PRODUCT BRIEF

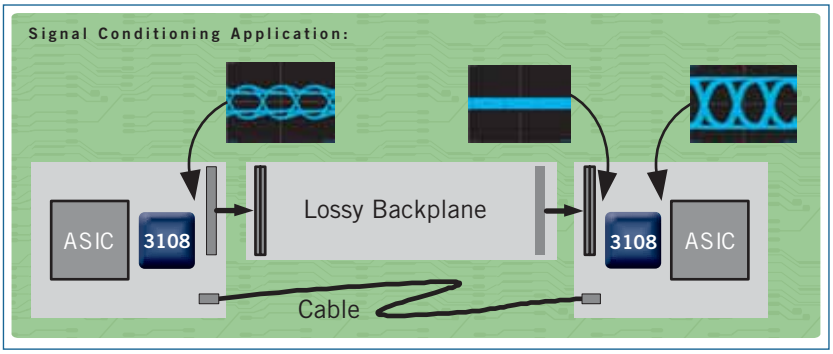
VSC3104
VSC3108

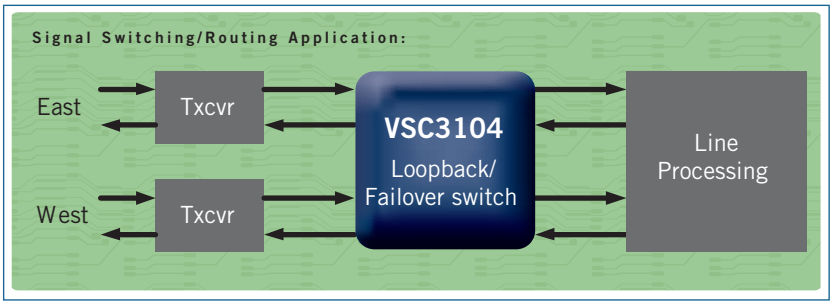
The VSC3104 is a 4x4 Crosspoint Switch with Integrated Equalization

The VSC3108 is a 8x8 Crosspoint Switch with Integrated Equalization

The VSC3104/3108 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 VSC3104/3108 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 VSC3104/3108 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.





APPLICATIONS

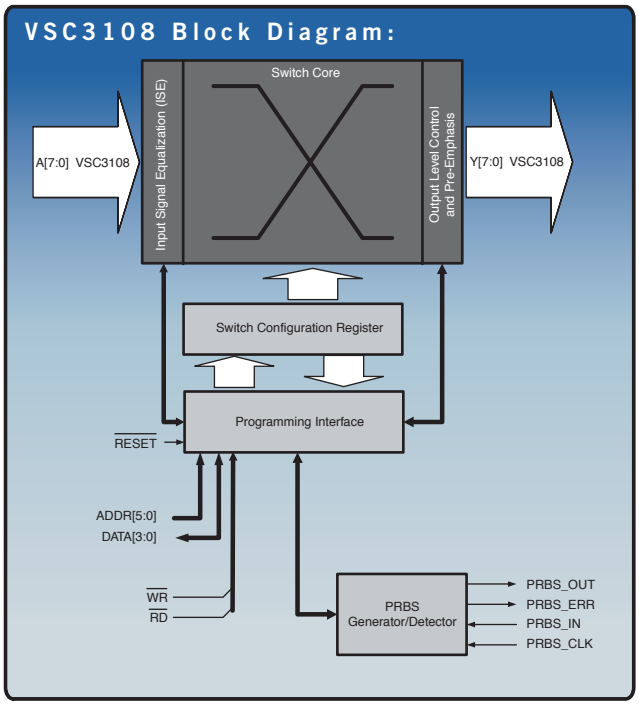
- Backplane driver/receiver
- Loop-back switch
- Protection switching
- Fan-out buffering
- Cable driver/receiver
- Wire re-ordering

SPECIFICATIONS

- 0 to 6.5 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
- 50Ω output source termination
- 100Ω input differential termination
- 250mW per channel power dissipation
- 100mV – 2400mV input signal range
- 550mV – 1100mV programmable output swing

Features

- High data rate support, up to 6.5 Gbps
- Integrated equalization
- Low cost
- Compact form factor
- Single supply operation
- Highly programmable
- Robust operation across voltage and temperature
- Fully asynchronous operation
- Excellent crosstalk and noise immunity



Benefits

- Enables operation at higher data rates and/or improves operating margins
- Controls difficult signal integrity problems
- Asynchronous operation allows application across any data format and speed
- Low skew enables precision fan-out buffering

Related Vitesse Products

Visit www.vitesse.com for information about other related Vitesse products.

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