Keying of cPCI Board and Backplane PICMG 2.15, Rev 1 PCI Telecom Mezzanine/Carrier Card PICMG 2.16, Rev. 1 Compact PCI Packet Switched Backplane RoHS Directive 2002/95/EC
Operating Systems	Solaris 10 (SPARC)

Form Factor/ Dimensions	6U / 8HP board 160mm(D) x 233mm(H) x 40mm(W)
Temperature	Operation : -5 to 55 degC
Humidity	5% - 90% non-condensing



Block Diagram



Ordering Guide

CPT2- S1- **X** - **X** - **X** 6U cPCI UltraSPARC® T2 CPU Blade with:

USB Flash Storage

- 0 none
- 1 1 GB
- 2 2 GB
- 3 4 GB
- 4 8 GB

Memory

- A 4x2GB DDR2 667MHz Fully-Buffered DIMM
- B 4x4GB DDR2 667MHz Fully-Buffered DIMM

Processor

- 4 4 Core UltraSPARC T2