

PE8003

Product Description

Quad, low power Transimpedance Amplifier (TIA) with integrated Post Amplifier (PA) operating at data rates from 155 Mbps to 2.7 Gbps. Features include loss of signal shutdown and differential 100-ohm outputs.

Product Benefits

- Allows for compact space saving parallel optical receiver module designs.
- Eases module and system design by reducing power supply and cooling requirements.
- Complete receiver in a single IC reducing noise entry points, space, and cost.
- Provides superior immunity to cross talk. Enables lower noise operation (better Rx sensitivity).
- Prevents false data acquisition and reports event to system diagnostics.
- 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 2.7 Gbps on a single die.
- Low power 100 mW / channel architecture.
- Fully integrated TIA and Post Amplifier (Limiting Amp)
- Fabricated in Peregrine's patented high isolation UTSi[®] SOS CMOS process.
- Individual channel disable triggered by Loss of Signal (LOS) @ -15dBm
- Operates from a single 3.3 V supply.

Availability

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

Sales Offices

United States

Peregrine Semiconductor Corp.

6175 Nancy Ridge Drive
San Diego, CA 92121
Tel 1-858-455-0660
Fax 1-858-455-0770

Europe

Peregrine Semiconductor Europe

Aix-En-Provence Office
Parc Club du Golf, bat 9
13856 Aix-En-Provence Cedex 3
France
Tel 33-0-4-4239-3360
Fax 33-0-4-4239-7227

Japan

Peregrine Semiconductor K.K.

The Imperial Tower, 15th floor
1-1-1 Uchisaiwaicho, Chiyoda-ku
Tokyo 100-0011 Japan
Tel: 03-3507-5755
Fax: 03-3507-5601

Australia

Peregrine Semiconductor Australia

8 Herb Elliot Ave.
Homebush, NSW 2140
Australia
Tel: 011-61-2-9763-4111
Fax: 011-61-2-9746-1501

For a list of representatives in your area, please refer to our Web site at: <http://www.peregrine-semi.com>

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).

The information in this data sheet is believed to be reliable. However, Peregrine assumes no liability for the use of this information. Use shall be entirely at the user's own risk.

No patent rights or licenses to any circuits described in this data sheet are implied or granted to any third party.

Peregrine's products are not designed or intended for use in devices or systems intended for surgical implant, or in other applications intended to support or sustain life, or in any application in which the failure of the Peregrine product could create a situation in which personal injury or death might occur. Peregrine assumes no liability for damages, including consequential or incidental damages, arising out of the use of its products in such applications.

Peregrine products are protected under one or more of the following U.S. patents: 6,090,648; 6,057,555; 5,973,382; 5,973,363; 5,930,638; 5,920,233; 5,895,957; 5,883,396; 5,864,162; 5,863,823; 5,861,336; 5,663,570; 5,610,790; 5,600,169; 5,596,205; 5,572,040; 5,492,857; 5,416,043. Other patents may be pending or applied for.

*UTSi, the Peregrine logotype, SEL Safe, and Peregrine Semiconductor Corp. are registered trademarks of Peregrine Semiconductor Corp. All PE product names and prefixes are trademarks of Peregrine Semiconductor Corp.
Copyright © 2001 Peregrine Semiconductor Corp. All rights reserved.*