

# VSC3204, VSC3208, VSC3212

VITESSE

## 4, 8 and 12 Port 155 Mbps to 4.25 Gbps Crosspoint Switches with CDR



### FEATURES:

- ▶ 155 Mbps to 4.25 Gbps Data Bandwidth
- ▶ Per Channel Clock/Data Recovery
- ▶ Two-wire Serial Programming
- ▶ User Programmable Input and Output Equalization
- ▶ Single Reference Clock with Per Channel Clock Dividers
- ▶ Protocol Transparent Operation
- ▶ Per Channel Pattern Generation and Detection [for Channel Diagnostics]

### BENEFITS:

- ▶ Supports Latest High Speed Protocols Including SAS, SATA, Gigabit Ethernet and Fibre Channel
- ▶ Addresses Random Jitter Clean-up
- ▶ Simple Operation and Control
- ▶ Multi-rate Operation on Same Chip

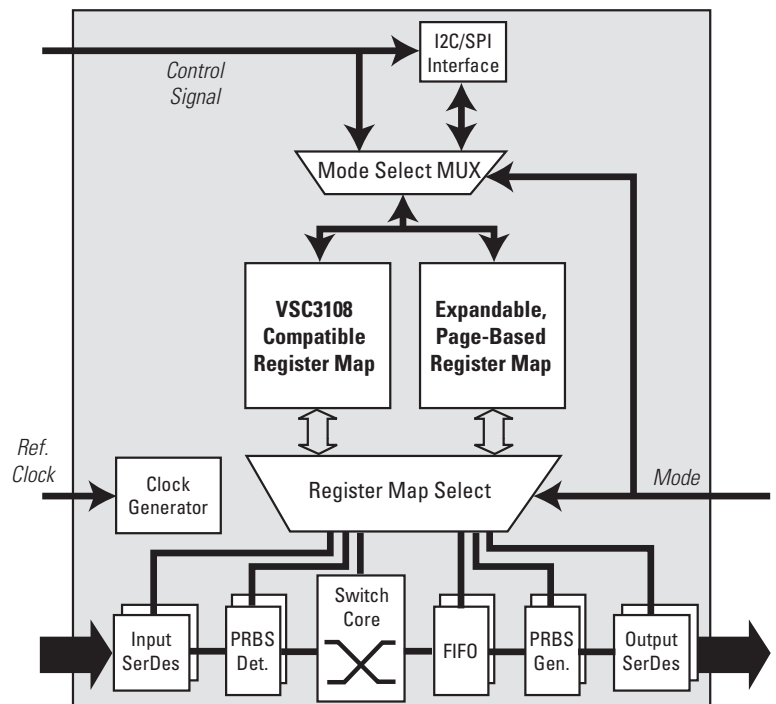
### APPLICATIONS:

- ▶ Box-to-box Communications
- ▶ Line Driver or Receiver
- ▶ Backplane Signal Fanout, Driver or Receiver
- ▶ Cable Signal Fanout, Driver or Receiver

### SPECIFICATIONS:

- ▶ Protocol Transparent 155 Mbps to 4.25 Gbps Data Rate
- ▶ 4-port (VSC3204), 8-port (VSC3208) and 12-port (VSC3212) devices with CDR
- ▶ Two Wire Serial Interface and Single Ref Clock

### BLOCK DIAGRAM:



# VSC3204, VSC3208, VSC3212

## 4, 8 and 12 Port 155 Mbps to 4.25 Gbps Crosspoint Switches with CDR

### GENERAL DESCRIPTION:

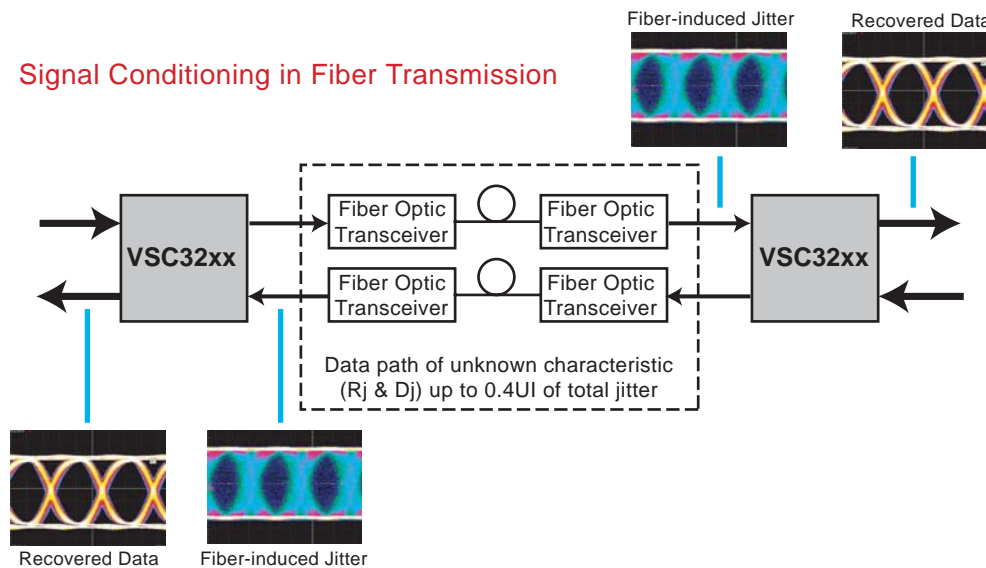


The VSC32xx series is a set of CDR crosspoint switches designed to regenerate and switch any non-return to zero (NRZ) serial data stream. With a single reference clock input, the VSC32xx switches operate at binary multiples of a base data rate between 155 Mbps and 4.25 Gbps. A fully nonblocking, multicast architecture allows the VSC32xx to be user-configured via simple two-wire or four-wire serial interfaces for a broad range of applications.

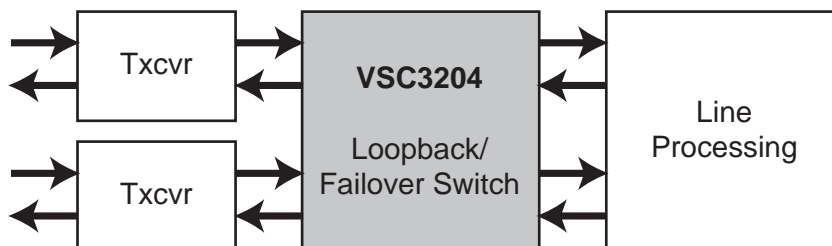
A high degree of signal integrity is maintained by means of configurable input and output equalization. The integrated equalization circuits are optimized to compensate for deterministic jitter that often results from lossy cabling and printed circuit board traces. These devices are tailored for high-speed serial signals used in serial copper interconnect applications such as multi-connector backplanes, box-to-box cabling as well as basic signal clean up throughout high speed systems.

### APPLICATION DIAGRAMS:

#### Signal Conditioning in Fiber Transmission



#### Signal Switching / Routing Application



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

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