Avago Optical Module Test

AI Overview

Avago optical modules, including SFP and SFP+ transceivers, are tested using dedicated evaluation boards and standardized electro-optical and digital diagnostic procedures.Evaluation BoardsAvago provides SFP and SFP+ evaluation boards such as the AFCT-5016Z, AFBR-700SDZ, and AFBR-57D5APZ, designed to facilitate testing of fiber optic transceivers compliant with MSA standards like SFF-8074i, SFF-8472, and SFF-8431/8432 . These boards include a printed circuit board (PCB) with clearly labeled connections, jumpers, and DIP switches to configure the module for testing . The SFP+ module plugs into a 20-pin connector on the board, allowing access to transmitter and receiver signals, power supply, and digital diagnostic interfaces .Test EquipmentTo perform a complete evaluation, the following equipment is typically required:DC power supply (3.3V) for module operation Fiber optic cables for signal transmissionDigital Communication Analyzer (DCA) such as 86100C with plug-ins 86105C or 86112A for eye diagram and signal integrity measurementsError Performance Analyzer and Pattern Generator (e.g., 70843B) to test bit error ratesFiber optic attenuators to simulate link lossEEPROM reader (i-Port or similar) to access digital diagnostic monitoring (DDM) data Test ProceduresElectro-Optical TestingConnect the SFP/SFP+ module to the evaluation board and power it with 3.3V supply .Use fiber optic cables to connect the transmitter and receiver to the DCA and error analyzer.Measure key parameters such as optical output power, receiver sensitivity, extinction ratio, and eye diagram quality .Apply attenuators to simulate different link conditions and verify module performance over the expected range.Digital Diagnostic Monitoring (DDM)Access the module's EEPROM via the I^2C interface (SCL and SDA lines) on the evaluation board .Read parameters such as temperature, supply voltage, laser bias current, and optical power.Verify that the module reports accurate values and responds correctly to digital interface comman...

Article Content

Optical Mouse Sensors

Avago Technologies ADNS-2610 and ADNS-2620 are new entry level, small form factor optical mice sensors, which are used to implement a non-mechanical tracking engine in computer mice.

White Paper

The new MiniPODTM optical modules incorporate Avago Technologies 850-nm Vertical-Cavity Surface Emitting Laser (VCSEL) technology, Avago Technologies PIN array technology, and Avago

Genuine Avago Transceiver Modules

The Avago AFCT-5715LZ Transceiver Module is a high-performance optical transceiver designed for single-mode fiber applications. Supporting 1.25Gbps data rates and 1000Base-LX standards, this

SFP+ Evaluation Board

The purpose of this SFP+ evaluation board is to provide the designer with a convenient means for evaluating SFP+ fiber optic transceiver such as AFBR-700SDZ and AFBR-57D5APZ compliant with

The Avago Advantage

Avago products serve three primary target markets: wireless communications, wired infrastructure, and industrial and other. Avago has a global employee presence and heritage of technical innovation

Avago AFBR-57G5MZ-ELX Compatible 32G Fibre

Built to replace the original AFBR-57G5MZ-ELX, we code and test each 32G FC SFP28 module to ensure it works with the Avago SAN switches,

AV02-2816EN UG AFBR-800EVK 18Jul2012 dd

The optical interface uses 12-fi ber PrizmTM to MPO/MTP connector (included in the kit). These modules incorporate Avago Technolo-gies'' proven integrated circuit and VCSEL technology to

AV02-2822EN AN_5509 AFCT-5716Z 11Feb2011.pdf

SFP+ module is shown in Figure 2. The SFP+ module TX & RX optical/electrical characteristics such as eye diagram, rise/fall time, jitter can be tested. It is recommended that low

Data Sheet

Glass Codewheel Tests ... Film Codewheel Tests ... Mounting Rotary Encoders with Codewheels There are two orientations for mounting the Avago Technologies encoder module and Avago Technologies

Application Note 5360

SFP+ Evaluation Board The purpose of this SFP+ evaluation board is to provide the designer with a convenient means for evaluat-ing SFP+ fiber optic transceiver such as AFBR-700SDZ and AFBR

Test Center

Perform optical performance testing to ensure signal quality, stability, and reliability by evaluating transceiver characteristics such as eye diagram and bit error rate (BER).

