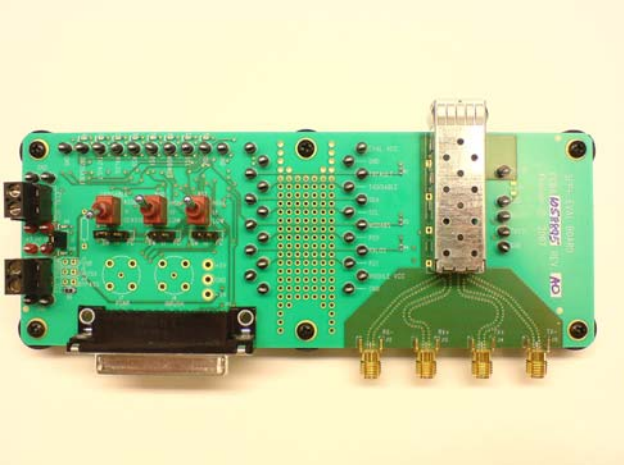
Finisar

Product Specification

SFP/SFP+ Evaluation Board

FDB-1027



Finisar's FDB-1027 Evaluation Board is the perfect vehicle for testing and evaluating SFP/SFP+ optical transceivers.

The board consists of a single SFP+ edge connector and cage, four 50-ohm SMA coaxial connectors (J12-J15) 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/SFP+ transceiver types for use at data rates of 125 Mb/s to 14.025 Gb/s.

The FDB-1027 SFP/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 2-wire serial bus on pins SCL and SDA, 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/SFP+ transceivers.

Switch (S1) is provided to assert and test the transmit disable function. Switch (S2) is provided to select the operating bit rate of the receiver (RS0) in multi-rate SFP/SFP+ transceivers that require it. Switch (S3) is provided to select the operating bit rate of the transmitter (RS1) in multi-rate SFP+ transceivers that require it. (Note: SFP modules do not support RS1.) TX disable can be controlled either by the switch or the parallel port; control is determined by the position of the jumper (S4). Similarly, jumpers at (S5) and (S6) govern the RS0 and RS1 controls, respectively.

SPECIFICATIONS

The FDB-1027 SFP/SFP+ Evaluation Board can be powered by one or two supply voltage(s) depending on whether the supply for the evaluation board and module need to be separated. A module supply voltage of 3.0 to 3.6V should be supplied at connector J9. If shunt at jumper J2 is removed, a second 3.3V supply can be provided at J1 to separately power the evaluation board.

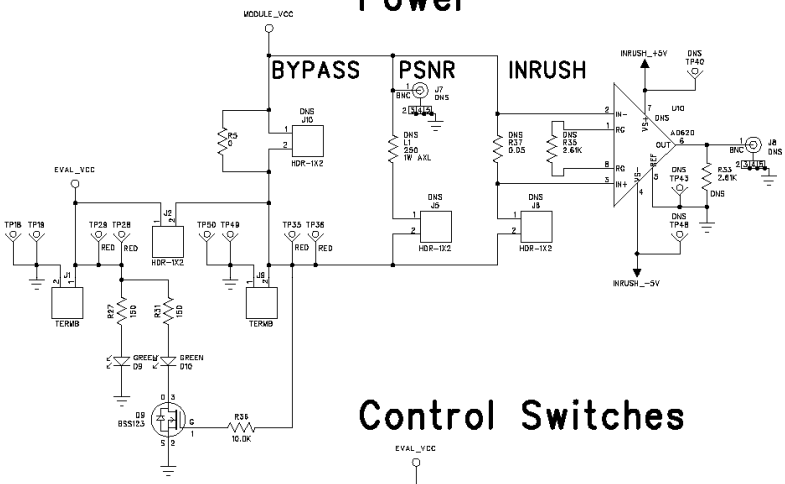
Please refer to module data sheets for specifications of input signals to the TX+ and TX– connectors and output signals on the RX+ and RX– connectors. SFP/SFP+ transceivers have internal AC coupling on all data lines.

The board layout and schematics are shown on pages 2 and 3.

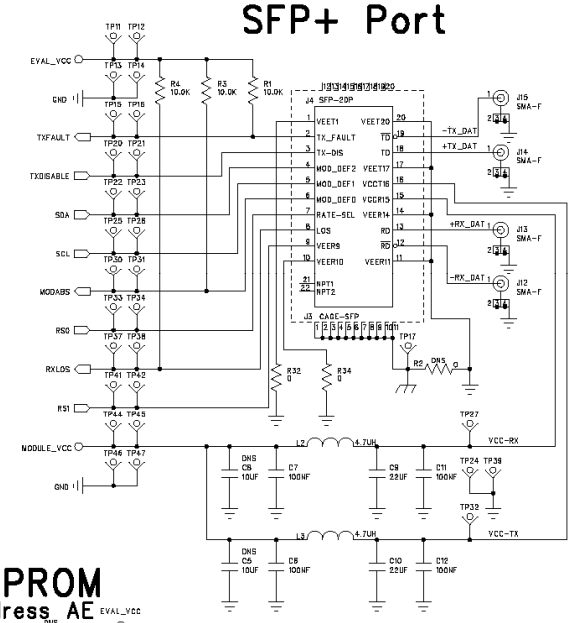
© Finisar Corporation February 15, 2012 Rev B

