# "Best Data Eyes in the Business"

Product Brief

10G PHY Layer Products

### Features for VSC8171

#### SONET/SDH 16:1 Mux with CMU

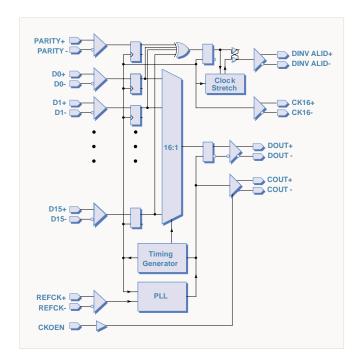
- 9.953 10.7 GHz Operation
- 16:1 Multiplexer with Integrated Clock Multiplier
- FIFO Companion Device VSC8273 16 x 622/667 MHz
- Supports OC-192 and FEC Rates with only a Reference Clock Frequency Change
- LVDS Parallel Interface
- Parity Checking
- High Speed Clock and Serial Data Output
- 650 mV (typ) Serial Data Output
- 35 ps (max) Rise/Fall Times
- Meets SONET OC-192 and SDH STM-64 Jitter Generation Requirements
- -5.2 V Single Power Supply
- 2.6 W (typ) Power Dissipation
- Thermally Enhanced 80-Pin PQFP and 96-Ball BGA
- 11.5 12.5 GHz Version Available - VSC8181



#### Introduction

Vitesse Semiconductor offers a complete line of physical layer serializer/ deserializer devices for use in a broad range of SONET OC-192 / SDH STM-64 and forward error correction applications. Vitesse has leveraged production proven technology to develop a family of chip sets that support a full range of design requirements from high-performance to low-power, performance-optimized, applications.

## VSC8171 Block Diagram





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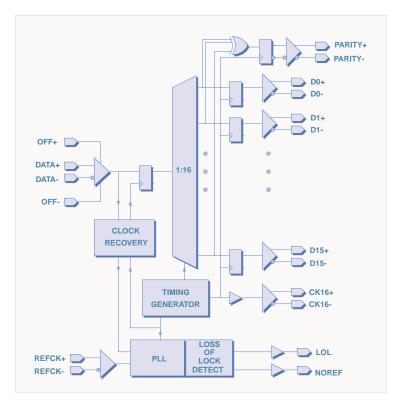
10G PHY Layer Products

### Features for VSC8172

#### SONET/SDH 1:16 Demux with CDR

- 9.953 10.7 GHz Operation
- 1:16 Demultiplexer with Limiting Amplifier and Integrated Clock Recovery
- LVDS Parallel Interface
- Parity Bit Calculation
- Loss of Lock Detection
- 50 mV (min) Input Sensitivity
- Supports OC-192 and FEC Rates with only a Reference Clock Frequency Change
- Meets SONET OC-192 and SDH STM-64 Jitter Tolerance Requirements
- -5.2 V / -2 V Power Supplies
- 3.4 W (typ) Power Dissipation
- Thermally Enhanced 100-Pin PQFP and 96-Ball BGA
- 11.5 12.5 GHz Version Available - VSC8182

## VSC8172 Block Diagram



The VSC8171 mux offers integration of a high output swing mux with a lowjitter generation clock multiplier unit. The VSC8172 demux offers an integrated limiting amplifier, demux and high jitter tolerant clock and data recovery unit. Vitesse has eyes for you: "The best data eyes in the business."



For more information on Vitesse Products visit the Vitesse web site at www.vitesse.com or contact Vitesse Sales at (800) VITESSE or sales@vitesse.com