# **Product Brief**

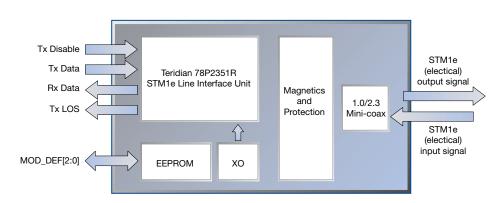
# **STM1e SFP Module**

Reduce developement costs for SDH Network OEM vendors and improves end user flexibility

The STM1e SFP is a Small Form-factor Pluggable (SFP) transceiver compatible with the Multi Source Agreement (MSA) for SFPs. The module utilizes Teridian Semiconductor's latest generation of Line Interface Units (LIUs) for 155 Mbit/s electrical SONET/SDH interfaces (STM1e). It also includes all the necessary components for interfacing to  $75\Omega$  telecommunications coaxial cable.

The 78P2351R physical layer IC includes Clock & Data Recovery in both directions, an adaptive receiver equalizer, and a CMI encoder/decoder for transparent NRZ to CMI line code conversion. It provides Receive Loss of Signal (LOS) detection and the option to disable (and tri-state) the transmit driver. A serial interface provides access to an on board E2PROM for identification information.







### **Benefits**

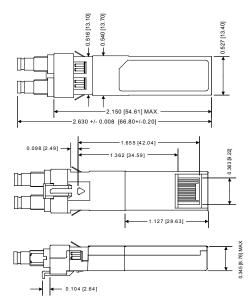
- Compatible with existing OC3/STM10 line cards using the pluggable SFP form factor
- Provides end user additional flexibility on a per port basis
- Reduces cost to system developers for offering STM1 electrical interfaces

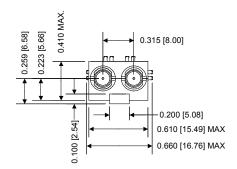


#### **Features**

- Compatible with the Multi-Source Agreement (MSA) for SFP transceivers
- 75Ω coaxial line interface compliant with ITU-T G.703/G.783 and Telcordia GR-253 for CMI coded 155Mbps electrical interfaces
- ITU-T G.783 compatible loss of signal detect
- Transmit power down supported
- Handles over 12.7dB of cable loss
- Extended Temperature operation:
  -10 C to 85 C
- 1.0/2.3 coaxial interface (Type A or D coupling)
- Low power dissipation (0.6 W typical)

## **Mechanical Specifications**





#### **Ordering Information**

PART DESCRIPTION	ORDERING NUMBER
STM1E-SFP EVAL KIT*	STM1E-SFP/EVK
STM1e-SFPxx-Grounds Isolated	STM1E-SFP02
STM1e-SFPxx-Grounds Connected	STM1E-SFP08

\*Include 1.0/2.3 to BMC cable assemblies and test board



6440 Oak Canyon, Irvine, CA 92618-5201 714-508-8800 (Tel) 714-508-8878 (Fax) For immediate technical information and the name of a local representative or distributor, **visit www.teridian.com**, send an e-mail to support@teridian.com or call (714) 508-8800.

No responsibility is assumed by Teridian Semiconductor Corporation for use of this product nor for any infringements of patents and trademarks or other rights of third parties resulting from its use. No license is granted under any patents, patent rights or trademarks of Teridian Semiconductor Corporation, and the company reserves the right to make changes in specifications at any time without notice. Accordingly, the reader is cautioned to verify that the data sheet is current before placing orders.

© 2005 Teridian Semiconductor Corporation