



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



VSC7227 and VSC7227-01

12-Channel Multirate Adaptive Channel Extender

Microsemi's EQNOX™ family of advanced unidirectional adaptive channel extender equalizes deteriorated input signals while dissipating the lowest possible power.

The VSC7227 devices are 12-channel unidirectional adaptive channel extenders with CDR. They incorporate analog and digital equalization, clock and data recovery, and output de-emphasis. VSC7227 supports data rates up to 14.5 Gbps. VSC7227-01 supports data rates up to 11.5 Gbps. Both devices are ideal for applications such as Ethernet, Fibre Channel, Infiniband, and Common Public Radio Interface (CPRI), as well as other protocols.

The VSC7227 devices are simple-to-use copper media receivers and drivers that provide electrical compensation to cable, copper, and backplane environments to increase system margin and media driving distances. They equalize greater than 40 inches of FR-4 at 10 Gbps and greater than 10 m of 24AWG of copper direct-attached cable at 10 Gbps.

The VSC7227 devices can be used either on their own or with an external microcontroller to control, monitor, and enhance system performance.

The VSC7227 devices feature Microsemi's proprietary FlexEQ™ technology to equalize deteriorated input signals while dissipating the lowest possible power. A low-cost 25 MHz crystal, along with on-chip frequency synthesizers, allows for CDR operation at any data rate. Its three-tap FIR output driver architecture enables up to 18 dB of de-emphasis.

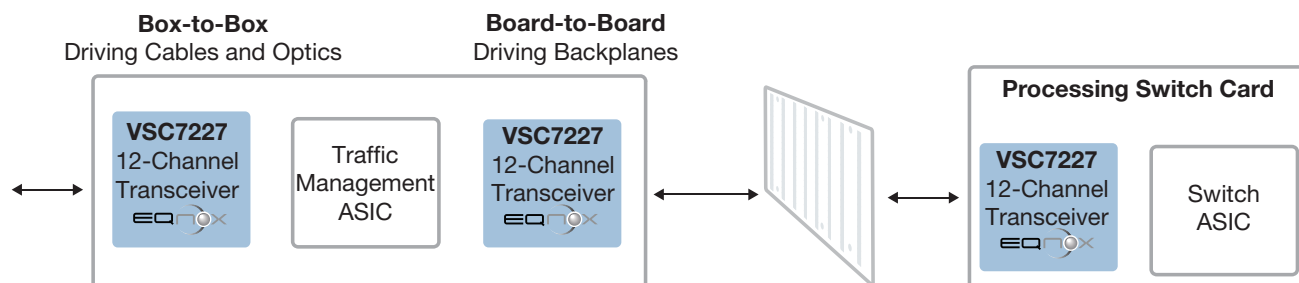
The VSC7227 devices include Microsemi's patented VScope input signal monitoring integrated circuit signal monitoring and waveform viewing technology.

Highlights

- World-class adaptive equalization
- Up to 14.5 Gbps operation for Fibre Channel (2G/4G/8G/16G), Infiniband (DDR, QDR, FDR), CPRI (1G to 10G)
- 18 dB programmable output de-emphasis
- Built-in VScope™ and BIST
- On-chip frequency synthesizers
- Low power (150 mW per channel)
- 2 × 2 crosspoint matrix on every adjacent channel

Applications

- Wideband signal switching, clean-up, and retimer
- Line, backplane, and copper cable driver, receiver, and retimer
- PCB signal enhancement
- Optical module retimer
- Optical and copper module host



VSC7227 and VSC7227-01

12-Channel Multirate Adaptive Channel Extender

Key Benefits

- Simple-to-use devices
- Low module and system power consumption
- Fully adaptive analog and digital equalization
- Wide range of data rate operation supporting multiple protocols, including Ethernet, Fibre Channel, Infiniband, and CPRI
- 25 MHz crystal and built-in frequency synthesizers
- LOS detection
- Built-in VScope input signal monitoring integrated circuit eye diagram monitoring

Architecture

- Two-wire serial port for optional microcontroller and VScope input signal monitoring integrated circuit
- Pin-strap option for operation without microcontroller
- World-class adaptive equalization including greater than 30 dB input equalization and four-tap decision feedback equalizer (DFE)
- Built-in self test (BIST)

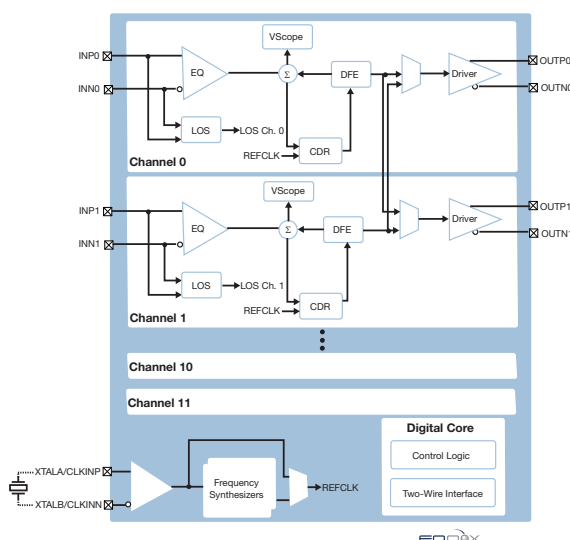
Key Specifications

- 1.2 V single power supply
- 150 mW per channel power consumption
- Two-wire serial interface
- DC coupling to high-speed inputs
- 13 mm × 13 mm BGA package

Related Products

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

- VSC7111 quad signal conditioner with up to 11.5 Gbps asynchronous operation
- VSC7224 four-channel multirate adaptive channel extender
- VSC8494 quad channel 10 Gbps OTN PHY with VeriTime™



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.