

Framers
and
Mappers

Features:

System / Packet Interface

- 32-bit Industry Compliant POS-PHY-3, Single-PHY Packet Interface
- 32-bit Industry Compliant UTOPIA-3, Single-PHY Cell Interface

Physical Layer Channelization Support

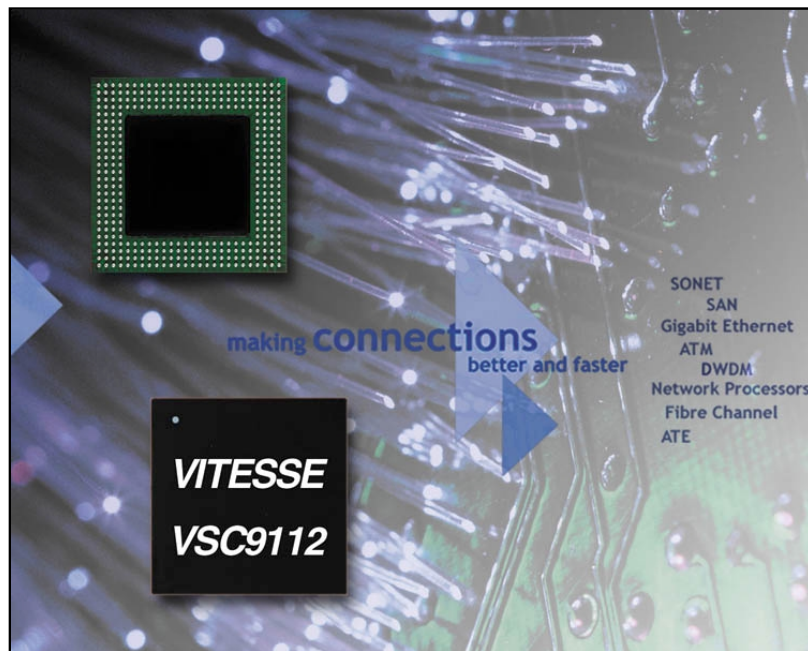
- STS-48c / STM-16c

Payload Processing

- Transparent Mode - Direct SPE Mapping
- ATM Cell Processing
- Programmable HDLC / PPP Encapsulation

SONET / SDH Processing

- Full Section, Line, and Path Termination and Generation
- Performance Monitoring and Reporting
- Enhanced Bit Error Rate Monitoring
- Section and Path Trace Buffers
- Full Overhead Insertion and Extraction and Status Monitoring Through Dedicated Access Ports



General Description

The VSC9112 is a dual mode STS-48c/STM-16c Packet/ATM mapping device. In Packet over SONET (POS) mode, this device can be used in equipment interconnecting IP/PPP/HDLC data over public or private SONET/SDH networks. Similarly in the ATM mode, this device can be used in equipment interconnecting enterprise ATM switches.

Features of the VSC9112 include: Full insertion/extraction of the transport overhead, bit error rate and extensive

SONET/packet/cell performance monitoring, packet/cell filtering and discarding functionalities, transmit and receive, JTAG TAP controller, and an 8-bit CPU interface with 8 general purpose I/O ports.

This highly integrated device provides a complete low-power physical layer solution on a single chip for Packet/ATM over SONET/SDH at the STS-48 rate.

