CPCI-735/736 'Universal-Mode' Mobile Pentium III Processor-based Single Board Computers



CPCI-735/736 SBCs offer the fastest Embedded Roadmap Pentium III processor, along with Force's SENTINEL Universal PPB technology.

- Telecommunications
- **Datacommunications**
- Industrial Control
- **■** Government

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Features

- Force's award-winning SENTINEL PCI-to-PCI bridge (PPB) technology—for implementing a single board computer (SBC) in either the system or peripheral slot of a host CompactPCI platform ("universalmode" capability)
- Mobile Pentium III 700MHz processor fastest available processor on Intel's embedded roadmap
- 64-bit local bus (via PMC slot) for Gigabit Ethernet, Fibre Channel or other high-bandwidth, data-intensive I/O requirements
- 1GByte of ECC-protected SDRAM (option to 2GBytes)
- 32MBytes onboard IDE FlashDisk memory (option to 64MBytes)
- System management functionality (IPMI compliant)
- Full Hot Swap specification compliance (PICMG 2.1, R2.0)
- Dual PCI mezzanine card (PMC) and 10/100 Ethernet interfaces
- 133MHz front side bus (FSB) ready design
- PICMG 2.16 draft specification support for Compact Packet-Switching Backplane (cPSB) applications (CPCI-736 only)

Highlights

The CPCI-735 SBC is the third product in Force's line of "universal-mode" CompactPCI SBCs. The CPCI-736 SBC is the first in Force's new CompactPCI server blade family for Compact Packet-Switching Backplane (cPSB) systems. As the first SBC supporting the PICMG 2.16 draft specification, the CPCI-736 is ideal for emerging switch-fabric applications and for building-block solutions such as Force's Centellis CO 21000-12U series platform. Force's SENTINEL PPB technology enables system or peripheral slot functionality on one platform—a capability not available on any other Pentium III 700 MHz processorbased SBC. The CPCI-736 provides an ideal solution for third-generation (3G) wireless, voice over Internet protocol (VoIP) and other demanding telecom/data comm applications. The CPCI-735 and CPCI-736 offer the highest performance processor on Intel's embedded roadmap with planned scalability for up to 1GHz performance.

'Universal-Mode' Mobile Pentium III Processor-based SBCs

DATASHEET

Processor/Memory Processor

- Low Power Mobile Pentium III processor
- 500MHz or 700MHz clock frequency

L2 Cache

■ 256KBytes internal (on-die) Cache

Memory

- Up to 1GByte onboard SDRAM
- Expansion modules provide up to 2GBytes in a single slot

User Flash memory

■ Up to 4MBytes User Flash capacity

IDE FlashDisk

■ Onboard IDE FlashDisk (32MBytes or 64MBytes)

I/O capabilities

- PMC slot 1 with 32-bit PCI interface; PMC slot 2 with 64-bit/66MHz interface
- Two 10/100 Ethernet interfaces
- One USB interface
- Three COM interfaces
- Keyboard/mouse interface
- System management functionality (IPMI compliant)

CompactPCI interface

- Universal PCI-to-PCI bridge, system slot and peripheral slot, 32-bit, 33MHz
- CompactPCI universal mode (SENTINEL)

Other features

- Watchdog unit
- Optional onboard 2.5-inch ATA HDD
- Power-up ramping and in-rush current protection
- Hot Swap support, compliant to PICMG 2.1 R2.0

Power requirements

■ Max. 20W for LP Mobile Pentium III 500MHz (TBD Pentiumm III/ 700MHz)

Environmental requirements

- Operating temperature: 0° to $+55^{\circ}$ C
- Airflow: 300LFM = 1.54 m/s
- Relative humidity: 5% to 95% (non-condensing)
- Operating altitude: -300 to +3000m
- Product complies to flammability ratings according to UL-94V0
- Designed for Network Equipment Building System (NEBS) Level 3 requirements



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Force Computers is the leading designer and worldwide supplier of standard and custom systems, board-level computer platforms and services for the embedded market



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