VSC8572
Dual Port Dual Media RGMII/SGMII GbE PHY with IEEE 1588

Best-in-Class Power Consumption

- Lowest power dual port GbE PHY in the industry
- EcoEthernet 2.0 green energy efficiency modes including ActiPHY, PerfectReach, and IEEE 802.3az
- Integrated temperature monitoring and LED brightness control
- Fully optimized power consumption for all link speeds

Superior PHY and Interface Technology

- Two integrated 10/100/1000BASE-T Ethernet copper transceivers (IEEE 802.3ab compliant) with VeriPHY™ cable diagnostics
- Two dual media copper/fiber ports with unidirectional IEEE 802.3ah support
- RGMII and SGMII SerDes MAC interfaces
- Patented line driver with low EMI voltage mode and integrated line side termination resistors
- HP Auto-MDIX support
- Integrated AC-coupling capacitors for SGMII interface
- Jumbo frame support up to 16 kB with programmable synchronization FIFOs

Advanced Carrier Ethernet Support

- Recovered clock outputs with programmable clock squelch control and fast link failure indication (<1 ms) for G.8261 SyncE applications
- Supports IEEE 1588v2 timestamp packet correction
- Flexible transmit and receive frequency timing per PHY port
- 1000BASE-T ring resiliency for switching between master/slave timing while maintaining link up integrity
- Integrated dual I2C mux to control SFP and PoE modules
- Supports IEEE 802.3bf timing and synchronization

Key Specifications

- 1.0 V core and 2.5 V I/O power supplies
- 3.3 V-tolerant 2.5 V inputs
- 17 mm × 17 mm ball grid array package
- Supports RGMII v1.3/2.0, SGMII v1.9, IEEE 1149.1 JTAG boundary scan, and IEEE 1149.6 AC-JTAG
- Compliant with IEEE 802.3 (10/1000 BASE-T, 100BASE-TX, 100BASE-FX, and 1000BASE-X)

Related Products

Visit www.microsemi.com for information about these related products:
- 1 GbE Carrier Ethernet switches, PHYs, and MACs
- 10/40/100G PHY solutions
- Electronic dispersion compensation CDRs and backplane signal conditioners

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.

VPPD-02791. 1.0. 4/16