# VSC3004, VSC3008

### **VITESSE**

The VSC3004 is a 4x4 Crosspoint Switch with Integrated Equalization The VSC3008 is a 8x8 Crosspoint Switch with Integrated Equalization



#### APPLICATIONS:

- ▶ Loop-back Switch
- ▶ Protection Switching
- ▶ Fan-out Buffering
- ▶ Cable Driver/Receiver
- Wire Re-ordering

#### FEATURES:

- ▶ 11Gbps Non-Return-to-Zero (NRZ) Data Bandwidth
- ▶ Quad (3004) & Octal (3008) Offerings
- ▶ Flexible Switching Options: Multicast, Loop Back, and Snoop Capability
- ▶ User Programmable Input Signal Equalization
- ▶ User Programmable Output Pre-emphasis
- ▶ Asynchronous Operation
- ▶ Simple Programming Interface

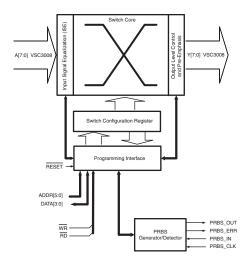
#### **BENEFITS:**

- ▶ Supports Latest Communications Protocols
- ▶ Selection of Size Based on System Needs
- ▶ Allows Great Flexibility in Routing/Fanning Signals
- ▶ Flexibility in Signal Attenuation of Incoming Signals
- ▶ Flexibility in Signal Attenuation of Outgoing Signals
- ▶ Protocol-transparent Operation w/o External Reference Clock
- ▶ Simpler System Design

#### SPECIFICATIONS:

- ▶ 0 to 11 Gbps Data Rate
- ▶ 20ps Added Jitter
- ▶ 10ps Channel to Channel Skew
- ▶ 2.5V Power Supply with a 3.3V Option
- ▶ 50ps Output Rise/Fall Time
- ▶ 50\(\Omega\) Output Source Termination
- $\blacktriangleright$  100  $\!\Omega$  Input Differential Termination
- ▶ 250mW Per Channel Power Dissipation
- ▶ 100mV 2400mV Input Signal Range
- ▶ 550mV 1100mV Programmable Output Swing

#### VSC3008 BLOCK DIAGRAM:



## VSC3004, VSC3008

The VSC3104 is a 4x4 Crosspoint Switch with Integrated Equalization The VSC3108 is a 8x8 Crosspoint Switch with Integrated Equalization

#### GENERAL DESCRIPTION:

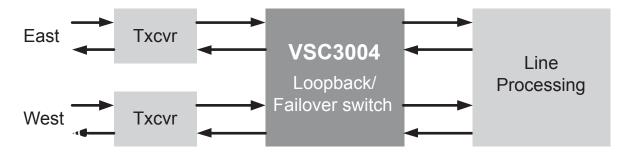


The VSC3004/3008 are multipurpose switching devices that are designed to enable next generation backplane designs, and extend the life of existing backplanes. The integrated equalization capabilities at both the input and output effectively absorb

the effects of signal loss through copper interconnect, either printed circuit board traces, or cable.

The function of the VSC3004/3008 is simple, yet powerful, creating multiple applications just about anywhere high-speed signals are present. The fully broadband, non-blocking and multi-cast capable switch core allows the VSC3004/3008 to be configured as a 1:4/1:8 fan-out buffer with very low channel-channel skew, or as a 4/8 channel signal reconditioner.

#### SIGNAL SWITCHING/ROUTING APPLICATION:



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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