



Bel's New RJ45 SFP Transceiver Module Delivers Gigabit Ethernet Speeds over Category 5/5e UTP Cables

Small-Footprint Device Integrates Broadcom's BCM54616S Transceiver for Optimal Low Power Dissipation

JERSEY CITY, N.J., Aug 09, 2010 (BUSINESS WIRE) -- Bel Fuse Inc., a premier developer of magnetic-based solutions for high-speed networking and computer applications, today announced the availability of the SFP-1GBT-03 transceiver module, a Small Form-factor Pluggable (SFP) device offering Gigabit Ethernet (GbE) speeds over Category 5/5e Unshielded Twisted-Pair (UTP) copper cable. The module supports copper networks, with an integrated SerDes PHY interface that can connect directly to a fiber-optic module. Notably, Bel's SFP-1GBT-03 part operates at 610mW (typical in 1000BASE-T applications) and 320mW (typical in 10/100Base-T applications) for unsurpassed cost and performance efficiency. It mates using a conventional RJ45 interface, and fits into standard Multi-Source Agreement (MSA)-compliant SFP equipment. Supporting both [full-duplex](#) and half-duplex communication, the module complies with IEEE 802.3, 802.3u, and 802.3ab specifications, and supports IEEE 802.3u and 802.3ab auto-negotiation features allowing networking equipment to automatically determine and adjust the required setting.

Bel's RoHS-compliant transceiver module is able to access the physical layer IC (PHY) via I2C interface. Additionally, the device features Baseline Wander correction to recover data in a worst-case network environment, and an automatic medium-dependent interface crossover (auto-MDIX) feature. In 1000BASE-T and 100BASE-TX modes, the transmit data stream is scrambled to reduce radiated emissions and to ensure that there is no correlation between symbols in the data stream.

Supporting 10/100/1000 Mbps data-rate in excess of 100 meters (325 feet) reach over UTP Category 5/5e cables, the robust SFP-1GBT-03 transceiver module is ideally suited for implementing small form-factor Network Interface Cards (NICs) and uplinks. As such, it is highly appropriate for use in such high-density applications as LAN 1000BASE-T, switch-to-switch interfaces, switched backplanes, blade servers, gaming devices, and router/server interfaces.

Lee Hancock, broadband product manager at Bel, said, "Bringing the new SFP-1GBT-03 transceiver module to market is a significant achievement for Bel, especially at this low price point. By integrating Broadcom's BCM54616S Gigabit Ethernet transceiver, the small form-factor module helps OEMs lower system cost and substantially reduces power dissipation in applications enabling high-speed, cost-effective network connectivity over copper cable. We are pleased to be again working with Broadcom to develop products of superior quality and functionality to help customers expand their Ethernet applications."

"Broadcom's BCM54616S Gigabit Ethernet transceiver provides the industry's lowest power and highest integration for maximum flexibility in systems design," said Ravi Manik, product line manager for Broadcom's PHY line of business. "Its integration into Bel's SFP-1GBT-03 transceiver module is a logical solution that will help enable a new class of cost-effective Gigabit Ethernet SFPs."

Bel's hot-pluggable SFP-1GBT-03 transceiver module operates from a single 3.3V power supply. It is packaged in a fully metallic housing to ensure superior RFI performance and extremely low EMI emissions to reduce the design constraints required to meet EMI emission specifications. A bail latch facilitates ease of extraction of RJ45 cable assemblies, even when transceiver modules are closely ganged together in equipment racks. Operating case temperature is 0 to +70 degrees C. For complete specifications regarding Bel's SFP-1GBT-03 transceiver module, visit <http://www.belfuse.com/Data/Datasheets/SFP-1GBT-03.pdf>.

Pricing for Bel's SFP-1GBT-03 transceiver modules is \$30.00 each in quantities of 1,000. Delivery is 16 to 20 weeks. Samples are immediately available. To locate a representative, visit <http://www.belfuse.com/FindARep.asp> or to find a distributor, visit <http://www.belfuse.com/DistributorList.asp>.

About Bel

Bel (www.belfuse.com) and its divisions are primarily engaged in the design, manufacture, and sale of products used in networking, telecommunications, high-speed data transmission, commercial aerospace, military, transportation, and consumer electronics. Products include magnetics (discrete components, power transformers and MagJack(R) connectors with integrated magnetics), modules (DC/DC converters, integrated analog front-end modules, custom designs), circuit protection (miniature, micro and surface mount fuses) and interconnect devices (micro, circular and filtered D-Sub connectors, passive jacks, plugs and high-speed cable assemblies). The Company operates facilities around the world.

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