

RG8G72475

32Gbaud Quad-Channel Limiting Driver

RG8G72475 is a 32Gbaud low power quad-channel limiting driver amplifier that is designed for 100Gbps DP-QPSK coherent pluggable module applications.

The RG8G72475 contains integrated quad lanes of driver with SPI circuitry for DC controls on a single die. Each channel of driver has 100Ω differential AC-coupled input and 100Ω differential interface with an open-collector type of output stage. The driver is designed with industrial temperature definition and provides the limiting output voltage of 2.7Vppd, which is suitable for driving InP and Silicon Photonics based modulators.

The RG8G72475 is delivered as die formed with solder bumps for the flip-chip assembly.

Features

- > 24GHz bandwidth for covering 33Gbaud limiting mode operation
- 0.8W (max.) power consumption for 2.7Vppd typical output swing
- AC-coupled 100Ω differential input
- Open-collector configuration output stage that can drive DC-coupled 100Ω differential impedance
- Digital control and Analog monitoring
- Temperature sensor and peak detector
- 1.8V logic SPI digital interface integration
- Covering industrial temperature operation
- Die with solder bumps for flip-chip assembly

Applications

- 100Gbps DP-QPSK coherent pluggable module applications

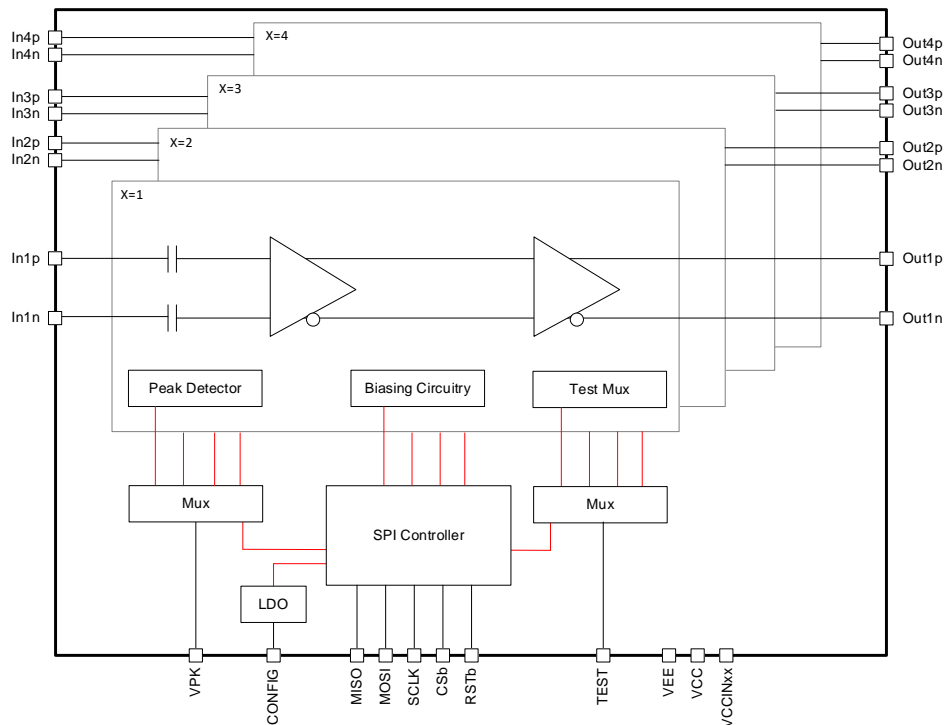


Figure 1. Block Diagram

Ordering Information

| Part Number    | Package Description           | Temperature Range |
|----------------|-------------------------------|-------------------|
| RG8G72475BGGWT | Die, 1.503 × 2.555 × 0.375 mm | -40°C to +105°C   |

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