

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









VSC7111

11.5 Gbps Quad Signal Conditioner Mux/Demux

Microsemi's best-in-class equalizer delivers the industry's highest performance PCI Express (PCIe) re-driver.

VSC7111 is a high-performance, quad-channel asynchronous buffer that simplifies high-speed signal path designs (up to 11.5 Gbps) by providing Microsemi's industry-proven signal equalization at both the inputs and outputs. The device optimizes energy efficiency with innovative Green modes that lower power consumption at lower data rates. Additional power savings can be achieved by deactivating unused channels and configuring the best output level settings for an application.

The VSC7111 device offers programmable, static, and adaptive equalization settings to provide a comprehensive solution for countering signal degradation over a wide variety of transmission cabling and interconnect transmission paths in broadcast video, telecommunications, storage, and server applications.

VSC7111 is fully compatible with the latest server, interconnect, and storage protocols including PCIe Gen 1/2/3, 10GBASE-KR, and SAS/SATA.

Loss of signal (LOS) detectors with programmable thresholds are included on every input port. Each channel includes PCle Gen 1/2/3 receive detection and state machines. The VSC7111 can be configured for pass-through 4-channel buffer, dual 2×2 matrix, dual 1:2 duocast, or dual 2:1 selector configurations.

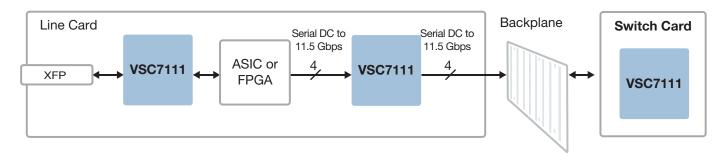
Highlights

- Up to 11.5 Gbps asynchronous operation
- Energy-efficient Green modes
- Adaptive equalization

Applications

- PCle Gen 1/2 blade servers
- 1.5G, 3G, and 6G SAS/SATA
- High-speed cable equalization

VSC7111 Line Card and Central Switch Card Applications



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 does not grant, explicitly or implicitly, to any party any pattent rights, licenses, or any other IP rights, whether with regard to such information is entirely by information. Information provided in this document is proprietary to Microsemi, and 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.



VSC7111

11.5 Gbps Quad Signal Conditioner Mux/Demux

Flexible Architecture

- 0 Gbps to 11.5 Gbps asynchronous operation
- 4-channel buffer, dual 2 x 2 matrix, dual 1:2 duocast, or dual 2:1 selector configurations

Best-in-Class EQ

- Input EQ of 26 dB at 11.5 Gbps
- Transmit pre-emphasis with 15 output levels (maximum 1600 mV differential peak-to-peak)
- Input sensitivity 100 mV differential peak-to-peak

Ultra Low-Power Green Mode

 0.71 W typical power consumption in full power mode (11.5 Gbps) and 0.47 W typical power consumption in Green mode (6.5 Gbps)

Storage and Server Protocols

- PCle Gen 1/2/3 receive detection and state machines
- SAS/SATA-compatible loss of signal (LOS) detection and outof-band (OOB) forwarding

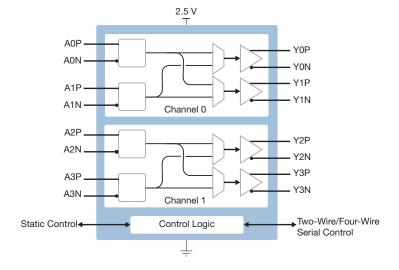
Key Specifications

- 2.5 V power supply
- 180 mW typical power consumption per channel in full-power mode, 140 mW per channel in Green mode
- 32-pin, 5 mm × 5 mm QFN package

Related Products

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

- Crosspoint Switches
- Ethernet Switches





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 radiation-hardened 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.