Avago AFCT-5016Z Application Note | Manualzz

This board is designed to provide a convenient means for evaluating SFP+ fiber optic transceivers. The note also describes the test methods for evaluating SFP+ modules.

Applications for Embedded Optic Modules in Data Communications

Avago Technologies has been the world leader in parallel optics since 2000 and currently delivers in excess of 200,000 modules per quarter. This white paper describes the latest embedded parallel

Qualification Report (2000hrs)

Qualification Report (2000hrs) Summary The AFCT-5745NPZ/UPZ Lead-free Singlemode Optical Transceivers have been qualified in accordance to the requirement of Telcordia Document GR-468

Avago Fiber Optic-Altera AV00-0282EN 040714 dd

Based on proven laser and IC technology, Avago provides a comprehensive portfolio of fi ber optic transceiver, transmitter and receiver module and single-mode optical component solutions with

Testing Optical Transceivers: Different SFP Testing

Discover the comprehensive guide to SFP optical transceiver testing, including the types of tests involved and step-by-step procedures. Ensure

Optical Encoder Modules

Optical Encoder Modules Reliability Data Description The following cumulative test results have been obtained from testing performed at Avago Technolo-gies in accordance with the latest revision of MIL

Fiber Optic Modules and Components | AVAGO Featured Products | AVAGO ...

Avago Industrial Fiber Optic Division (IFPD) provides an extensive range of fiber optic modules and components for industrial and automotive applications, including POF transceivers, high galvanic

Optocouplers Desig

and rating). Avago Technolo-gies has conducted extensive op-erating life tests to determine the efects of continuous high-voltage stress, both transient as well as steady-state, on the degradation of

The DatasheetArchive

This document describes the details of the evaluation printed circuit board (PCB) and the test equipment and methods for evaluating the optical/electrical characteristics of SFP modules.

AFBR-709DMZ 10Gb/1Gb Ethernet, 850nm SFP+ Transceiver

Description The Avago AFBR-709DMZ transceiver is part of a family of SFP+ products. This transceiver utilizes Avago''s 850nm VCSEL and PIN Detector technology to provide an IEEE

Optical Transceivers

Broadcom''s Optical Transceivers are products that support insertion and removal of fiber optic connectors - for applications requiring flexibility in user handling, cable types and link distances.

Avago Technologies VCSEL design and integration

Vertical integration within Avago Technologies enables the specialized design of the VCSEL, optics and IC laser driver to meet these requirements. The VCSEL and IC driver were co

Avago Compatible Transceivers | EDGE Optical Solutions

Browse Avago compatible optical transceivers. 100% compatible, tested and certified. Fast shipping, competitive pricing.

Application Note 1300

This document describes the details of the evaluation printed circuit board (PCB) and the test equipment and methods for evaluating the optical/electrical characteris-tics of SFP modules.

Qualification Report

Qualification Report Summary The AFBR-57D7AMZ Multimode Optical Transceivers are qualified in accordance to the requirement of Telcordia Document GR-468-CORE under the supervision of

Charting the Path Toward 1.6T and 3.2T Optical Module

Pluggable optical transceiver modules are essential components in data communication systems, widely used as optical interconnects at the termination

How to Test Optical Transceiver Modules: Methods, Metrics & Best ...

Learn how to test optical transceiver modules using power meters, BERT testers, and DDM tools. Ensure compatibility, performance, and reliability in data center and enterprise networks.

Reliability Data Sheet

All of these products use the same LEDs, similar IC, and the same packaging materials, processes, stress conditions and testing. The data in Table 1 and Table 2 reflect actual test data for devices on a

Contact Us

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