

## Product Preview

1.0625 Gbits/sec  
Fibre Channel Transceiver

### Features

- ANSI X3T11 Fibre Channel Compatible 1.0625 Gbps Full-duplex Transceiver
- GLM Compatible (FCSI-301-Rev 1.0)
- 20 Bit TTL Interface for Transmit and Receive Data
- Monolithic Clock Synthesis and Clock Recovery - No External Components
- 53.125 MHz TTL Reference Clock
- Automatic Lock-to-Reference Function
- Suitable for Both Coaxial and Optical Link Applications
- Low Power Operation - 750 mW
- 80 Pin, 14x14 mm PQFP Package
- Single +3.3V Power Supply

### General Description

The VSC7126 is a full-speed Fibre Channel Transceiver optimized for Host Adapter and other space-constrained applications. It accepts two 10-bit 8B/10B encoded transmit characters, latches them on the rising edge of TBC and serializes the data onto the TX+/- PECL differential outputs at a baud rate which is twenty times the TBC frequency. It also samples serial receive data on the RX+/- PECL differential inputs, recovers the clock and data, deserializes it onto two 10-bit receive characters, outputs a recovered clock at one twentieth of the incoming baud rate and detects Fibre Channel "Comma" characters. The VSC7126 contains on-chip PLL circuitry for synthesis of the baud-rate transmit clock, and extraction of the clock from the received serial stream. These circuits are fully monolithic and require no external components.

### VSC7126 Block Diagram

