

VSC7175

VITESSE

Serial ATA 2:1 Fail-over Switch



APPLICATIONS:

- (Active-Passive Redundant Failover Systems
- (Dual-Ported Serial ATA Disk Arrays (JBODs)
- (NAS Servers
- (RAID Subsystems
- (Disk-based Back-up Systems
- (Serial ATA Routing Applications
- (Buffers for Externally Connected Links
- (Serial ATA Port Multipliers/Replicators
- (Serial ATA Host Bus Adapters Selecting Between Internal and External Connectors

FEATURES:

- (2:1 Fail-over Switch for Serial ATA Links
- (Serial ATA 1.0 Compliant at 1.5 Gb/s (3.0 Gb/s Capable)
- (Passes Out-of-Band (OOB) Patterns Transparently
- (Increased Receiver Sensitivity
- (High Output Swing Mode with Pre-emphasis
- (Very Low Power

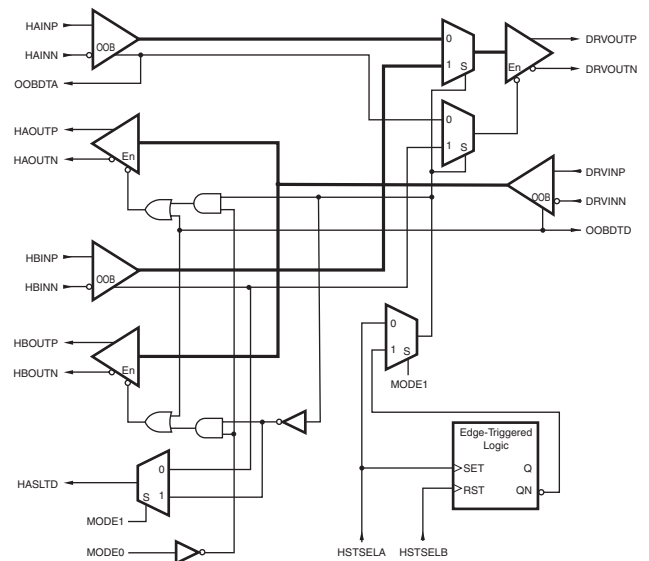
BENEFITS:

- (Simple Mux-based Serial ATA Fail-over Switching Capability (no re-timing and Repeating Complexity)
- (Supports Both 2:1 and 1:2 Modes of Operation
- (High Output Swing Mode with Pre-emphasis Provides for Lengthy Backplane or Cable Infrastructure Interconnects
- (Interoperability with VSC7174 Quad Serial ATA Host Bus Controller Delivers End-to-End Serial ATA Solutions
- (OOB Agnostic
- (Proven Technology (Based on a Long-running Vitesse Production Design)

SPECIFICATIONS:

- (High Output Swing Mode with Pre-emphasis
- (600 mW Maximum Power
- (3.3V Power Supply
- (32-pin, 7x7 mm QFP-N Package

VSC7175 BLOCK DIAGRAM:



Serial ATA 2:1 Fail-over Switch

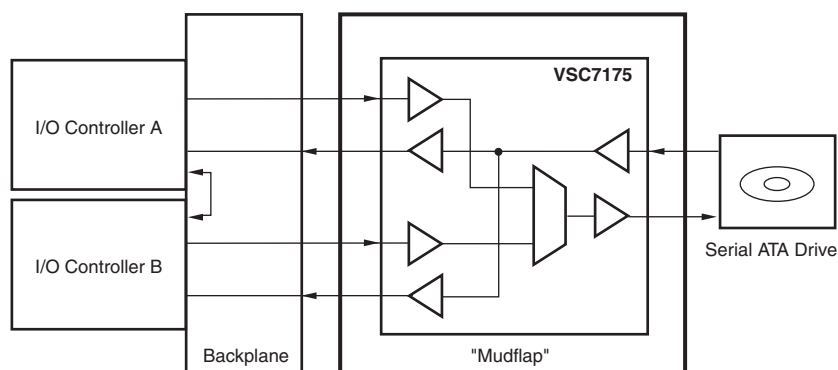
GENERAL DESCRIPTION:



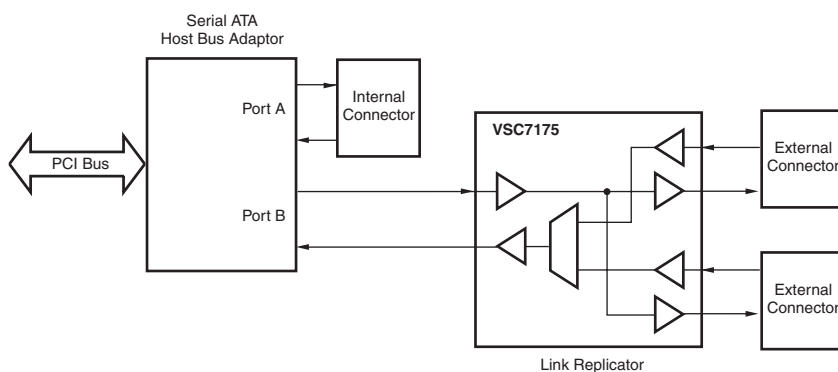
The VSC7175 is a Serial ATA multiplexer/buffer which implements a 2:1 Failover Switch function for 1.5 Gb/s and 3.0 Gb/s links. This function is used when dual hosts, such as I/O Controllers, must access single-ported disk drives in high availability storage subsystems where redundancy and load sharing are important.

The outputs from the I/O Controllers are multiplexed to the Serial ATA drive. The output from the Serial ATA drive is buffered and replicated to the I/O Controllers. The VSC7175 provides the high output swings, pre-emphasis and improved receiver sensitivity needed to drive long backplanes and external cables.

APPLICATION DIAGRAM FIGURE 1:



APPLICATION DIAGRAM FIGURE 2:



For more information on Vitesse Products visit the Vitesse web site at www.vitesse.com or contact Vitesse Sales at (800) VITESSE or sales@vitesse.com

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