

VSC7113

10.3 Gbps Quad Signal Conditioner

The VSC7113 device is a quad-channel asynchronous buffer that simplifies high-speed signal path designs (up to 10.3 Gbps) by providing dual 2 x 2 crosspoint functionality along with input and output equalization capabilities. Low power modes allow the device to scale power depending on data rate, and unused ports can be completely powered down.

Programmable and static equalization settings provide a comprehensive solution for countering signal degradation over a wide variety of interconnect transmission paths, including copper and optical media.

The device can be configured for pass-through 4-channel buffer, dual 2×2 matrix, dual 1:2 duocast, or dual 2:1 selector configurations. All signal inputs and outputs are fully differential.

VSC7113 operates from a single 2.5 V supply and supports an extended temperature range of –40 °C to 110 °C. It is offered in a compact, 32-pin, 5 mm × 5 mm QFN package.

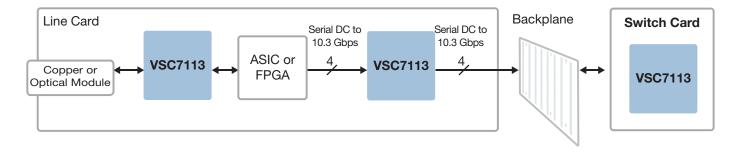
Highlights

- Up to 10.3 Gbps asynchronous operation
- Low power modes
- Static and programmable input equalization
- Programmable transmit output

Applications

• 10 GbE high-speed cable and backplane equalization

VSC7113 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 patent 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.



VSC7113

10.3 Gbps Quad Signal Conditioner

Flexible Architecture

- 0 Gbps to 10.3 Gbps asynchronous operation
- 4-channel buffer, dual 2 x 2 matrix, dual 1:2 duocast, or dual 2:1 selector configurations
- Optimized for ease of use and customer cost

Broad Input/Output Capabilities

- Input EQ of 20 dB at 10.3 Gbps
- Static or programmable transmit pre-emphasis up to 5 dB
- Input sensitivity 100 mV differential peak-to-peak

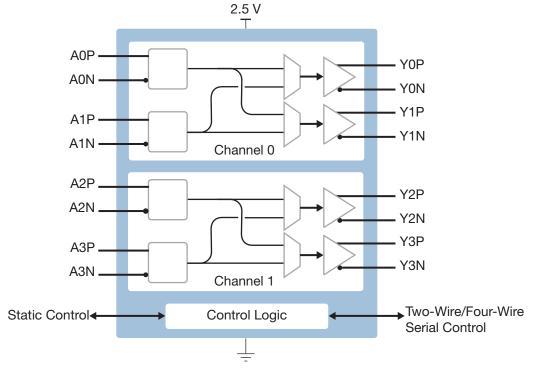
Key Specifications

- 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:

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





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.

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Equalisers category:

Click to view products by Microsemi manufacturer:

Other Similar products are found below:

M22554G-12 M21424G-13 PTN3944EWY M21518G-13 EQCO30T5.2 AD8195ACPZ-R7 AD8192ACPZ-RL7 AD8124ACPZ

AD8128ACPZ-R2 AD8192ACPZ AD8194ACPZ AD8195ACPZ AD8197AASTZ ADV3002BSTZ ADV3003ACPZ ADV3003ACPZ-R7

GS1524-CKDE3 MAX3814CHJ+T MAX3802UTK+D MAX3980UTH+ MAX3815CCM+TD EQCO30R5.D MAX3814CHJ+

EQCO125T40C1T-I/8EX GS3440-INTE3 MAX3984UTE+ GS2964-INE3 GS6042-INE3 GS2974ACNE3 GS2984-INE3 GS3440-INE3

GS2993-INE3 SN75LVPE802RTJT NB7VQ1006MMNG QPC7334SR QPC7335SR ISL54102ACQZ GS12141-INE3 GS12341-INE3

GS12190-INE3 GS3590-INE3 VSC7224XJV-02 LMH0044SQE/NOPB LMH0074SQE/NOPB DS30EA101SQ/NOPB LMH0344SQE/NOPB

LMH0344SQ/NOPB LMH0384SQE/NOPB LMH0384SQ/NOPB LMH0394SQ/NOPB