

GX76476

4 × 64Gbps Linear Differential I/O Driver

The GX76476 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 GX76476 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 4.0Vppd 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
- > 65GHz bandwidth
- > 10dB dynamic range of gain control
- 2.7W (typical) at linear 4.0Vppd
- 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

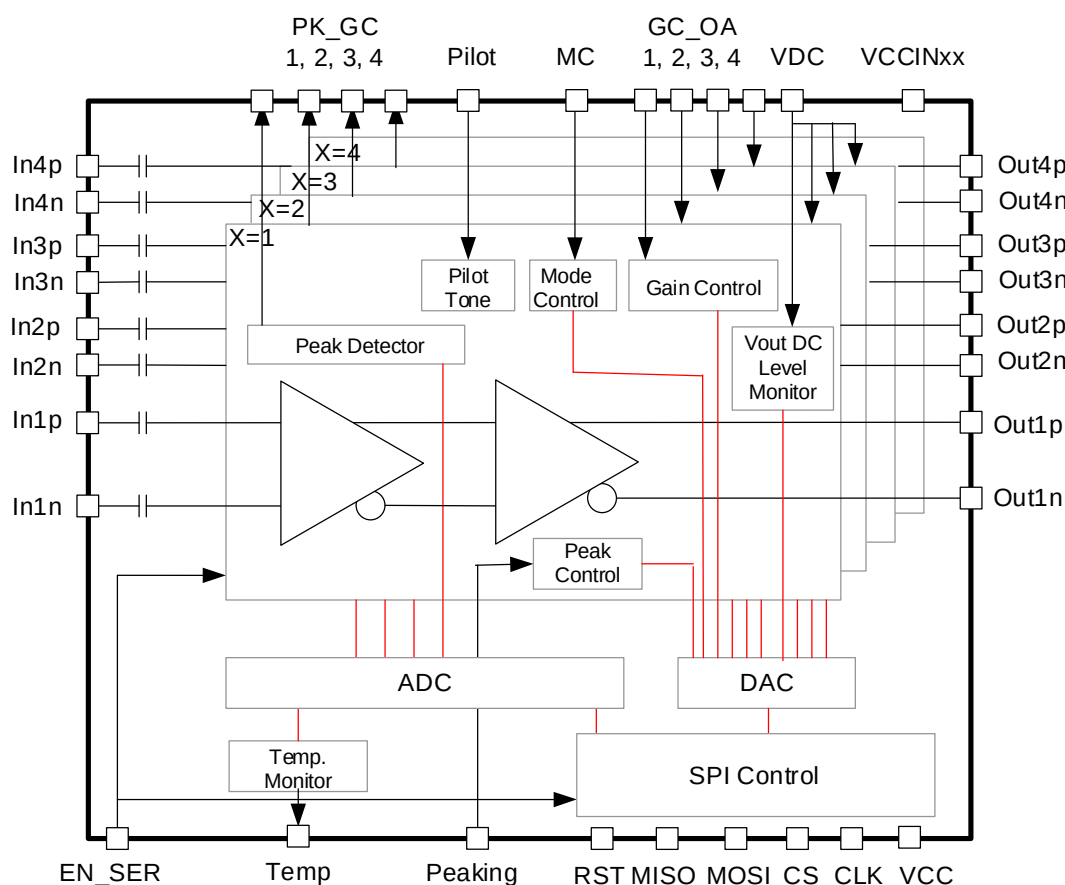


Figure 1. Block Diagram

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