



2.488 GBPS FULLY INTEGRATED LOW POWER SONET/SDH TRANSCEIVER

FEATURES

- Fully integrated OC-48/STM-16 SONET/SDH transceiver with CDR, MUX, DEMUX, and CMU
- 16-bit, 155.52-Mbps LVPECL interface
- On-chip, PLL-based clock generator
- Loss-of-signal (LOS) output
- Line and system loopback modes
- Lock detect
- Meets SONET, Telcordia, and ITU-T jitter requirements
- Power supply: 2.5V (core), 3.3V (LVPECL I/O)
- Power dissipation: 1.2W typical
- 14 × 20 mm, 128-pin PQFP package
- Standard CMOS fabrication process

SUMMARY OF BENEFITS

- First CMOS OC-48 transceiver in the world.
- Low power consumption eliminates external heat sink, fans for system airflow, and expensive high current power supplies.
- High integration reduces design cycle and time to market.
- Increased port density per board and system.
- CMOS-based device takes advantage of the most effective silicon economy of scale.
- Features low-jitter CMU: 3 mUIRMS typical.
- Target applications:
 - OC-48/STM-16 transmission equipment
 - SONET/SDH optical modules and test equipment
 - ADD/DROP multiplexers
 - Digital cross-connects
 - ATM switch backbones
 - Terabit routers
 - Edge routers

Application Block Diagram

