

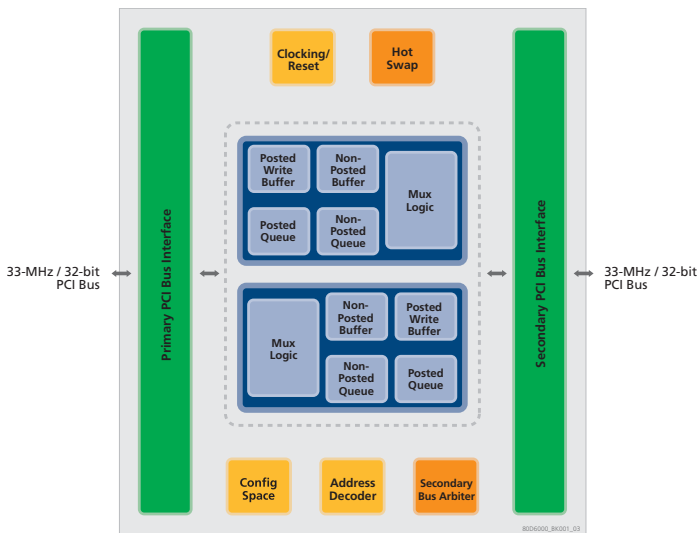
Tsi352™ PCI-to-PCI Bridge Product Brief

Device Overview

The IDT Tsi352 is a PCI-to-PCI Bridge that provides a high performance connection path between two peripheral components interconnect (PCI) buses.

Transactions occur between masters on one PCI bus and targets on another PCI bus, and the Tsi352 allows bridged transactions to occur concurrently on both buses. The bridge supports burst-mode transfers to maximize data throughput, and the two bus traffic paths through the bridge act independently.

Block Diagram



Features

- Two 32-bit, 33-MHz PCI buses
- Fully compliant with *PCI-to-PCI Bridge Architecture Specification Revision 1.1*
- Configurable for *PCI Power Management Interface Specification Revision 1.0 or 1.1* support
- CompactPCI friendly silicon as defined in the *CompactPCI Hot Swap Specification*
- Provides internal two-tier arbitration for up to four secondary bus masters and supports an external secondary bus arbiter
- Secondary bus is driven low during reset
- Provides five secondary PCI clock outputs
- Burst data transfers with pipeline architecture to maximize data throughput in both directions
- Provides programmable extension windows and port decode options
- Independent read and write buffers for each direction
- Provides VGA palette memory and I/O, and subtractive decoding

Other

- Advanced submicron, low-power CMOS technology

Physical

- 160-QFP package
- 3.3 V core logic with universal PCI interface compatible with 3.3 V and 5 V PCI signaling environments

Benefits

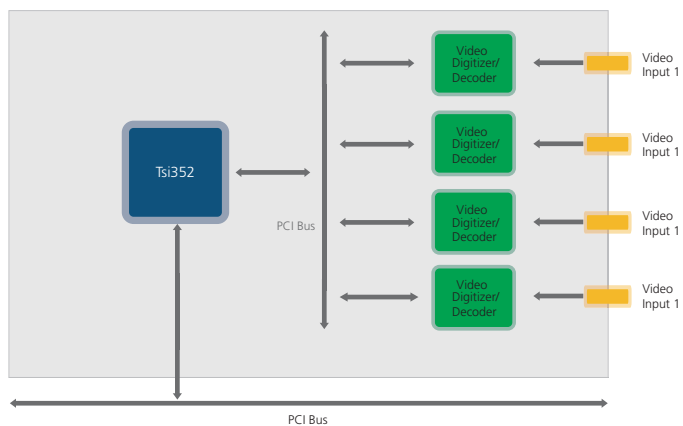
- Bus expansion and electrical load splitting
- Small foot print package making it ideal for applications with tight board real estate requirements
- Expanding the PCI bus and support more slots
- Increases system performance by supporting simultaneous upstream and downstream transactions

Typical Applications

The Tsi352 can be used in the following applications:

- Multifunction I/O cards
- Motherboards
- Consumer Networking Systems
- Industrial applications
- Back planes

Typical Application — Digital Video Recorder



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