NBS

Product Brief

PCI Target A63233T

General Description

The A63233T is a high performance 32bit, 33Mhz target only PCI interface chip which is fully compatible with the PCI 2.2 specification.

Intended for use with a wide variety of peripherals, the A6332Tsupports zero wait state for all applications and Paced Burst Mode is available to support slower peripherals.

The A63233T may be ordered with the customer's Vendor ID and Subsystem ID already programmed into the chip, thus saving board space and cost of an external EEPROM.

Applications

- High-Performance PCI IO boards
- CPCI applications
- PC104+ applications
- Industrial controllers
- FAX/MODEM concentrators
- Supervisory / maintenance terminals

Features

- High-Performance PCI Applications
  - 33 MHz Performance
  - 32-Bit PCI Bus Widths
  - Memory, I/O, and Configuration Support
- Two User-Configurable Base Address Registers for Target Functions
- Interrupt Capability
- Flexible Backend Data Flow Control
- Hot-Swap Extended Capabilities Support for Compact PCI
- Configurable Vendor / Subsystem ID
- PCI V2.2 Compliant

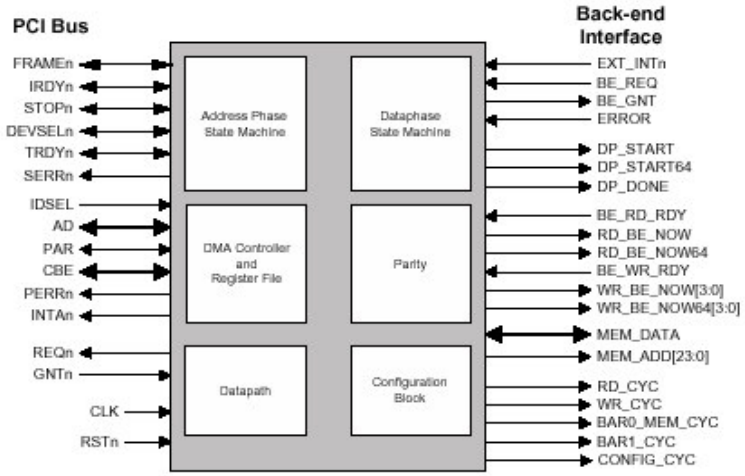
Data Transfer Rates

- Fully Compliant Zero-Wait-State Burst (32-Bit Transfer Each Cycle)
- Optional Paced Burst (Wait States Inserted Between Transfers)

Configuration Options

- Backend Support for Synchronous DRAM, SRAM, and I/O Subsystems

Functional Block Diagram



The NBS PCI Family

NBS offers a complete line of standard PCI Interface chips. The family ranges from a basic 32 bit, 33Mhz PCI Target Chip, the A63233T through to the A66466M, a 64 bit 66Mhz Master PCI device, with on board DMA control.

Selection Guide

Family	Speed/Size	Desc.
A63233T	33/32	Target
A63233TD	33/32	Target w/DMA
A63266M	33/32	Master w/DMA
A63266T	66/32	Target
A63266TD	66/32	Target w/DMA
A63266M	66/32	Master w/DMA

Customizations

Traditional semiconductor manufacturers must anticipate all applications and situations, increasing the die size (cost) and greatly escalating the complexity of their devices. Inflexible feature sets require additional design effort and ultimately additional circuitry must be added, increasing costs and complexity.

By contrast, NorthBridge Semiconductor provides the core functionalities and allows the customer to customize the design to fit their needs. This means no wasted die space (lower cost); simpler, more reliable circuitry and fewer external support parts.

NBS's innovative process technology allows us to tailor this component – or any of our components – to fit our customer's specific requirements for minimal incremental cost.

Product features and timing parameters can be modified to accommodate a wide variety of customized applications. NBS's process allows for the rapid creation of prototypes for verification and once approved, virtually no delay in the delivery of production volumes.

Typical Customizations

- Change the Backend Interface
  - Support Specific Busses
  - Support Specific I/O devices
  - Define FIFO Interfaces
- Modify the PCI Side
  - Modify the BARs
  - Modify DMA behavior
- Support Specific Bus/Speed combinations.

NBS's technology can easily support the custom requirements of your design

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Check out our website www.nbsemi.com for more product information.

NorthBridge Semiconductor specializes in PCI and communications interface chips. We offer both standard product and customized product to meet your needs