ENHANCED PCI BRIDGE CONTROLLER
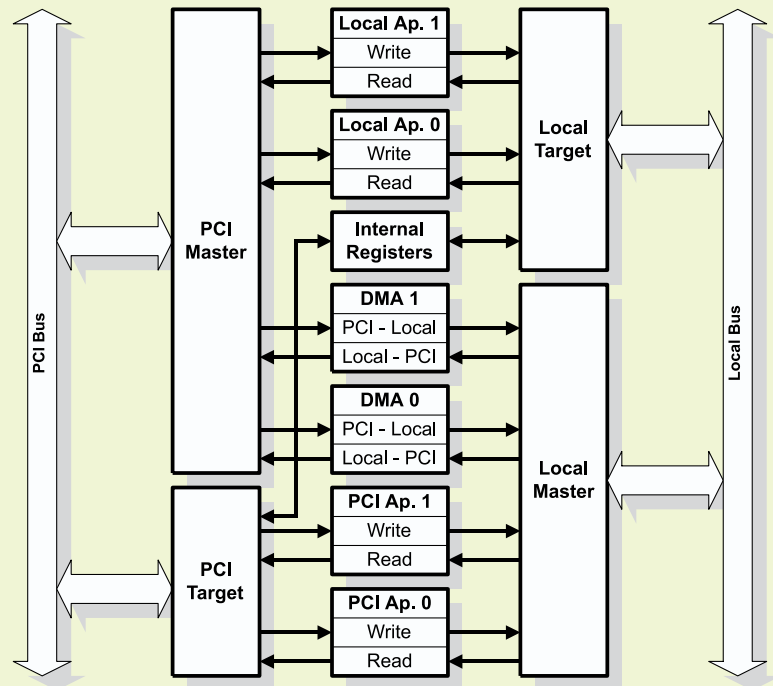
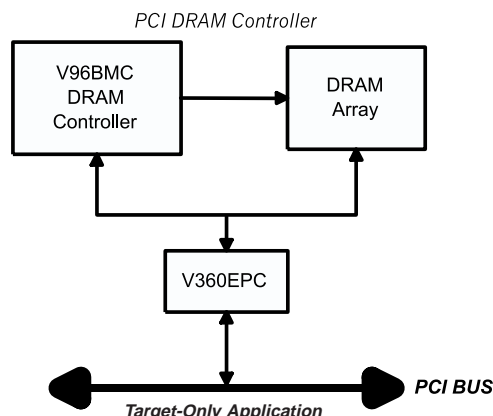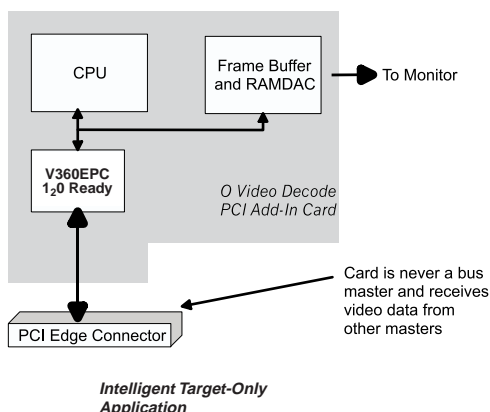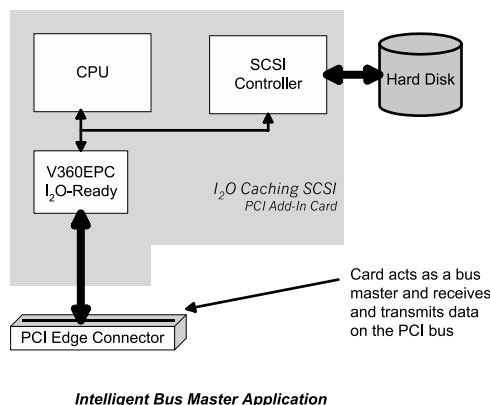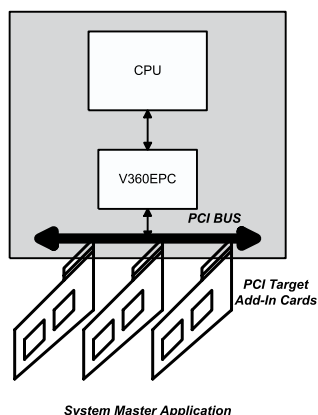### For 32-bit De-Multiplexed Address/Data Applications

BLOCK DIAGRAM

- Glueless interface to Intel's i960®Cx/Hx and AMD®29030/40 processors

- Fully compliant with PCI 2.1 specification

- Configurable for primary master, bus master, or target operation

- Type 0 and Type 1 configuration cycles

- Up to 1Kbyte burst access on PCI or local

- 64 bytes of Read FIFO per aperture

- 640 bytes of programmable FIFO with DYNAMIC BANDWIDTH ALLOCATION™

- On-the-fly byte order (endian) conversion

- Up to 50MHz local bus

- 3.3 volt support

- I2O ATU and messaging unit including hardware controlled circular queues

- Two-channel DMA plus multiprocessor DMA chaining and Demand mode DMA

- Hot Swap capability

- Enhanced support for 8/16-bit local bus devices with programmable region sizes

- 16 8-bit bi-directional mailbox registers with doorbell interrupts

- Optional power-on serial EEPROM initialization

- Support for real-mode DOS "holes"

- Low-cost 160-pin PQFP package

- Industrial Temperature Grade Design -40°C to +85°C

V3 SEMICONDUCTOR
THE EMBEDDED CHIPSET COMPANY

TYPICAL APPLICATIONS

System Master Application

Intelligent Bus Master Application

Intelligent Target-Only Application
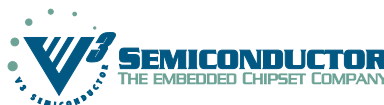

Target-Only Application

Two unique features of the V360EPC make it the highest performance PCI bridge on the market. One is the size of the FIFO structure; 640 bytes of FIFO storage gives you plenty of buffering to handle continuous transfers of large data streams without tying up the local or PCI buses. The DYNAMIC BANDWIDTH ALLOCATION™ feature of the FIFOs allows you to adjust the "draining" and "filling" of the read and write FIFOs to most efficiently meet the requirements of the data streams. You can balance your bus utilization to maximize overall system performance. The priority of reads, writes, and FIFO flushes can be independently programmed to maintain strict data coherency.

The V360EPC provides the most flexible, highest performance, and economical way to add PCI connectivity to applications like imaging and networking. Whether you're creating a system with the i960 or PowerPC CPU as the PCI master or designing an intelligent add-in card, or even a processor-less application, the V360EPC from V3 Semiconductor is the ideal choice.

ABOUT V3 SEMICONDUCTOR

V3 Semiconductor has been providing embedded systems designers with innovative products since 1987. V3 products are supported throughout North America, Europe, the Middle East and the Far East by a network of distributors and manufacturers' representatives.

For more information on the V360EPC, or our other i960® and PowerPC™ processors support components, please contact:

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