

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









# **VSC3316**

### 11.5 Gbps 16 × 16 Crosspoint Switch

Microsemi's multichannel 11.5 Gbps crosspoint switch provides a costeffective solution for high-speed copper interconnects.

The VSC3316 is the industry's highest performance signal integrity crosspoint solution. The VSC3316 is uniquely capable of addressing a wide array of routing, switching, and signal integrity issues across storage, blade server, video distribution, telecommunications, and Ethernet applications. Featuring a 16  $\times$  16 non-blocking, multicasting switch core with ports running at any rate up to 11.5 Gbps, the VSC3316 architecture provides protocol-transparent operation, allowing each channel to run independently. The VSC3316 supports a wide frequency range and virtually all data protocols.

The VSC3316 incorporates Microsemi's fourth-generation input equalization and pre-emphasis I/O capability for the industry's highest speed and protocol requirements. The device can perform signal fanout, loopback, and protection switching. It can also regenerate signals severely compromised by transmission losses. Microsemi's equalization works independently of the data rate, providing highly effective compensation for deterministic jitter across a wide range of high-speed interconnect applications.

# **Highlights**

- DC to 11.5 Gbps operation
- 16 x 16 fully non-blocking switch capability
- Protocol-transparent operation
- Advanced EQ

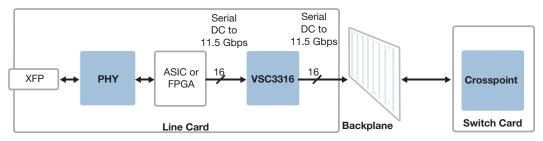
### **Applications**

- Blade servers
- Storage servers
- Telecom
- Video distribution
- Test and measurement equipment

### **Specifications**

- 11.5 Gbps NRZ per channel data rate
- 2.5 V power supply
- 15 mm × 15 mm flip chip ball grid array package

### VSC3316 Line Card Application



Microsemi makes no warranty, representation, or guarantee regarding the information contained herein or the suitability of its products and services for any particular purpose, nor does Microsemi assume any liability whatsoever anising out of the application or use of any product or circuit. The products sold hereunder and any other products sold by Microsemi have been subject to limited testing and should not be used in conjunction with mission-critical equipment or applications. Any performance specifications are believed to be reliable but are not verified, and Buyer must conduct and complete all performance and other testing of the products, alone and together with, or installed in, any end-products. Buyer shall not rely on any data and performance specifications or parameters provided by Microsemi. It is the Buyer's responsibility to independently determine suitability of any products and to test and verify the same. The information provided by Microsemi hereunder is provided "as is, where is" and with all faults, and the entire risk associated with such information is entirely with the Buyer. Microsemi does not grant, explicitly or implicitly, to any party any pattent rights, licenses, or any other IP rights, whether with regard to such information itself or anything described by such information. Information provided in this document is proprietary to Microsemi reserves the right to make any changes to the information in this document or to any products and services at any time without notice.



# VSC3316

### 11.5 Gbps 16 × 16 Crosspoint Switch

# Speed and Protocol Support

- 11.5 Gbps non-return-to-zero (NRZ) data bandwidth
- Protocol-transparent

#### **Architecture**

- Fully non-blocking and multicasting switch core
- LOS detection and forwarding (supports out-of-band signaling)
- Fully asynchronous operation with <1 ns latency</li>
- 16 × 16 switch core enables signal fanout, loopback, and protection switching

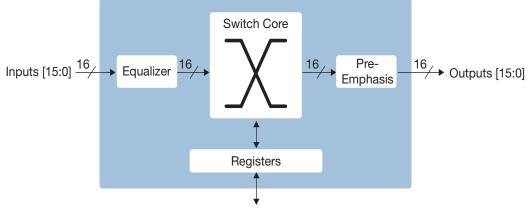
# Signal Integrity

- Multiple time-constant programmable input and output equalization
- Wide equalization adjustment range
- Input EQ of 26 dB at 11.5 Gbps
- 9 dB of pre-emphasis
- Embedded post-EQ eye opening monitor per channel

#### **Related Products**

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

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



Two-Wire Interface or Four-Wire Interface



Microsemi Corporate Headquarters One Enterprise, Aliso Viejo, CA 92656 USA Within the USA: +1 (800) 713-4113 Outside the USA: +1 (949) 380-6100 Sales: +1 (949) 380-6136 Fax: +1 (949) 215-4996 email: sales.support@microsemi.com www.microsemi.com

Microsemi Corporation (Nasdaq: MSCC) offers a comprehensive portfolio of semiconductor and system solutions for communications, defense and security, aerospace, and industrial markets. Products include high-performance and radiationhardened analog mixed-signal integrated circuits, FPGAs, SoCs, and ASICs; power management products; timing and synchronization devices and precise time solutions; voice processing devices; RF solutions; discrete components; enterprise storage and communications solutions, security technologies, and scalable anti-tamper products; Ethernet solutions; Power-over-Ethernet ICs and midspans; custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, California, and has approximately 4,800 employees worldwide. Learn more at www.microsemi.com.