Description

The GX76473 is a low-power, high-performance, quad-channel linear driver chip that is designed for 400G/600G optical integrated transmitter small-form factor (SFF) modules for metro and long-haul applications.

The GX76473 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 DC-coupled output, and linear output voltage of 1.8Vppd suitable for InP multi-level modulations.

Typical 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
- 2.1W (typical) at linear 1.8V_{ppd}
- 1.6W (typical) for 43Gbps application
- AC-coupled 100Ω differential input/DC-coupled 100Ω differential 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

Block Diagram

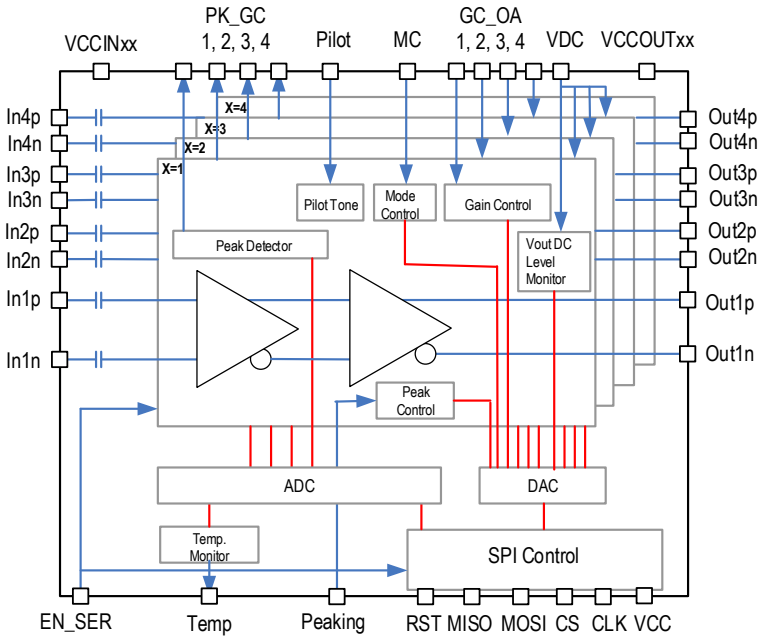


Figure 1: Block Diagram

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