

CardBus/PCMCIA Host Adapter Controller

Features

High Performance

- Supports up to 33 MHz CardBus with peak bandwidth of 132 MB/sec
- Integrated Write Posting enhances bus performance between PCI and PCMCIA
- Built-in bus master for inter-slot transfer capability
- Supports both centralized and distributed DMA schemes
- Supports Zoom Video (ZV) standard for live video capture and playback
- Supports ZV port buffer control signal to allow dual-socket ZV port implementation

Compatibility

- Intel YENTA, Intel 365SL register set compatible
- Backward compatible with PCI Card 95, PCMCIA 2.1, and JEIDA 4.1, ExCA
- Supports ISA mode for I/O transaction filtering
- Directly upgradeable from Omega 82C094

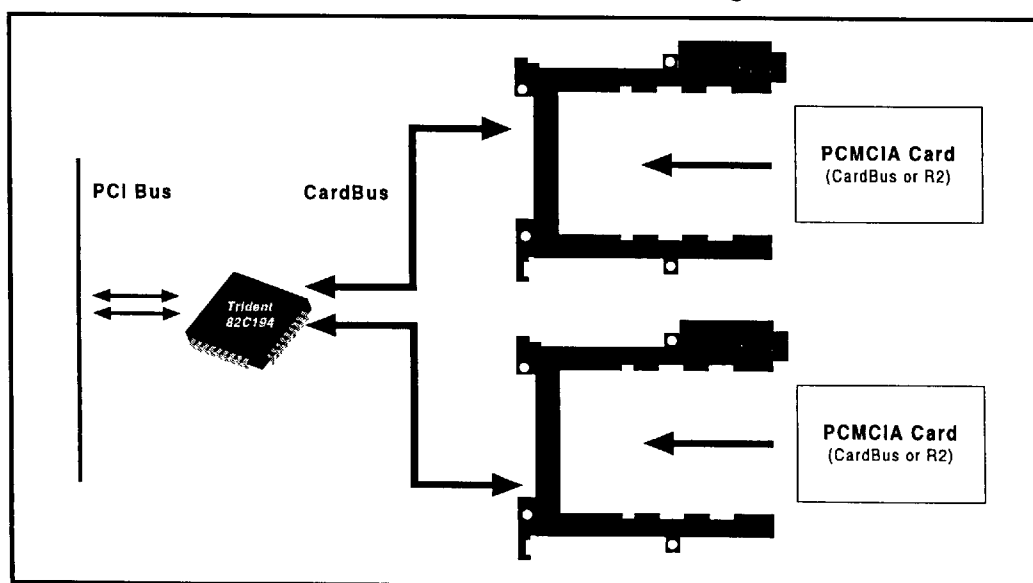
Small Form Factor

- Single chip PCMCIA host controller
- Built-in PCI-WAY, SIBP, and ISA Legacy IRQ directly support advanced PCI Core Logic
- Serial power control supports most PCMCIA power switch designs
- Direct connection to 33 Mhz PCI bus and two PCMCIA sockets without glue logic
- Companion ASIC chip for ZV buffer, serial IRQ, and power control
- 208 pin PQFP/TQFP

Power Management

- Supports PCI Mobile Design Guide CLOCKSUN# for optimized power saving
- CardBus clock frequency reduced when idle