Finisar

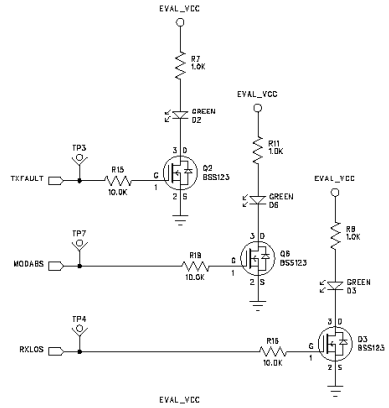
Power



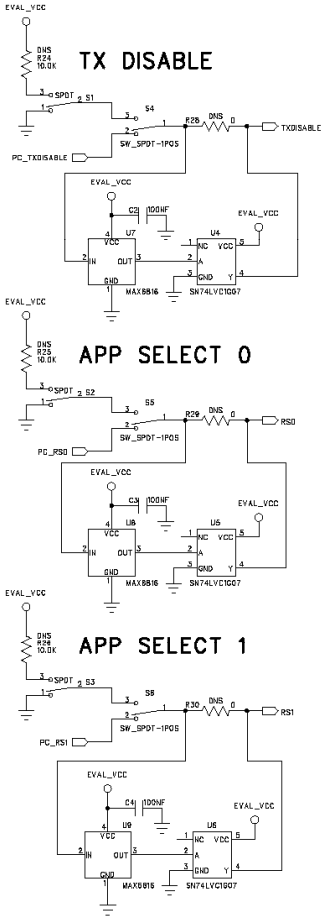
SFP+ Port



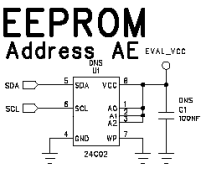
Status LEDs



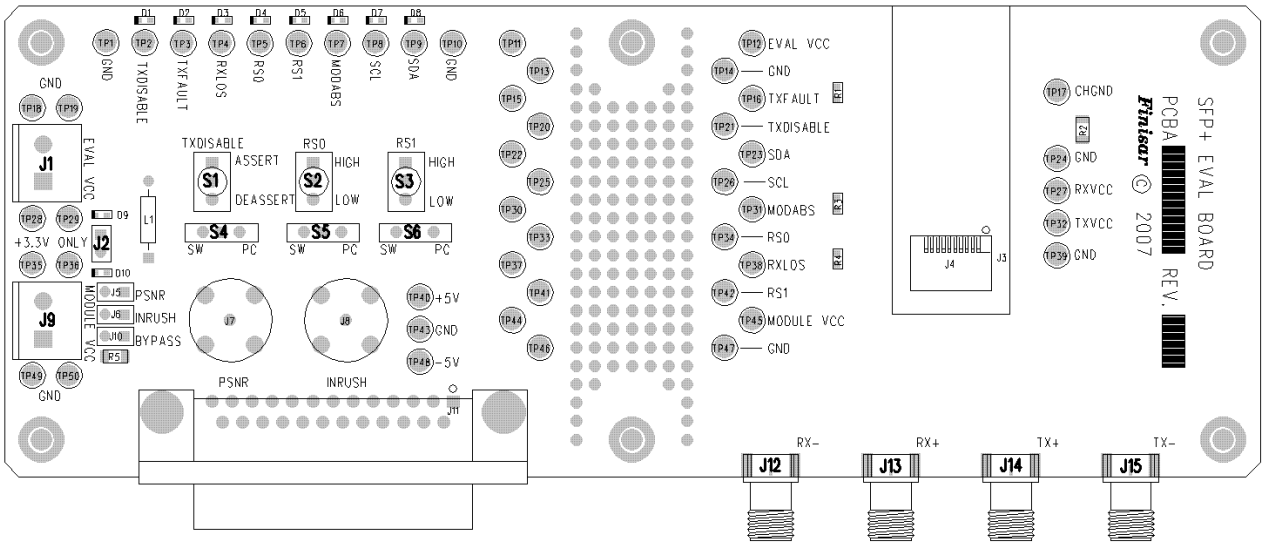
Control Switches



EEPROM



PC Interface



Finisar Corporation
1389 Moffett Park Drive
Sunnyvale, CA 94089-1134
Tel. 1-408-548-1000
Fax 1-408-541-6138
sales@finisar.com
www.finisar.com