



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



VSC7109

3.5 Gbps Quad Signal Conditioner

VSC7109 is a high-performance, quad-channel asynchronous buffer that simplifies high-speed signal path designs (up to 3.5 Gbps) by providing Microsemi’s industry-proven signal equalization at both the inputs and the outputs. The device optimizes energy efficiency with innovative Green modes that lower power consumption. Additional power savings can be achieved by deactivating unused channels and configuring the best output level settings for an application.

The VSC7109 device offers programmable, static, and adaptive equalization settings to provide a comprehensive solution for countering signal degradation over a wide variety of cabling and interconnect transmission paths in server, video, and storage applications.

VSC7109 is fully compatible with the latest server, video, interconnect, and storage protocol data rates including Ethernet, HDMI 1.4, 3G SDI, PCIe Gen 1, and SAS/SATA.

Loss of signal (LOS) detectors with programmable thresholds are included on every input port. Out-of-band (OOB) signal forwarding can be enabled on each output. The VSC7109 can be configured for pass-through 4-channel buffer, dual 2 × 2 matrix, dual 1:2 duocast, or dual 2:1 selector configurations.

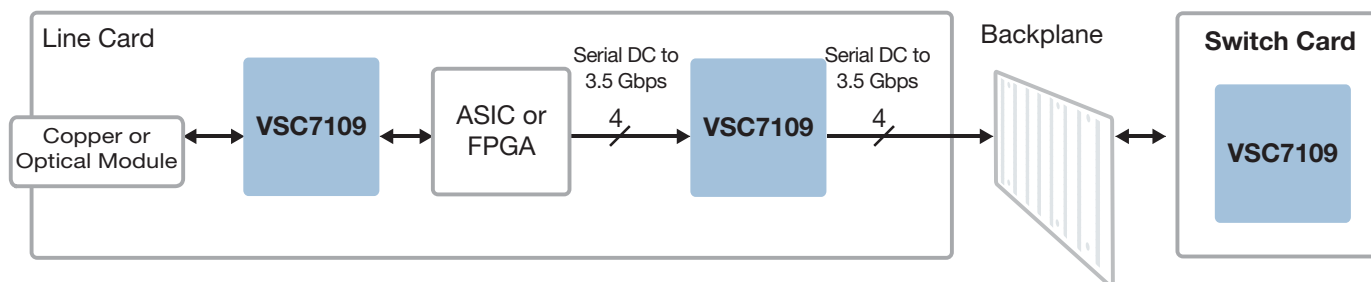
Highlights

- Up to 3.5 Gbps asynchronous operation
- Energy-efficient Green modes
- Adaptive equalization
- Programmable transmit output

Applications

- Blade servers
- Video switches
- Storage interconnect
- High-speed cable and backplane equalization

VSC7109 Line Card and Central Switch Card Applications



VSC7109

3.5 Gbps Quad Signal Conditioner

Flexible Architecture

- 0 Gbps to 3.5 Gbps asynchronous operation
- 4-channel buffer, dual 2 × 2 matrix, dual 1:2 duocast, or dual 2:1 selector configurations

Best-in-Class EQ

- Input EQ of 25 dB at 3.5 Gbps
- 10 dB transmit pre-emphasis with 15 output levels (maximum 1600 mV differential peak-to-peak)
- Input sensitivity 100 mV differential peak-to-peak

Protocols

- Gigabit Ethernet and XAUI Ethernet formats
- HDMI 1.4 and 3G SDI data rate support
- PCIe Gen 1 receive detection and state machine
- SAS/SATA-compatible loss of signal (LOS) detection and out-of-band (OOB) forwarding

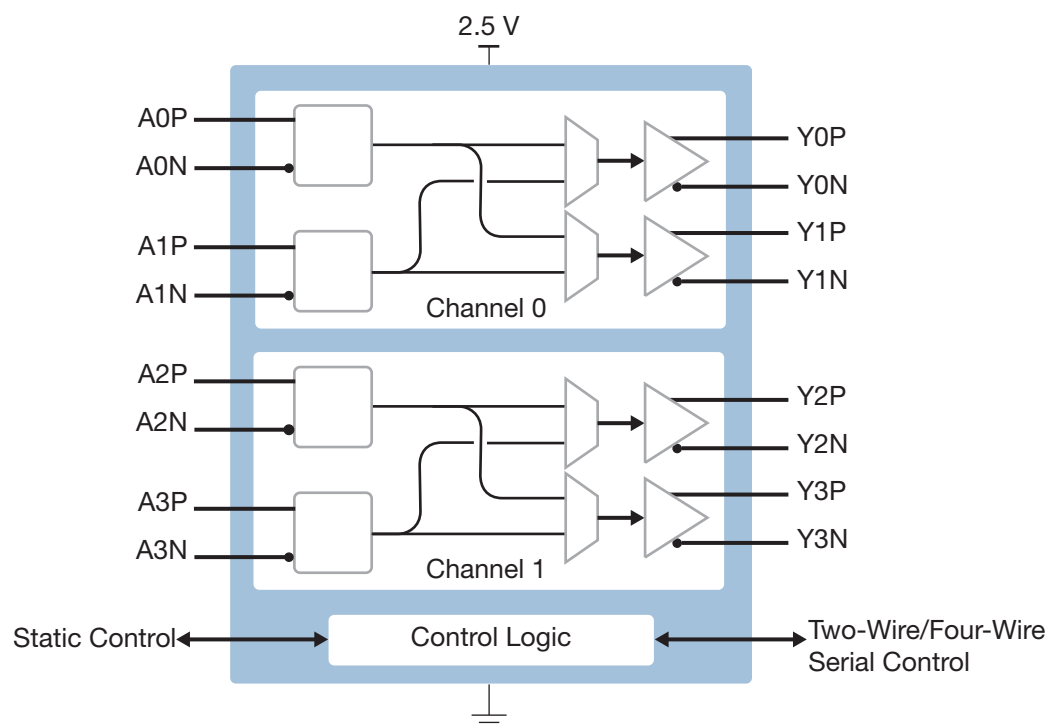
Key Specifications

- 2.5 V power supply
- 118 mW typical power consumption per channel in Green mode
- 32-pin, 5 mm × 5 mm QFN package
- Extended temperature range of -40 °C ambient to 110 °C junction

Related Products

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

- Crosspoint Switches
- Ethernet Switches
- 1G and 10G PHYs



Microsemi

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.