

## PE8000 VSR

### Product Description

*Quad, low power VCSEL laser driver for applications operating at data rates from 155 Mbps to 3.125 Gbps. Features include eye safety shutdown control and programmable modulation and bias current.*

### Product Benefits

- Allows for compact space saving parallel optical receiver module designs.
- Eases module and system design by reducing power supply and cooling requirements.
- Enables precision tuning of multi-channel links providing lowest power operation.
- Provides superior jitter performance and integration capabilities.
- Simplifies module and system designs.

### Applications

- Very Short Reach OC -192 Links
- Gigabit Ethernet Optical Links
- Fibre Channel Optical Links
- Infiniband Optical Links
- Proprietary multi-channel interconnects
- High-Speed Optical Interconnects
  - Rack-to-Rack
  - Shelf-to-Shelf
  - Board-to-Board

### Features

- Four independent channels operating from 155 Mbps to 3.125 Gbps on a single die.
- Low power 100 mW / channel architecture.
- User programmable 7-bit DAC for  $I_{bias}$  and  $I_{mod}$  control enabling fine-tuning of VCSEL output power.
  - $I_{bias}$  resolution of 0.05 mA
  - $I_{mod}$  resolution of 0.1 mA
- Fabricated in Peregrine's patented high isolation UTSi<sup>®</sup> SOS CMOS process.
- Operates from a single 3.3 V supply.

### Availability

This product will be available in Q3, 2001 (Subject to Change).

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## Data Sheet Identification

### Advance Information

The product is in a formative or design stage. The data sheet contains design target specifications for product development. Specifications and features may change in any manner without notice.

### Preliminary Specification

The data sheet contains preliminary data. Additional data may be added at a later date. Peregrine reserves the right to change specifications at any time without notice in order to supply the best possible product.

### Product Specification

The data sheet contains final data. In the event Peregrine decides to change the specifications, Peregrine will notify customers of the intended changes by issuing a PCN (Product Change Notice).

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