



- Intel® 700MHz Pentium®III Processor-M, 256KB L2 cache
- Intel®440GX Chipset with 100MHz FSB
- Up to 512MB ECC SDRAM
- PCI Video with 2MB SDRAM
- Two Fast Ethernet Interfaces and PMC Site
- Two StarFabric Links
- Optional Onboard 2.5" Ultra DMA/33 EIDE Drive
- 6U x 4HP, Operates in System or Peripheral Slots
- PICMG® 2.16, 2.17, and 2.1 R2.0 Compliant

Diversified Technology's low cost cPB-4311 CompactPCI® processor blade, compliant with the PICMG® 2.16 packet switched backplane (PSB), 2.17 StarFabric, and hot-swap open standards, addresses the low cost, low power processing needs of Internet, telecom and industrial control applications.

The cPB-4311 comes with a low power, 700MHz Intel® Pentium®III processor with 256KB L2 cache, 440GX chipset with 100MHz front side bus, and up to 512MB ECC SDRAM. Onboard are two 10/100Mbps/sec Ethernet auto-negotiating controllers, optional Ultra DMA/33 IDE hard drive, 32-bit/33MHz PMC site, PS/2 keyboard and mouse interfaces, Universal Serial Bus (USB), serial and parallel ports, floppy interface and a SVGA CRT controller. A StarGen SG2010 bridge provides links to dual StarFabric meshes whereas the two Ethernet controllers provide the links to the 2.16 PSB. An IDE-compatible CompactFlash™ carrier is available on the optional cRT-4311 rear I/O transition module.

The cPB-4311 does not have a PCI bridge to the CompactPCI backplane. As such, it can be used in either system or peripheral slots of a CompactPCI platform. The cPB-4311 supports being hot-swapped and automatically performs proper operating system shutdown upon opening of the ejector latch (requires ACPI compliant operating system).

Part of DTI's PlexSys family of CompactPCI PSB products, the cPB-4311 operates in PICMG 2.16-compliant systems. Also included are a system monitor (voltages and CPU/board temperature) and a 2-year limited warranty.

Low cost and standards-based, Diversified Technology's cPB-4311 system/peripheral processor blade is the unique choice for application developers addressing embedded clustering and media gateway markets.



SPECIFICATIONS

CPU / Cache

- Intel Low Power (BGA2) Pentium III at 700MHz
- 32KB internal L1 cache; 256KB 64-bit on-die L2 Cache
- Intel 440GX Chipset

Bus Interface

- 100MHz Front Side Bus
- Supports onboard 32-bit/33MHz PMC card

Memory

- One 168-pin right-angled socket for up to 512MB registered PC100 ECC SDRAM

Data Path

- 64-bit/100MHz on CPU and memory bus
- 32-bit/33MHz on onboard PCI bus
- StarGen SG2010 dual mesh StarFabric bridge

Flash Memory

- 4Mb (512KB) Sector Flash for BIOS field upgrade

Peripherals & I/O Interface

- Optional 2.5" EIDE drive mounted on board
- Optional CompactFlash Type II drive carrier on rear I/O module
- 32-bit/33MHz IEEE P1386.1 PMC socket
- Hot Swap LED on front panel

I/O Interface	Front Panel	Rear Panel
COM 1	N/A	J3
COM 2	N/A	J4
LPT 1	N/A	J4
USB 0	N/A	J4
USB 1	4-pin USB	N/A
SVGA	15-pin D-shell	N/A
PS/2 K/M	6-pin combo	J4
Primary EIDE	2.5" HD (50-pin)	N/A
Ethernet A	N/A	J3
Ethernet B	N/A	J3
Secondary EIDE	N/A	J4

* Note: J4 is not available if cPB-4311 is to be used in H.110 slot.

Clock / Calendar

- Real-time clock with 256 byte battery backup CMOS RAM

Supervisory

- System monitor (LM87): voltages, CPU/board temperatures

Interoperability

- Validated to operate in PICMG 2.16-compliant and 2.17-compliant system platforms
- DTI's cSB-4240 24-port level 2/3 Ethernet Switch Blade
- 3rd party CompactPCI PSB products

OS Compatibility

- General: Windows® 2000/XP/NT; Red Hat/MontaVista™ Linux®; Solaris™ 7/8; UnixWare® 2.1.1/7.1.1; QNX®

BIOS

- Phoenix core; PCI 2.1, ACPI Rev 1.0b and SMBIOS 2.3 compliant
- Serial console redirection, peripheral enable/disable, quick/multi- boot, PXE 2.0 boot from ROM
- Software enable/disable of onboard Ethernet, 2.17 link disable
- Legacy USB support
- Advanced thermal management

Mechanical

- 9.2" x 6.3" x 0.8" (233.35 mm x 160 mm x 20.32 mm)
- 6U x 4HP
- Conforms to PICMG 2.0 R3.0 (Core), 2.1 R2.0 (Hot Swap), 2.16 R1.0 (PSB), and 2.17 R1.0 (StarFabric) Specifications

Power Requirements

Input Power	24W	
ICC typ. *	+5V	3.0A
	+12V	10mA
	+3.3V	2.6A

*Measured with 700MHz CPU and 512MB memory

Environmental

Operating

- Temperature: 0° to 50°C / 32° to 122°F
- Humidity (RNC): 5 to 95% @ 40°C / 104°F
- Altitude: 4,572m / 15,000ft
- Shock: TBD
- Vibration: TBD

Storage and Transit (w/HD)

- Temperature: -40° to +65°C / -40° to 149°F
- Humidity (RNC): 0 to 95% @ 40°C / 104°F
- Altitude: 15,240m / 50,000ft
- Shock: TBD
- Vibration: TBD

Reliability & Serviceability

- MTBF: 14.6 years
- MTTR: 3 minutes, plus system startup (hot swap system)
- SMBIOS serial number
- 2 year limited warranty

Regulatory Compliance (currently pending)

- CE Certification
- Safety: UL/cUL 60950; EN/IEC 60950; CB Report Scheme CB Certificate and Report
- EMC/EMI: FCC 47 CFR Part 15, Subpart B, Class A; EN55022, EN50081-1/CISPR22; EN55024

Ordering Information

cPB-4311/700

2.16 Processor Blade with 700MHz Pentium III processor

cPB-4311/700-T

2.16/2.17 Processor Blade with 700MHz Pentium III processor without J4 connector

Options

- cRT-4311P 6U x 4HP Rear I/O Transition Module for PSB backplanes
- cRT-4311 6U x 4HP Rear I/O Transition Module for non-PSB backplanes
- PC100 ECC SDRAM
- 2.5" EIDE HD
- CompactFlash media
- Cables



All products are shipped FOB factory (MS).
Specifications subject to change without notice.
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