



T2VPX 6U VITA-46 Board Level Computer

Based on the Sun UltraSPARC T2 Processor

Preliminary Product Brief

Themis Computer's T2VPX™ is the industry's first Sun® Microsystems T2 multiprocessor-based board to utilize the VITA-46 (VPX) and VITA-65 backplane standards. VITA-46 is a new industry standard that brings high-speed serial fabrics to the most demanding environments.

The T2VPX is based on the UltraSPARC® T2 processor, bringing the highest core and thread count processor technology to demanding applications. The T2VPX will be offered with 6 or 8 core processors.

The T2VPX continues Themis' legacy of bringing the Sun Solaris™ OS to demanding applications. Featuring a new system architecture with up to eight processor cores and 64 threads, three 10 Gigabit Ethernet, on-chip wire-rate crypto units, on-board HDD support and nine front panel I/O ports, the T2VPX is designed to provide the industry's best data bandwidth and server class I/O.

The T2VPX is ideal for compute-intensive, multi-threaded military and aerospace applications requiring rugged computing solutions – up to 30G shock, and high bandwidth IO Fabrics.

T2VPX Features and Specifications

<ul style="list-style-type: none"> ▪ Processor: UltraSPARC T2 6/8 Core processor ▪ Memory: Up to 32GB ECC DDR2 ▪ Includes CPU independent Board Management Controller (Service Processor Module) ▪ Storage: On-board HDD support ▪ IPMI support <p><u>Operating System Support</u></p> <ul style="list-style-type: none"> ▪ Solaris® 10 Operating System, Solaris 8/9 in containers <p><u>Backplane Slot Configuration</u></p> <p>2 x 6U slots</p>	<p>Backplane I/O</p> <p>J1:</p> <ul style="list-style-type: none"> ▪ Ch A: 10GigE or GigE ▪ Ch B: 10GigE or GigE ▪ Ch C: x4 PCIe or GigE ▪ Ch D: x4 PCIe or GigE <p>J2: Two x4 PCIe</p> <p>J4: Two GigE</p>	<p>Front Panel I/O</p> <ul style="list-style-type: none"> ▪ One 10 GigE ▪ Four GigE ▪ Two USB 2.0 ports ▪ One 4x SAS port ▪ Serial Console port
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Environmental

Parameter	Air Cooled
Operating ¹ Temperature	0°C to 55°C
Non-Operating Temperature	-40°C to 85°C
Operating Humidity	0 to 95% Non-condensing
Non-Operating Humidity	0 to 95% Condensing
Vibration ²	2G rms 10-2k Hz
Shock ³	30G peak, 20ms

1. Air Cooled: Standard airflow is 8 cfm at sea level. Some products will require different airflow.

2. Vibration profile provided upon request. Test level applied for 1 hour each axis.

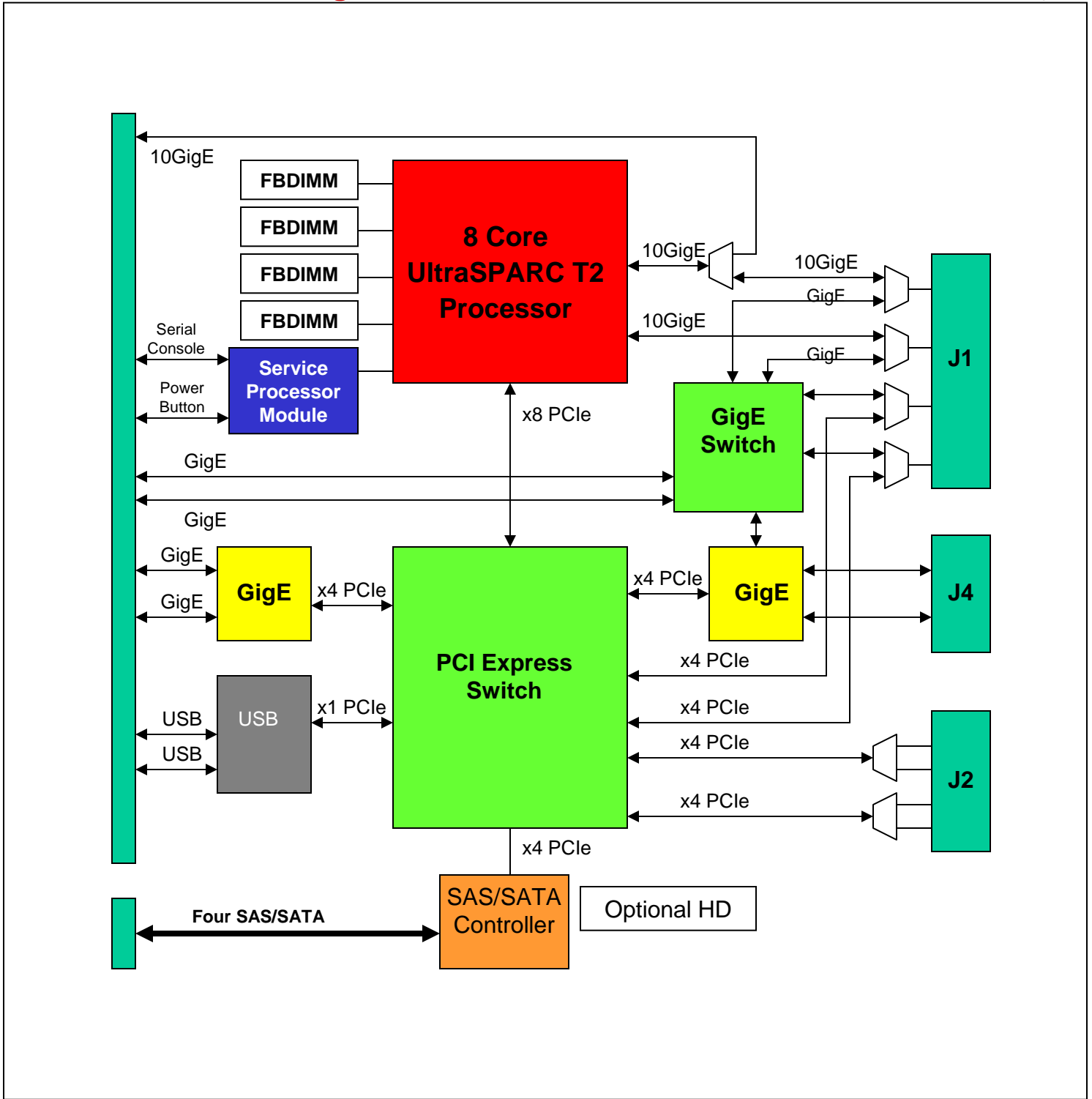
3. 30G, 20ms, 3 pulses each axis.

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Please contact your Themis sales representative if the standard specifications for the VP31 does not meet the requirements for your application.

T2VPX Block Diagram

Preliminary



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