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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!



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VSC8514-11

Quad Port Gigabit Copper EEE PHY with QSGMII MAC-to-PHY Interface

Smallest package footprint quad PHY.

The VSC8514-11 device is a quad port Gigabit Ethernet PHY featuring Microsemi's innovative EcoEthernet™ 2.0 power-saving technologies such as IEEE 802.3az Energy Efficient Ethernet (EEE), ActiPHY™ automatic link power down, and PerfectReach™, an intelligent algorithm that adjusts power based on cable length.

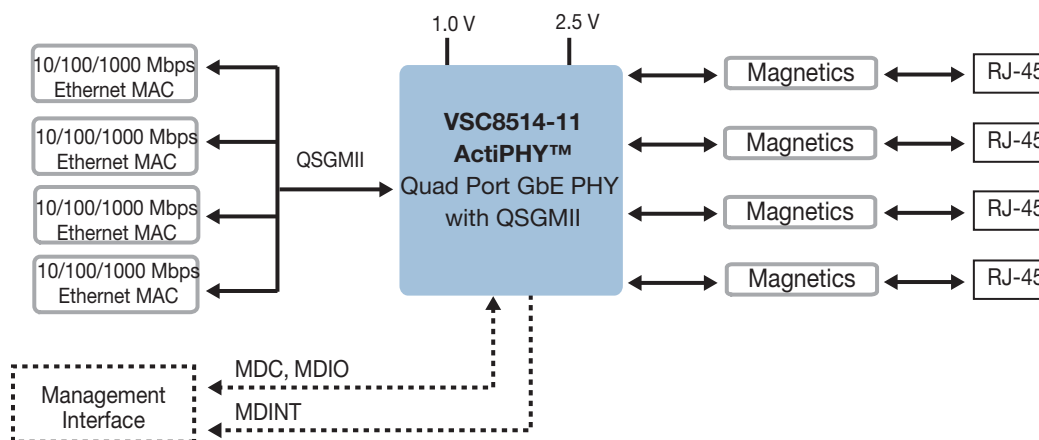
The VSC8514-11 device optimizes power consumption in all link operating speeds. Adjustable LED brightness control further reduces power consumption for end users.

Highlights

- EcoEthernet™ 2.0 with IEEE 802.3az Energy Efficient Ethernet (EEE)
- QSGMII MAC interface

Applications

- Data centers
- Enterprise gateways, switches, and routers
- Home gateways and wireless routers
- Internet of Things (IoT)
- PON MDUs
- Wireless backhaul



VSC8514-11

Quad Port Gigabit Copper EEE PHY with QSGMII MAC-to-PHY Interface

EcoEthernet v2.0 Energy Efficiency

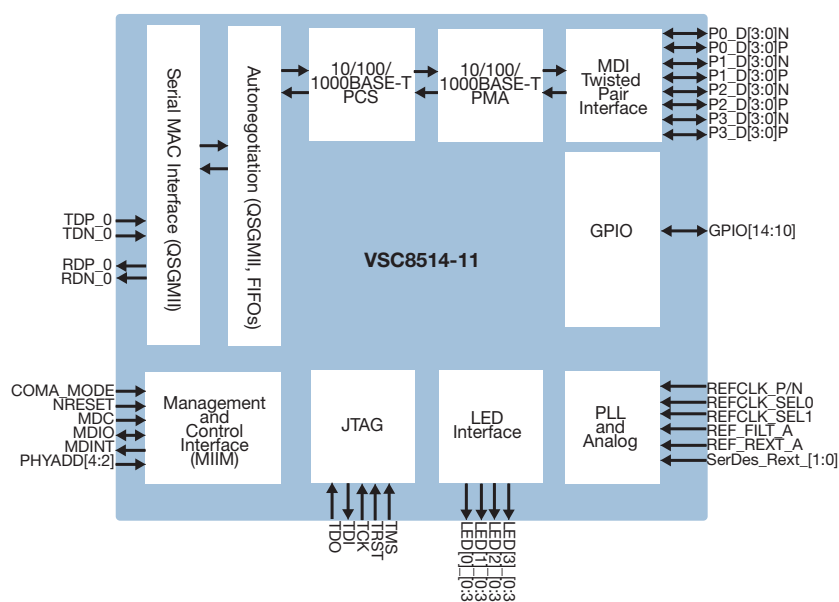
- ActiPHY
- PerfectReach
- IEEE 802.3az Energy Efficient Ethernet
- Integrated LED brightness control
- Fully optimized power consumption for all link speeds
- 10BASE-Te support according to IEEE 802.3az

Superior PHY and Interface Technology

- Four integrated 10/100/1000BASE-T Ethernet copper transceivers (IEEE 802.3ab-compliant) with VeriPHY™ cable diagnostics
- QSGMII SerDes MAC interface
- Patented line driver with low EMI voltage mode and integrated line side termination resistors
- HP Auto-MDIX support and forced MDI/MDIX option
- Jumbo frame support up to 16 kB with programmable synchronization FIFOs
- IEEE 802.3bf register support provides standardized access to information about data delay between the MDI and xMII interface for a given PHY

Key Specifications

- 1.0 V and 2.5 V power supplies
- 3.3 V-tolerant 2.5 V inputs (single-ended and bi-directional TTL/CMOS I/Os)
- QSGMII v1.3 and IEEE 1149.1 JTAG boundary scan
- IEEE 802.3 10BASE-T/Te, 100BASE-TX, and 1000BASE-T compliance
- 12 mm x 12 mm, 138-pin multi-row QFN package
- VSC8514-11 operation temperature: 0 °C to 125 °C
- VSC8514-14 operating temperature: -40 °C to 125 °C



Microsemi

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