Omega 82C194 Application Block Diagram





Omega 82C194™ CardBus/PCMCIA Host Adapter Controller

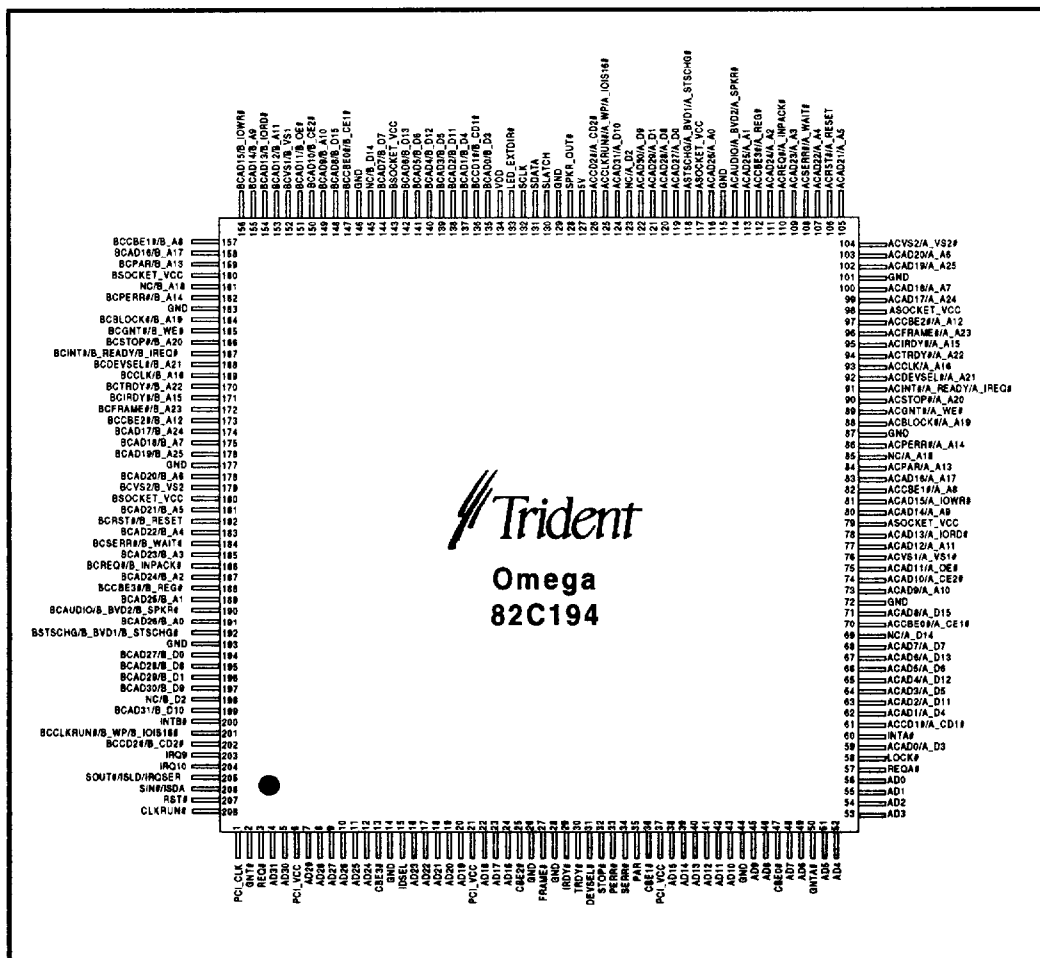
Product
Brief

Overview

The Omega 82C194 is a high performance PCI-to-CardBus /PCMCIA host adapter controller chip capable of controlling two CardBus sockets connected directly to a PCI bus. It allows the PCI bus to expand the electrical load limit while maintaining a high performance 32 bit bus master capability for CardBus PC cards. It is compatible with the YENTA register set and, to ensure application and software backward compatibility, it is fully compliant with PC Card 95 and JEIDA 4.1 industry standards.

The Omega 82C194 is optimized for use in high performance notebook and desktop computers where the support of DMA, Serial Interrupt Bus Protocol (SIBP), and

serial power control are important for advanced MPU and core logic. It supports both ISA mode and VGA mode I/O address translation to facilitate easy adoption of multimedia applications. For broadband network and MPEG video data transfer, its inter-socket transfer capability offers maximum performance. Integrated Write Posting enhances bus performance between PCI and PCMCIA. The intelligent power management provides both hardware and software power saving modes to lower chip operating power. Support of CLOCKRUN# of the PCI Mobile Design Guide allows the system clock to be adjustable for optimized power saving.



Omega 82C194 Pinout Diagram

Contact your local Trident representative for an *Omega 82C194 Technical Reference Manual*.

Trident Microsystems, Inc., 189 North Bernardo Avenue, Mountain View, CA 94043-5203. Specifications subject to change without notice.
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