Test Set Supports Robust Receiver Designs with Accurate Characterization, Conformance Testing

Agilent Technologies Inc. announced its complete optical receiver stress test solution will be expanded to test 850 nm multimode transceivers. Agilent demonstrated the new optical test solutions at ECOC 2010, Sept. 20 to 22, Torino, Italy, Lingotto Fiere Exhibition Center, Hall 3, Booth 334.

The Agilent N4917A optical receiver stress test set provides the most accurate and repeatable conformance and characterization test results. Design and test engineers in the communications and storage industry can now accurately characterize and verify standard conformance of receive optical sub assemblies (ROSAs) and transceiver modules operating up to 14.2 Gb/s, commonly used in 10 Gb Ethernet and 10 G Fibre Channel networks.

Optical component vendors are continuously driving optimization and redesign of the optical transceivers used in IEEE 802.3ae 10GbE and IEEE 8.03ba 40GbE and 100G Ethernet and for next-generation Fibre Channel networks. The growing demand for optical short-reach connections increases the demand for testing 850 nm multimode transceivers and subcomponents. R&D and test departments need flexible test equipment that allows accurate characterization and compliance testing, in a repeatable and efficient way, for such new receiver designs.

Agilent already offers a complete optical receiver test solution for 10 GbE-LR/-ER and 10 G Fibre Channel. This solution is now extended to address testing of short-reach transceivers, such as 10GBASE-SR, 40GBASE-SR4 and 100GBASE-SR10.

The extended Agilent N4917A optical receiver stress test set provides R&D and test engineers with a complete test solution. Benefits include:

* Accurate test results with calibrated injection of optical modulation amplitude (OMA), extinction ratio (ER) and vertical eye closure penalty (VECP)

* Reduction in programming and setup time by automating conformance and characterization tests -- now also for 10 GBASE ?SR/100 G BASE-SR10 in addition to existing 10 GBASE - LR, -ER, and 10 G Fibre Channel

* A choice of two reference transmitters: a new one for 850 nm multimode fibers, in addition to the existing one supporting 1310 nm and 1550 nm single mode fibers

* nvestment protection because the solution is based on existing Agilent instruments, such as the J-BERT and Infiniium DCA-J, which can be used for accurate characterization in other gigabit applications up to 28.4 Gb/s.

The Agilent optical receiver stress test solution consists of the following:

* The N4917A calibration and automation software and stress conditioning unit with fiber optic cable kit

* The 81490A reference transmitter for 1310 nm/ 1550 nm single mode fibers and 850 nm multimode fibers

* Accessory kits for single mode and multimode

* The J-BERT N4903A/B high-performance serial BERT

* The 86100C/D Infiniium DCA-J.

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