

GX76474

4x64Gbit/s Linear Differential I/O Driver

The GX76474 is a low-power, high-performance, quad-channel linear driver chip. It is designed for 400G/600G optical integrated transmitter small-form factor (SFF) modules for metro and long-haul applications.

The GX76474 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 60Ω differential interface with an open collector type output stage, and linear output voltage of 4.0V_{ppd} suitable for Silicon Photonics modulator and multi-level modulations.

Applications

- 400/600Gbps 16QAM/64QAM advanced multi-level modulation systems
- High bandwidth SFF optical integrated modules

Features

- Data rate up to 64Gbps per channel for 400G/600G DP-mQAM applications
- > 40GHz Bandwidth
- > 10dB dynamic range of gain control
- 2.4W (typical) at linear 4.0V_{ppd}
- AC-coupled 100Ω differential input/ open collector configuration at the output
- Ultra-low inter-channel cross-talk
- Peaking adjustment functionality
- Analog control for gain and output voltage setting, and analog monitor for peak detector and gain control monitor
- OIF compliant SPI digital interface integration

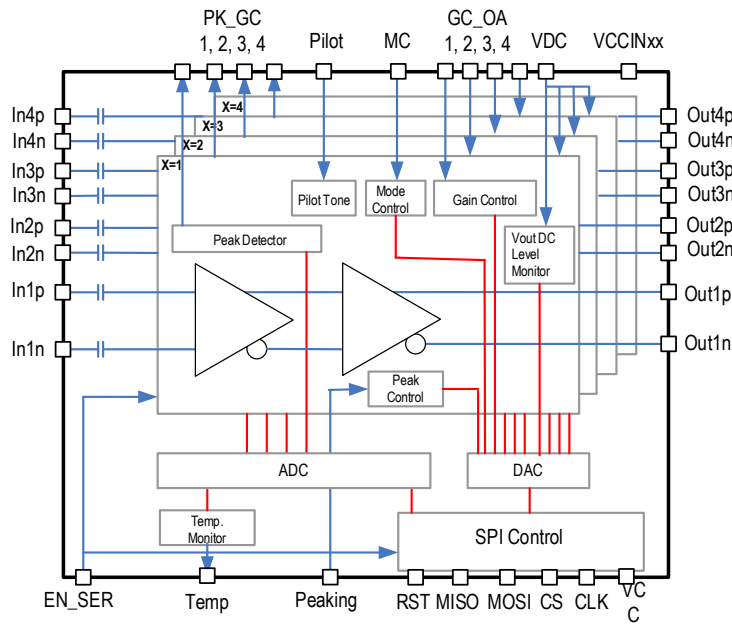


Figure 1. Block Diagram

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Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,
Koto-ku, Tokyo 135-0061, Japan
www.renesas.com

Contact Information

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