

VSC3340-31

3.5 Gbps 40 × 40 Crosspoint Switch

Microsemi's multichannel 3.5 Gbps crosspoint switch provides a costeffective solution for high-speed copper interconnects.

The VSC3340-31 is the industry's highest performance signal integrity crosspoint solution. The VSC3340-31 is uniquely capable of addressing a wide array of routing, switching, and signal integrity issues across broadcast video, telecommunications, and Ethernet applications. In video applications, the VSC3340-31 can support HDMI, DVI, DisplayPort, or SDI HDTV protocols. The VSC3340-31 features a 40×40 non-blocking, multicasting switch core with ports running at any rate up to 3.5 Gbps. The VSC3340-31 architecture provides protocol-independent operation that allows each channel to run independently.

The VSC3340-31 includes both register and static programming modes. The VSC3340-31 incorporates Microsemi's fourth-generation input equalization and pre-emphasis I/O capability for the industry's latest generation protocols. The device can perform signal fanout, loopback, and protection switching. It can also regenerate signals severely compromised by transmission losses. Microsemi's industry-proven equalization provides highly effective compensation for deterministic jitter across a wide range of high-speed interconnect applications.

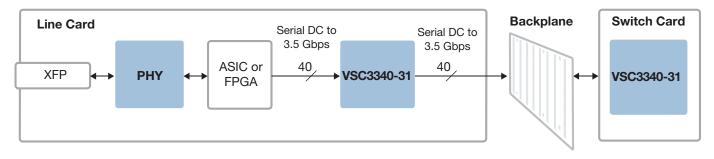
Highlights

- DC to 3.5 Gbps operation
- 40 × 40 fully non-blocking switch capability
- Protocol-independent operation
- Advanced EQ
- Small 23 mm × 23 mm form factor

Applications

- HDMI/DVI/DisplayPort switching/routing
- Broadcast video routers
- Broadcast video switchers

VSC3340-31 Line Card and Central Switch Card Applications



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Speed and Protocol Support

- 3.5 Gbps non-return-to-zero (NRZ) data bandwidth
- Protocol-independent asynchronous operation

Architecture

- Fully non-blocking and multicasting switch core
- Loss of Signal (LOS) detection and forwarding (supports outof-band signaling)
- Fully asynchronous operation with <1 ns latency
- 40 x 40 switch core enables signal fanout, loopback, and protection switching

Signal Integrity

- Multiple time-constant programmable input and output equalization
- Wide equalization adjustment range
- Input EQ
- Pre-emphasis

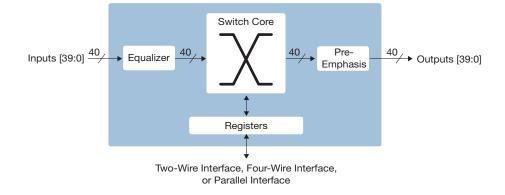
Key Specifications

- 3.5 Gbps NRZ per channel data rate
- 2.5 V power supply
- 23 mm × 23 mm flip chip ball grid array package

Related Products

Visit www.microsemi.com for information about these related products:

- Crosspoint Switches
- Ethernet MACs
- Mux, Demux, and Transceivers
- Electronic Dispersion Compensation CDRs





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