

GX36420-3

4 × 64Gbps Linear TIA

The GX36420-3 is a 64Gbps linear quad TIA chip that integrates four lanes of TIAs for XI, XQ, YI, and YQ channels, in addition to digital interface circuitry for DC controls on a single die for 400G/600G coherent applications. The TIA electrical characteristics, functions, and physical dimensions are designed for small-form factor integrated optical modules such as CFP2 and CFP4.

Applications

- 400G/600G coherent systems with 64Gbps 16QAM/64QAM modulation format
- Integrated optical modules for CFP/CFP2/CFP4 form factors

Features

- Quad 64Gbps linear TIA integrated SPI and analog interface
- Differential linear gain: $150\Omega 5,000\Omega$ and > 30dB dynamic range
- · 40+GHz adjustable 3dB bandwidth
- Automatic and manual gain control, output voltage control, peak detection, RSSI and input current monitor, and shutdown functionalities
- Low THD, crosstalk, and power consumption for covering 64QAM applications

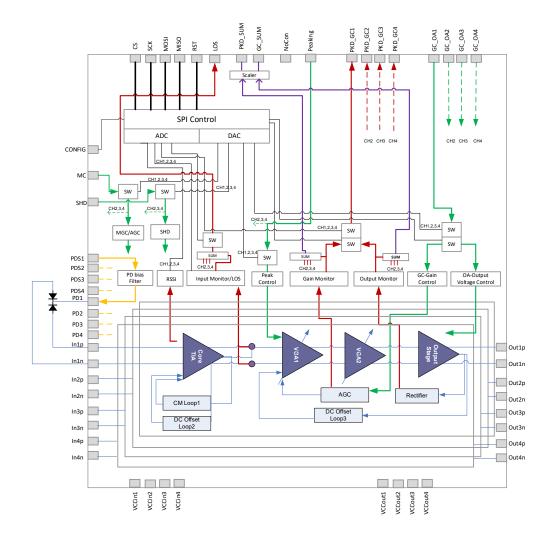


Figure 1. Block Diagram

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