TRANSPORT PHYSICAL LAYER

VSC7967

VITESSE®

PON Integrated 155 Mbps to 2.5 Gbps Burst-mode Laser Driver and Limiting Amplifier



APPLICATIONS:

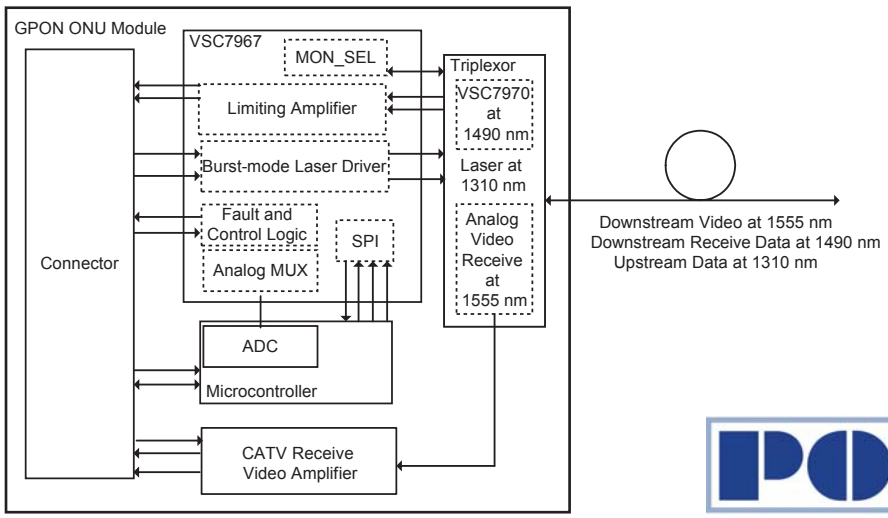
- BPON, GE-PON, and GPON burst-mode laser driver

SPECIFICATIONS:

- Package size: 5 mm x 5 mm QFN
- Maximum modulation = 80 mA
- Typical core power = 330 mW
- Operating temperature range = -40 °C to 100 °C

FEATURES:	BENEFITS:
APC loop requires no initialization phase	Laser driver is ready to transmit upon power up
VSC7967 meets the specification for BPON, GE-PON, and GPON	Allows the VSC7967 to be used in both PON and SFP module solutions
Burst enable input supports LVPECL, LVDS, and LVTTL output levels	Allows PON module to interoperate with multiple upstream devices
Selectable resistance on monitor diode input	Improves accuracy of the monitor diode input by allowing the user to select the resistance and capacitance in the input
Laser driver crossing point control	Enables the user to adjust the level of the crossing point on the laser driver output
Built-in eye safety support	No external components are required to meet IEC-60825 eye safety specifications

APPLICATION DIAGRAM:



