VSC8244

Quad Port 10/100/1000BASE-T PHY with RGMII / RTBI MAC Interfaces

The VSC8244 is the industry's smallest, lowest power quad port Gigabit Ethernet transceiver for low-cost RGMII and RTBI switch and router applications.

In 1000BASE-T mode, the VSC8244's power consumption is 30% lower than the next best competitor. The device's compact 19 mm x 19 mm BGA package is ideal for high-density switch applications.

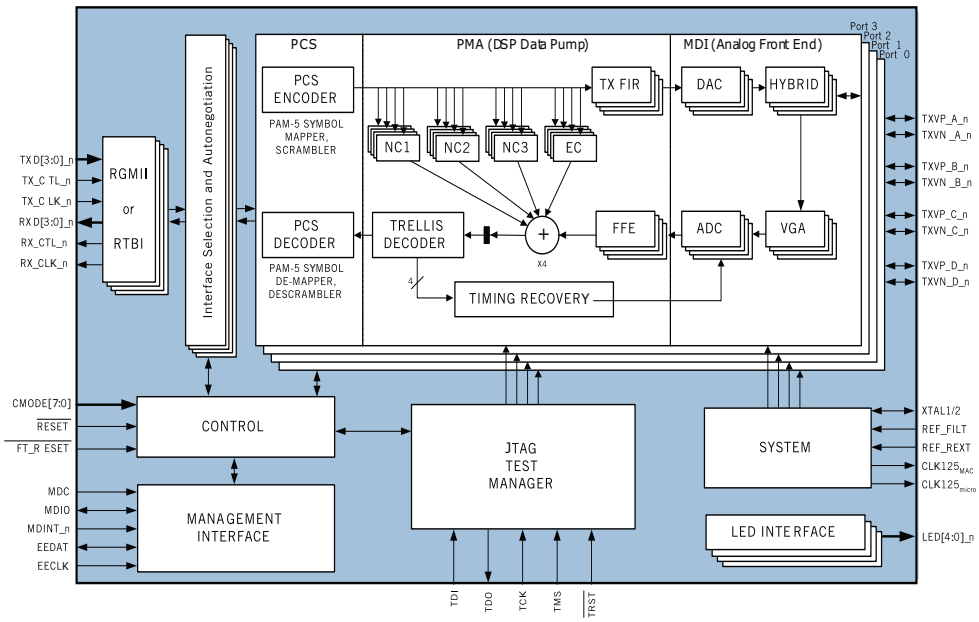
Microsemi's mixed signal and DSP architecture yields robust performance, supporting both full and half duplex 10BASE-T, 100BASE-TX, and 1000BASE-T over >140 m of Category 5, unshielded twisted pair (UTP) cable, with industry leading tolerance to NEXT, FEXT, Echo, and system noise.

Applicationss

- High density 10/100/100BASE-T LAN & MAN switches and routers
- Workgroup LAN switches and routers
- PICMG 2.16 and 3.0 backplane applications
- Gigabit Ethernet-based SAN, NAS, and MAN systems
- High performance workstations and multi-port server NICs

Specifications

- Steady state power consumption per port
- I/O power supply voltage options
- Analog supply voltage
- Core power supply voltage
- Crystal parallel resonant frequency (± 100 ppm tolerance)



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Features

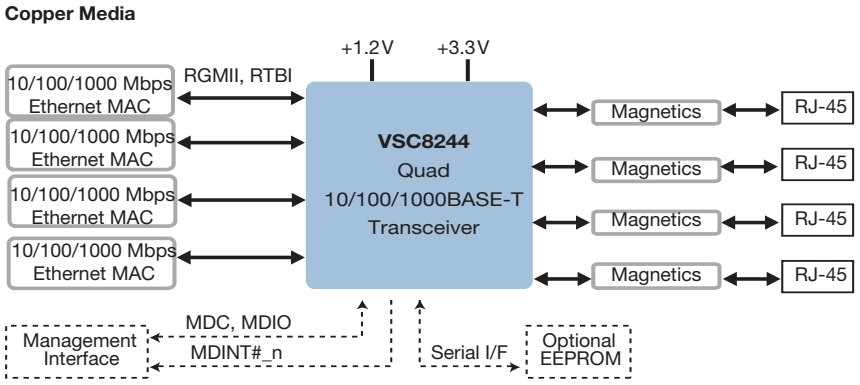
- Lowest power consumption in the industry at less than 640 mw/port (1000BASE-T mode)
- Patented, low EMI line driver with integrated line side termination resistors
- Supports RGMII v1.3 (2.5 V & 3.3 V) & v2.0 (1.5 V HSTL), 1.8 V (SSTL compatible)
- User-programmable RGMII timing compensation
- Compliant with IEEE 802.3 (10BASE-T, 100BASE-TX, 1000BASE-T) specifications
- >10 kB jumbo frame support with programmable synchronization FIFOs
- Five direct drive LEDs with on-chip liltering interface option
- Serial LED interface option
- Three user configuration options: 1) Optional serial EEPROM, 2) Hardware configuration pins, or 3) Serial Management Interface (SMI)
- Full suite of BIST, MAC, and far-end loopback modes
- VeriPHY™ link cable diagnostics software suite
- Automatic detection and correction of cable pair swaps, pair skew and pair polarity, along with HP auto MDI/MDI-X crossover function
- Manufactured in advanced 0.13 µm, 3.3 V/1.2 V digital CMOS process

Benefits

- Eliminates heatsinks and fans for Gigabit to the desktop LAN switches
- Removes 576 passive components in 48-port switch applications
- Compatible with a wide variety of parallel I/F switch ICs
- Simplifies PCB layout; eliminates PCB trombones
- Ensures seamless deployment throughout copper networks with industry's highest tolerance to noise and substandard cable plants
- Provides for maximum jumbo frame sizes in custom SAN and LAN systems
- Eliminates external components and EMI issues
- Provides maximum system design flexibility
- Offers design engineer a solution to fit any unmanaged or managed system requirement
- Simplifies comprehensive in-system test to ensure the highest product quality
- Enables network manufacturers to simplify deployment and improve network management capabilities of Gigabit Ethernet links
- Compatible with 1st generation 1000BASE-T PHYs; supports auto MDI/MDI-X even when autonegotiation is disabled
- Most cost effective technology eliminates more expensive analog process variants

Related Products

Visit www.microsemi.com for information about other related products.



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.

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Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

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http://moschip.ru/get-element

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В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

Офис по работе с юридическими лицами:

105318, г.Москва, ул.Щербаковская д.3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:
moschip.ru
moschip.ru_4
moschip.ru_6
moschip.ru_9