

# Product Summary

## VSC8144

2.488Gb/s 4:1 SONET/SDH Transceiver with Integrated Clock Generator

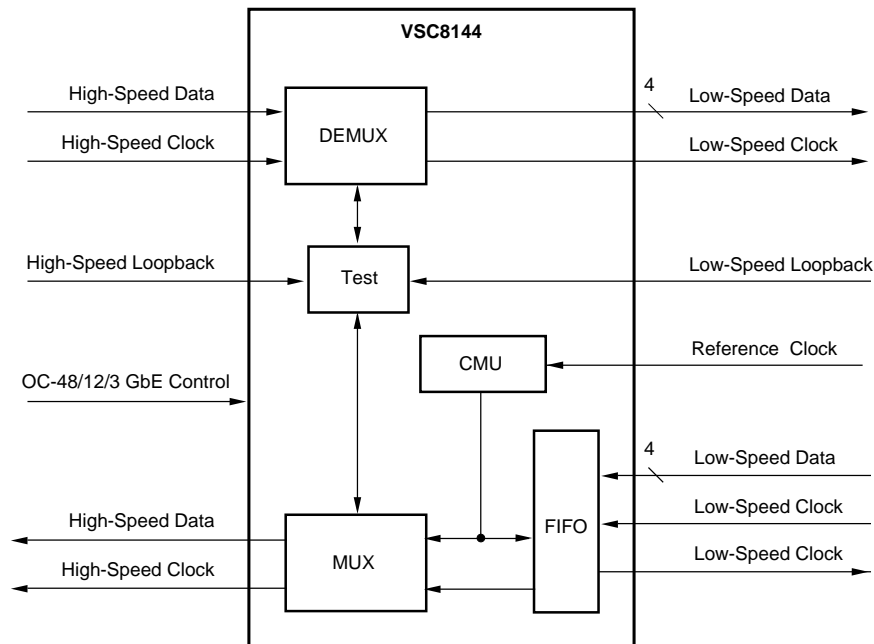
### Features

- Multi-Rate Transceiver for SONET OC-48, OC-24, OC-12, OC-3, and Gigabit Ethernet Rates
- 4-Bit LVDS Low-Speed Interface
- On-Chip PLL-Based Clock Generator
- High-Speed Clock Output
- Equipment, Facility and Split Loopback Modes
- Exceeds Bellcore Jitter Performance
- Single 3.3V Power Supply
- 2.5 W Maximum Power Dissipation
- 100-Pin PQFP (14x14x2mm)

### General Description

The VSC8144 is a SONET/SDH compatible multi-rate transceiver with integrated clock generator for use in SONET/SDH systems operating at OC-48, OC-24, OC-12, OC-3, or Gigabit Ethernet data rates. The internal clock generator uses a Phase Locked Loop (PLL) to multiply either a 77.76MHz, 155.52MHz, or 622.08MHz reference clock for internal logic and output retiming. The 4-bit parallel LVDS interface incorporates an on-board FIFO to address loop timing design issues. Facility and Equipment Loopbacks can be configured separately or simultaneously. The device operates with 2.5 W maximum power and is packaged in a thermally enhanced 100-pin PQFP package.

### Block Diagram



### Order Information

Product	Package
VSC8144QQ	100-Pin PQFP

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