USPIIe Compact PCI Single Board Computer

Hot-swappable cPSB Compliant
650 MHz UltraSPARC IIe Performance

The USPIIe-cPCI™ is a cPCI-based single-board computer that builds on Themis' highly successful USPIIe product base. Themis Computer combined it's USPIIe technology with new CompactPCI® (PSB) standards to provide Solaris users the next generation solution for their demanding applications.

Second Generation UltraSPARC Performance on CompactPCI

Themis' USPIIe-cPCI 6U form factor cPCI single-board computer features a full set of I/O, including a PMC expansion slot, in a single-slot cPCI form factor. The USPIIe-cPCI will support up to seven peripheral slots on a cPCI compliant 64-bit/ 33MHz/5V expansion bus.

The USPIIe-cPCI is a cPCI backplane/midplane (cPSB) control processor that complies with PICMG 2.0 R3.0 cPCI specification, PICMG 2.1 R1.0 cPCI Hot Swap Specification, and meets the requirements set forth in the PICMG 2.16 D0.9.1 cPCI Packet Switching Backplane (PSB) specification.

The USPIIe-cPCI provides new levels of performance and features to UltraSPARC SBCs. Now users have an ideal solution for voice-over-IP (VoIP), third generation wireless and switch-fabric applications.

USPIIe-cPCI Features

- 550/650 MHz Ultra-IIe Processor, 256KB L2 Cache
- Up to 2GB of SDRAM Memory
- 2 MB Boot Flash and 8 MB User Flash
- 2x 10/100 Mb/s Ethernet channels
- 4x Serial channels (2x RS-232, 2x TTY)
- Bi-Directional Parallel Port
- Two-level Under Voltage / Over Temperature Monitoring

- Keyboard & Mouse Ports (PS/2 or USB)
- 2x Ultra2 LVD SCSI channels (80MB/s transfer rate each)
- PMC Slot (64-bit/33 MHz)
- 4x USB Ports (2 front and 2 rear ports)
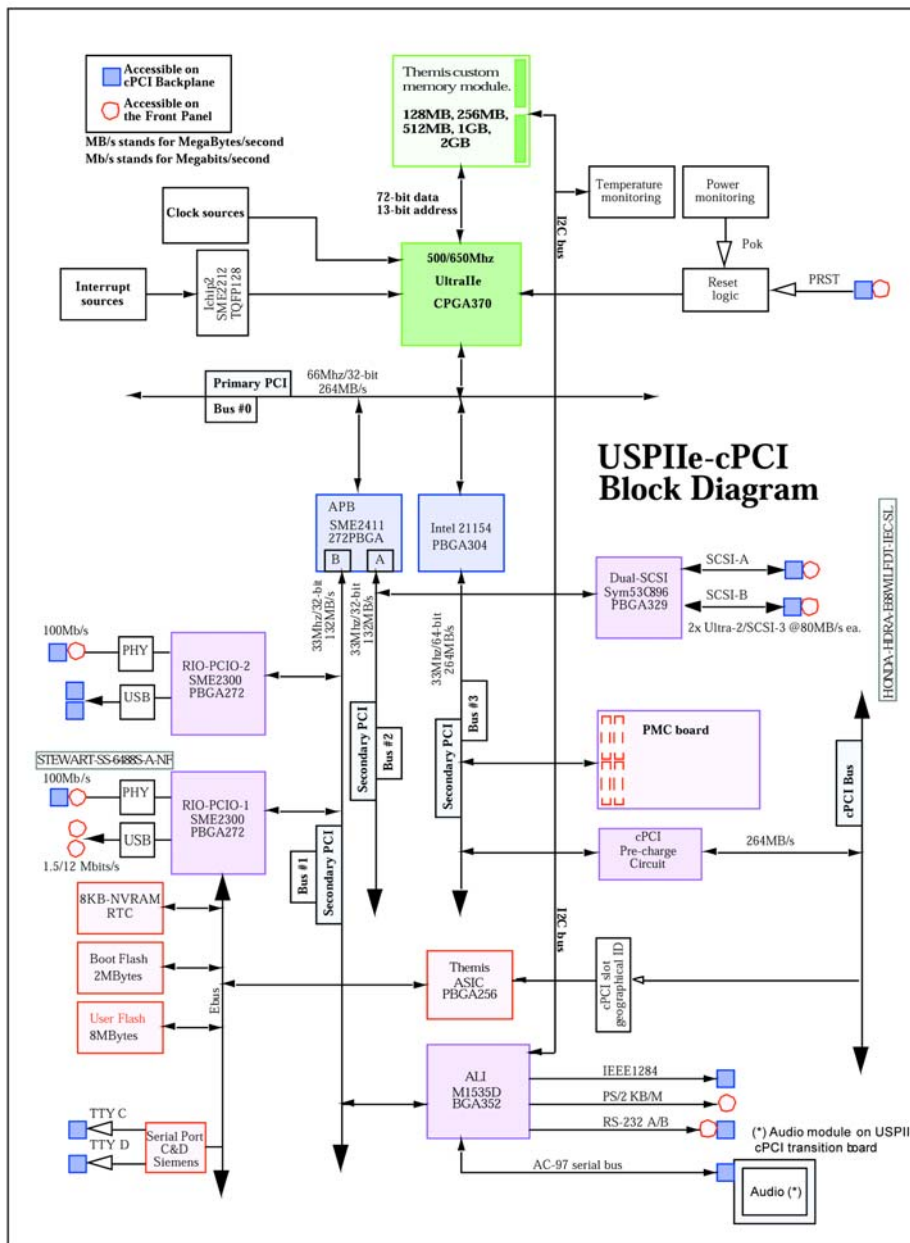- AC-97 Audio Port
- RTC-TOD/8K NVRAM

