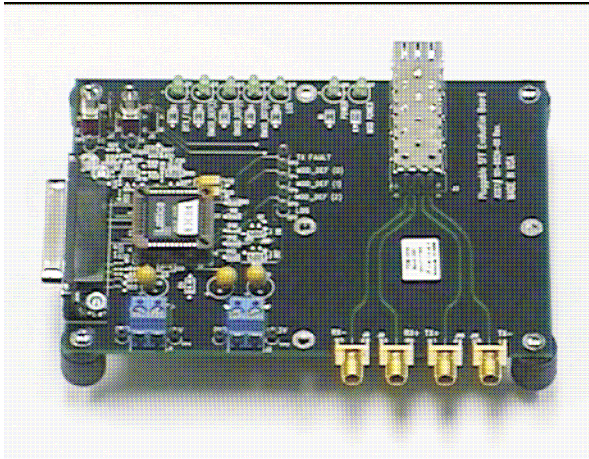


# Product Specification

## SFP Evaluation Board

### FDB-1018



Finisar’s FDB-1018 Evaluation Board is the perfect vehicle for testing and evaluating the new Small Form Factor Pluggable (SFP) optical transceivers.

The board consists of a single SFP edge connector and cage, four 50-ohm SMA coaxial connectors (J8-J11) for the high-speed differential transmitter input and receiver output signals, and test points and LEDs for monitoring all other SFP pins. It is compatible with short wavelength and long wavelength SFP transceiver types for use at data rates of 125 Mb/s to 4.25 Gb/s.

The FDB-1018 SFP Evaluation Board is supplied with software and a DB-25 cable for communication with a PC parallel port. This cable allows direct communication between the PC and the module via the I<sup>2</sup>C 2-wire serial bus on pins MOD\_DEF(1) and MOD\_DEF(2), as well as for reading the status lines and setting the TX disable and Rate Select inputs.

The software included with the board provides a simple windows-based GUI for monitoring the Serial ID information available in Finisar’s SFP transceivers.

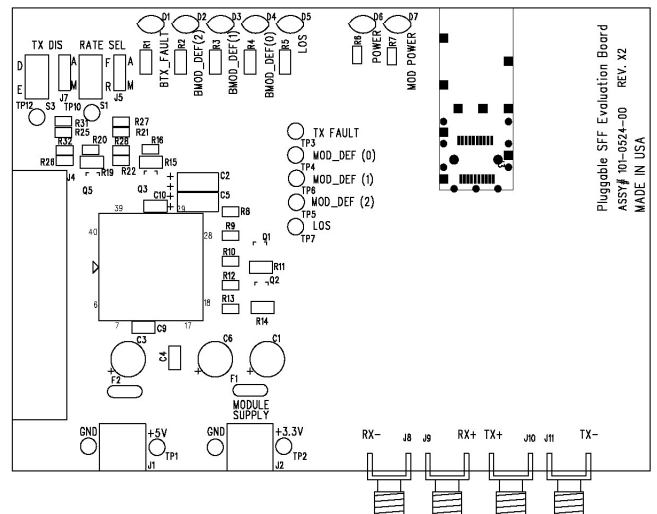
A switch is provided to assert and test the transmit disable function (S3). Another switch (S1) is provided to select the operating bit rate in those dual rate SFP transceivers that require it (not required for Finisar’s SFP transceivers). TX disable can be controlled either by the switch or the parallel port. Change the position of the jumper to change controls. Similarly, a jumper governs the Rate Select control.

### SPECIFICATIONS

The FDB-1018 SFP Evaluation Board requires two supply voltages. A module supply voltage of 3.1 to 3.6V should be supplied at connector J2. A 5V ±10% supply, used for the parallel port communication, should be connected to J1.

Input signals to the TX+ and TX– connectors should yield a differential swing ranging from 400 mV to 2400 mV, or each have a single-ended swing ranging from 200 mV to 1200 mV. Output signals on the RX+ and RX– connectors may range between 185 to 1000 mV, single-ended. SFP transceivers have internal AC coupling on all data lines.

The board layout and schematics are shown below.





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