PON PRO

VPPD-01356
Revision 1.0

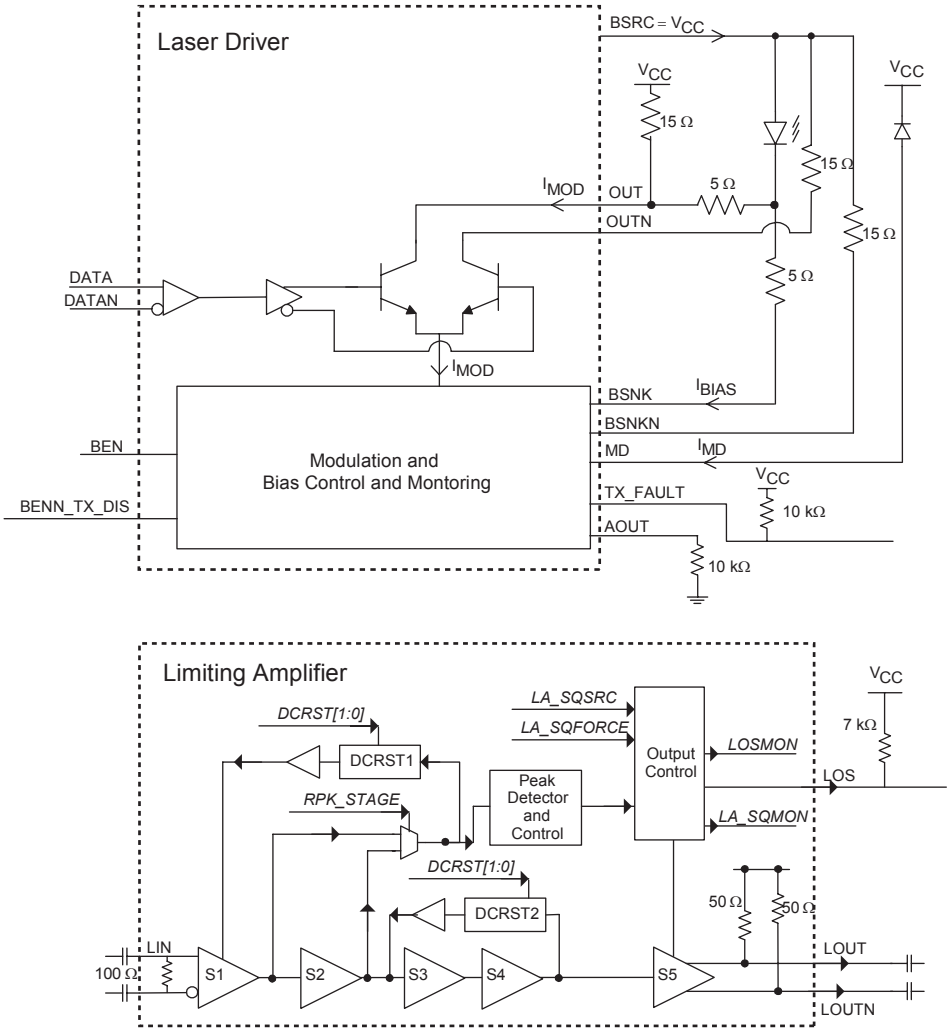
VSC7967

PON Integrated Burst-mode Laser Driver and Limiting Amplifier

GENERAL DESCRIPTION:

The VSC7967 is a multirate 1.25 Gbps integrated laser driver and 2.5 Gbps limiting amplifier for Passive Optical Network applications optimized to reduce module cost. The device is intended to drive distributed feedback (DFB) and Fabry Perot (FP) lasers. A standard SPI port is provided for programming integrated digital-to-analog converters for laser bias current, modulation current, average power, and the limiting amplifier loss of signal threshold. The VSC7967 is equipped with SFP-compliant fault indicators, redundant disable control, Automatic Power Control, temperature sensor, various signal monitors, and robust eye safety features. The VSC7967 is available in a 5mm x 5mm 32-pin QFN plastic package.

BLOCK DIAGRAMS:



Trademarks ™

Vitesse, ASIC-Friendly, FibreTimer, TimeStream, Snoop Loop, Super FEC, FOCUSConnect, Meigs-II, Meigs-IIe, Lansing, Campbell-I, Barrington, PaceMaker, HOVCAT48, HOVCAT48e, HOVCAT192, HOVCAT192e, Micro PHY, FOCUS32, FOCUS16, IQ2200, NexSAS, VersaCAT, GigaStream, HawX, SparX, StaX, VstaX, SimpliPHY,VeriPHY, ActiPHY, XFP PRO, SFP PRO, Smart-LINK, OctalMAC, EQ Technology are trademarks in the United States and/or other jurisdictions of Vitesse Semiconductor Corporation. All other trademarks or registered trademarks mentioned herein are the property of their respective holders.

Copyright © 2006

Vitesse Semiconductor Corporation ("Vitesse") retains the right to make changes to its products or specifications to improve performance, reliability or manufacturability. All information in this document, including descriptions of features, functions, performance, technical specifications and availability, is subject to change without notice at any time. While the information furnished herein is held to be accurate and reliable, no responsibility will be assumed by Vitesse for its use. Furthermore, the information contained herein does not convey to the purchaser of microelectronic devices any license under the patent right of any manufacturer.

741 Calle Plano
Camarillo, CA 93012, USA
Tel: +1 805.388.3700
Fax: +1 805.987.5896
www.vitesse.com
sales@vitesse.com