Specifications

- 6U Single-slot cPCI Form Factor
- PCI Interface (cPCI and PMC) – 64-bit/33MHz
- Front panel I/O includes the following interface connectors:
  - 2x Ethernet ports (8-pin RJ45)
  - 2x RS-232 Serial ports (9-pin hi-density mini-D type)
  - 2x 80MB/sec Ultra2 LVD SCSI ports
  - 1x Keyboard/Mouse ports, PS/2 or USB type (8-pin circular mini-DIN)
- Solaris 8 Operating Environment Support

- Shock (Operating): up to 30 G @ 20 ms
- Vibration (Operating): 0.5g from 4 – 50Hz (Non-Operating) 1.0g from 4 – 50Hz
- Temperature Range (Operating): 0 - 55°C
- Temperature Range (Non-Operating): -40 - 85 °C
- Humidity: 10 – 95% non-condensing
- Power Reqts.: +5V (± 5%) @ 5.4 Amps maximum
- Power Consumption (base): 22 Watts
- Power Consumption (with PMC): 27Watts
- Dimensions (HxD): 6U 9.173" (233mm) x 6.299" (160mm)
- Weight: approx. 1.34 lbs. (weights vary by board configuration)

Complies with PICMG 2.0 R3.0 cPCI Specifications
Complies with PICMG 2.1 R1.0 cPCI Hot Swap Specifications
Meets PICMG 2.16 D0.9.1 cPCI Packet Switching Backplane requirements

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USPIIe-cPCI Block Diagram

Part Numbers USPIIe-cPCI/AAAA-BBB-C

AAAA = Memory	0256 = 256MB RAM	C **= Keyboard**	P = PS/2
	0512 = 512MB RAM		S = USB
	1024 = 1024MB RAM		
	2048 = 2048MB RAM	**Ejector Type**	VME64 with cPCI type latches
BBB = Frequency	550 = 550MHz		
	650 = 650MHz		

I/O Transition Module with cables   INT-KIT-USPIIe-cPCI

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