

Bus-to-Bus Interface PMC

Cardbus/PCMCIA Adapter PMC

The Technobox Cardbus/PCMCIA-to-PMC Adapter permits use of Cardbus and PCMCIA cards in a PMC slot.

The Cardbus interface is closely modeled after the PCI standard, and Cardbus cards, if properly installed and configured, will appear to the system as a PCI device.

This Technobox product uses the Texas Instruments 1520 Cardbus to PCI bus interface chip, assuring a high degree of compatibility with off-the-shelf socket and card services software that may already be built into the operating system. Although the 1520 supports two sockets, the PMC product provides connection for only one socket.

Features include an on-board 5V to 12V DC-to-DC converter, supplying Vpp for Flash cards. Also, a Vpp/Vcc switch, controlled by the Texas Instruments 1520 controller, supports Cardbus live insertion/removal, standard hardware in the

majority of Cardbus socket controller implementations.

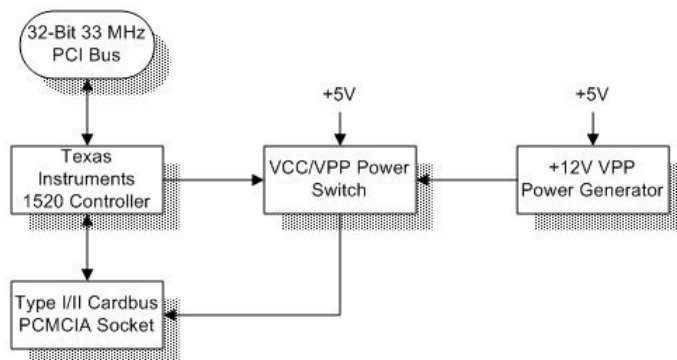
Mechanically, the Cardbus to PMC adapter has been designed to accommodate either a Type I or Type II Cardbus card without violating the IEEE 1386 component envelope (See US Patent 5984688). By positioning the plane of the Cardbus card closer to the plane of the PMC board, it is possible to operate a 5 mm thick Type II card, including rails, within the 8.2 mm total envelope dictated by IEEE 1386. Some adapter designs currently on the market ignore these mechanical constraints, so close attention should be given to the mechanics of Cardbus-to-PMC adapters when making purchasing decisions.

Although primarily designed for Cardbus, this product may also support PCMCIA cards provided that the PCMCIA card driver software does not rely on ISA interrupts and is capable of using a PCI interrupt line. This PMC product presents PCI

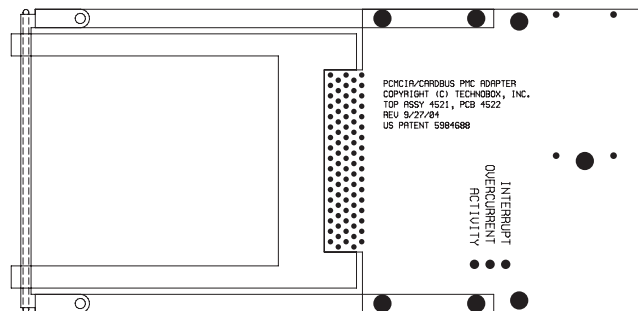
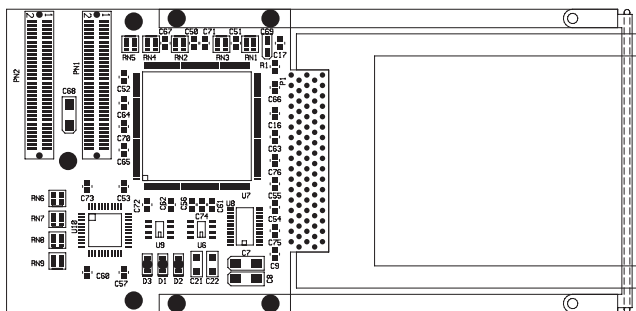


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- Supports single Cardbus card
- Live insertion and removal
- TI 1520 interface
- On-board converter provides 12 volts to support Flash cards
- Accepts Type I or II cards
- Patented design assures IEEE 1386.1 compliance (US Patent 5,984,688)
- PCMCIA card support for PCI
- Status LEDs for interrupt, activity and overcurrent status
- Windows and Linux supported
- Available as bundle with select Cardbus cards



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interrupts only, and has no access to the system's ISA interrupt signals that PCMCIA cards often require.

For static applications of Cardbus-derived PMC functions, where live insertion is not critical, the adapter provides #4-40 set screws to secure the Cardbus card in the slot.

LEDs visible from the side of the card are provided to convey interrupt, activity, and overcurrent status.

Many difficult-to-design interfaces are readily available in the CardBus form factor at a reasonable price. These include USB, IEEE 1394 (Firewire), Wireless Networking, and sound cards. Technobox provides separate part numbers for ordering these functions already integrated onto the board, although customers are welcome to do their own integration of Cardbus/PCMCIA cards.

The adapter itself is designed for Industrial Temperature (-40 to +85 C) operation. Temperature range for the installed CardBus/PCMCIA card is per the vendor's specification.

The Texas Instruments 1520 controller is supported by many operating systems, including Windows and Linux. Please contact Technobox for more information.

Specifications

Temperature (Operating): 0 to 55 C
 Temperature (Storage): -40 to +85 C
 Altitude: Not specified or characterized (Typical similar equipment is at 15,000 ft.)
 Humidity (Operating/Storage): 5% to 90% non-condensing
 Vibration: Not specified or Characterized
 MTBF: Available upon request
 Typical Power Dissipation: TBD
 Power Supplies Required: +3.3V and +5V
 PCI Environment: 5V, 32bits, 33 MHz

Ordering Information

4521 (Basic Adapter)
 4662 (4521 with Audio Cardbus card)
 4663 (4521 with 802.11g WiFi Cardbus card)
 4664 (4521 with Dual USB 2.0 Cardbus card)
 4665 (4521 with Dual 1394a Cardbus card)

