imall

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





VSC8489

Dual Channel WAN/LAN/Backplane RXAUI/XAUI to SFP+/KR 10 GbE SerDes PHY

Microsemi's full dual channel SerDes PHY provides hardware-based KR support for timing-critical applications, including all industry-standard protocol encapsulations.

The VSC8489 device meets the SFP+ SR/LR/ER/220MMF host requirements in accordance with the SFF-8431 specifications. It also compensates for optical impairments in SFP+ applications, along with degradations of the PCB.

The VSC8489 device provides full KR support, including KR state machine, for autonegotiation and link optimization. The transmit path incorporates a multitap output driver to provide flexibility to meet the demanding 10GBASE-KR (IEEE 802.3ap) Tx output launch requirements.

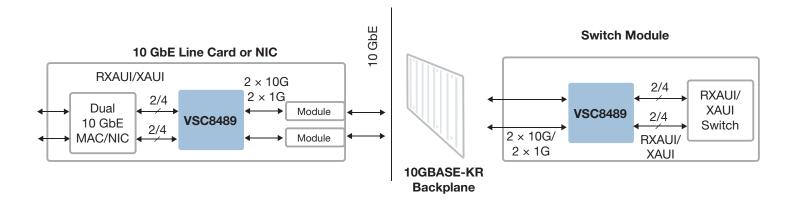
Highly flexible clocking options enable Layer 1 support for Synchronous Ethernet. The VSC8489 device uses a single 156.25 MHz reference clock for LAN/WAN operation. It includes a failover switching capability for protection routing, along with selectable lane ordering. A complete suite of BIST functionality includes line and client loopbacks along with pattern generation and error detection.

Highlights

- Failover switching and lane ordering
- Simultaneous LAN and WAN support
- RXAUI/XAUI support
- SFP+ I/O with KR support
- 1 GbE support
- Seamless upgrade path for IEEE 1588v2 and MACsec functionality

Applications

- Multiple-port RXAUI/XAUI to SFI/ SFP+ line cards or NICs
- 10GBASE-KR compliant backplane transceivers
- Secure data center to data center interconnects
- 10 GbE switch cards and router cards



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 described to grant explicitly to may patt 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.



VSC8489

Dual Channel WAN/LAN/Backplane RXAUI/XAUI to SFP+/KR 10 GbE SerDes PHY

Range of Support

- Compliant to IEEE 802.3ae and SFF-8431 electrical (SFI) specifications
- 9.95 Gbps WAN and 10.3 Gbps LAN operation, as well as 1.25 Gbps Ethernet support
- Supports all standard SFP+ applications
- Support for 10GBASE-KR (IEEE 802.3ap) for 10G backplanes, including 1.25 Gbps and 10.3 Gbps autonegotiation
- Adaptive equalization receiver and programmable, multitap transmitter pre-emphasis
- Synchronous Ethernet support
- MDIO/SPI and two-wire serial slave management interfaces
- IEEE 1588v2/Y.1731 OAM precision timing support at 1.25 Gbps and 10.3 Gbps using pin-compatible VSC8489-10 and VSC8489-13 devices

Key Specifications

- 875 mW typical for each bidirectional channel
- 1.2 V and 1.0 V core power supplies (2.5 V TTL supply)

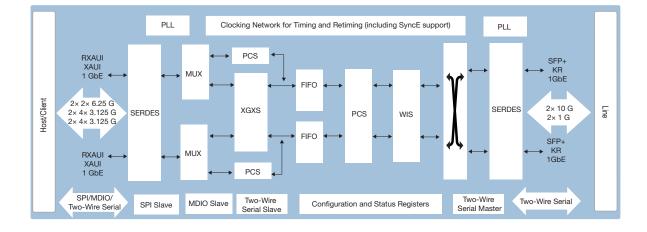
Flexibility

- Failover switching and lane ordering
- VScope input signal monitoring integrated circuit
- Host-side and line-side loopbacks with BIST functions
- I/O programmability for lane swap, invert, amplitude, slew, preemphasis, and equalization
- Optional forward error correction (FEC)
- Synchronous Ethernet support with flexible clocking
- Passive copper cable support for minimum transmission cost
- Extended temperature range (-40 °C to 110 °C) using pincompatible VSC8489-13
- Pin compatible with VSC8489-10, VSC8489-13, VSC8490, and VSC8491

Related Products

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

- VSC8490-10
- VSC8491-10
- VSC8572
- VSC8574
- VSC8584





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.

©2012–2016 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.