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Alaska® 88E1000 (Single-Port) Transceiver Alaska® 88E1000S (Single-Port) Transceiver

The Marvell® single-port Alaska® 88E1000 and 88E1010 transceivers are physical layer (PHY) devices for Ethernet 1000BASE-T, 100BASE-TX and 10BASE-T applications. These devices are manufactured using standard digital CMOS process and contains all the active circuitry required to implement the physical layer (PHY) functions to transmit and receive data on standard CAT 5 unshielded twisted pair cable.

The Alaska 88E1000 and 88E1010 transceivers contain an IEEE 802.3 compliant Gigabit Media Independent Interface (GMII) and a 10-bit interface (TBI) that connects directly to a Media Access Controller (MAC)/switch port. These devices use advanced mixed-signal processing to perform equalization, echo and cross-talk cancellation, data recovery, and error correction at a Gigabit per second (Gbps) data rate. The Marvell advanced mixed-signal technology allows the Alaska 88E1000 and 88E1010 transceivers to achieve robust performance in noisy environments with low power dissipation.

The single-port Alaska 88E1000S and 88E1010S transceivers include all of the features and capabilities of the Alaska 88E1000 device as well as a proprietary 1.25 GHz Serializer/Deserializer (SERDES) interface that reduces pin count for high-port-count applications. The SERDES interface may be connected directly to a fiber-optic transceiver for 1000BASE-T/1000BASE-SX/LX media conversion applications.

Key Features

- GMII and TBI
- SERDES media interface (Alaska 88E1000S and 88E1010S devices only)
- Superior performance (180 meters cable distance)
- Low power (1.8 Watts)
- 128-pin PQFP (14 mm x 20 mm) (Alaska 88E1000 and 88E1000S devices only)
- 117-pin Thin Fine Ball Grid Array (TFBGA) (10 mm x 14 mm) (Alaska 88E1010 and 88E1010S devices only)

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- Marvell® Announces Broad Support for VCT...[more](#) »
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LITERATURE

- Gigabit Ethernet Over Copper Performance White Paper (pdf) »

Related Links

- Alaska® Single Port 88E1111 Transceiver »