

## VSC3340-01 6.5 Gbps 40 × 40 Crosspoint Switch with Low-Power Green Modes

Microsemi's multichannel 6.5 Gbps crosspoint switch provides a costeffective solution for high-speed copper interconnects.

The VSC3340-01 is an advanced signal conditioning crosspoint switch solution uniquely capable of addressing a wide array of asynchronous, physical layer switching and routing applications across storage, server, video, communications and other industries. Featuring a 40 × 40 nonblocking, multicasting switch core with ports running at any rate up to 6.5 Gbps, the VSC3340-01 architecture provides protocol-transparent operation, allowing each channel to run independently and optimize low power operation when running at lower speeds. VSC3340-01 supports virtually all standard and proprietary data protocols up to the maximum data rate.

The device incorporates Microsemi's fourth-generation input equalization and pre-emphasis I/O capability engineered to overcome channel impairments experienced in today's high-density systems at multigigabit data rates. It can perform signal fanout, loopback, and protection switching. It can also regenerate signals compromised by losses in the transmission medium. Microsemi's equalization provides highly effective compensation for deterministic jitter across a wide range of high-speed interconnect applications.

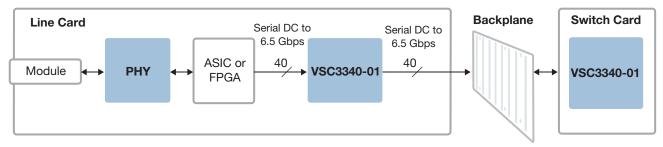
#### **Highlights**

- DC to 6.5 Gbps operation
- 40 × 40 fully non-blocking switch capability
- Protocol-independent operation
- Advanced input equalization and output preemphasis
- Low power green modes
- Small 23 mm × 23 mm form factor

#### **Applications**

- HDMI/DVI/DisplayPort switching/routing
- Broadcast video switching/routing
- PCIe repeater applications
- Servers
- Storage
- Telecom

#### VSC3340-01 Line Card and Central Switch 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 arising 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 grant, explicitly or implicitly, to any party any patter rights, licenses, or any other IP rights, whether with regard to such information itself or anything described by such information provided in this document or to any products and services at any time without notice.



# VSC3340-01

6.5 Gbps 40 × 40 Crosspoint Switch with Low-Power Green Modes

### Speed and Protocol Support

- 6.5 Gbps non-return-to-zero (NRZ) data bandwidth
- Protocol-independent low power green modes when used at lower data rates

#### Architecture

- Fully non-blocking and multicasting switch core
- Loss of signal (LOS) detection and forwarding (supports out-ofband signaling)
- Fully asynchronous operation with <1 ns latency
- 40  $\times$  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 of 26 dB at 6.5 Gbps
- 9 dB of pre-emphasis

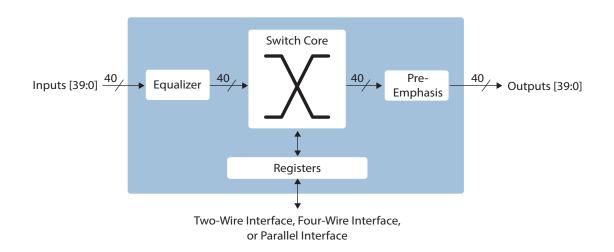
#### **Key Specifications**

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

#### **Related Products**

Visit <u>www.microsemi.com</u> for information about these related products:

- Crosspoint switches
- Ethernet MACs
- Mux, demux, and transceivers
- Electronic dispersion compensation CDRs





Microsemi Corporate Headquarters One Enterprise, Aliso Viejo, CA 92656 USA Within the USA: +1 (800) 713-4113 Outside the USA: +1 (949) 380-6100 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 aerospace & defense, communications, data center and industrial markets. Products include high-performance and radiation-hardened analog mixed-signal integrated circuits, FPGAs, SoCs and ASICs; power management products; timing and synchronization devices and precise time solutions, setting the world's standard for time; voice processing devices; RF solutions; discrete components; enterprise storage and communication solutions, security technologies and scalable anti-tamper products; Ethernet solutions; Power-over-Ethernet ICs and midspans; as well as custom design capabilities and services. Microsemi is headquartered in Aliso Viejo, California and has approximately 4,800 employees globally. Learn more at www.microsemi.com.

©2010-2017 Microsemi Corporation. All rights reserved. Microsemi and the Microsemi logo are registered trademarks of Microsemi Corporation. All other trademarks and service marks are the property of their respective owners.

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Analogue & Digital Crosspoint ICs category:

Click to view products by Microsemi manufacturer:

Other Similar products are found below :

MT093AE1 MT8808AE1 ADV3203ASWZ AD8177ABPZ ISPGDX240VA-4B388 VSC3308YKU LX64EV-3F100C ISPGDX240VA-4BN388 LX256EV-5FN484C GX4002-INE3 AD8112JSTZ AD8115ASTZ SN65LVCP22D ADV3205JSTZ SY89540UMY AD75019JPZ AD75019JPZ-REEL AD8106ASTZ AD8107ASTZ AD8108ASTZ AD8109ASTZ AD8110ASTZ AD8111ASTZ AD8116JSTZ AD8152JBPZ AD8153ACPZ AD8155ACPZ AD8159ASVZ ADN4604ASVZ AD8153ACPZ-RL7 ADN4612ACPZ ADV3201ASWZ ADV3226ACPZ ADV3227ACPZ ADV3228ACPZ ADV3229ACPZ HMC858LC4B MAX4550CAI+ EL4544IGZ HA4314BCPZ MAX9152EUE+T MAX4360EAX+ MAX4549EAX+ MAX4549EAX+T MAX4570CAI+ TEA6422D SY55858UHG NB4L858MFAG NB4N840MMNG NB6L72MMNG