

# SXT6051

## STM-1/0 SDH Overhead Terminator

### General Description

The SXT6051 Overhead Terminator implements the Regenerator Section Termination, Multiplexer Section Termination and Higher Order Path Termination in STM-0 (51Mb/s) and STM-1 (155Mb/s) multiplexers. It provides micro-controller access for performance monitoring, alarm detection and configuration for transmit and receive paths. When used with the SXT6251 (21E1 Mapper), a complete solution for a 21 E1 or a 63 E1 Multiplexer is realized.

The SXT6051 is compliant with the latest releases of ITU-T G.703 and G.707. It provides all the alarm and control features to easily implement the multiplexer described in ITU-T G.783.

### Applications

- SDH Terminal Mux/ADM for microwave radio
- ADM fiber ring Mux
- Digital Loop Carrier (NGDLC) Systems
- Digital Cross-Connect Systems

### Features

- Performs Regenerator Section, Multiplexer Section, and Higher Order Path Overhead Processing for STM-1 and STM-0 signals.
- Byte parallel interface for STM-1 or STM-0, with byte alignment performed internally. Serial NRZ or B3ZS interface option for STM-0.
- Demultiplexes STM-0/STM-1 signals to Telecom Bus output with optional pointer processor re-timing.
- Multiplexes Telecom Bus data into STM-0 or STM-1 signals with pointer processing.
- Compatible with 1+1 protected ITU architecture.
- Records all RSOH, MSOH, and HPOH alarms. One second counters for B1, B2, B3, M1 REI and G1 REI.
- Full J0/J1 trace identifier processing
- Serial access to STM-1 user-defined, media-dependent and national bytes.
- Dedicated pins for serial access or pass-through feature for E1, E2, F1, F2, F3, D1-D3 & D4-D12 bytes.
- Low power CMOS technology with 3.3V core and 5V I/O in PQFP-208 package.
- IEEE 1149.1 Boundary Scan (JTAG) support

### SXT6051 System Block Diagram

