

## Description

The GX36420 is a 64Gbps linear quad TIA chip that integrates four lanes of TIAs for XI, XQ, YI, and YQ channels, as well as 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 module such as CFP2 and CFP4.

## Typical 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 analogue interface
- Differential linear gain: 150–5,000Ω, and > 30dB dynamic range
- > 40GHz 3dB-bandwidth and adjustable bandwidth
- Automatic and manual gain control, Output Voltage Control, Peak Detection, RSSI and Input Current Monitor, and Shutdown functionalities
- Low THD, cross talk, and power consumption for covering 64QAM receiver

## Block Diagram

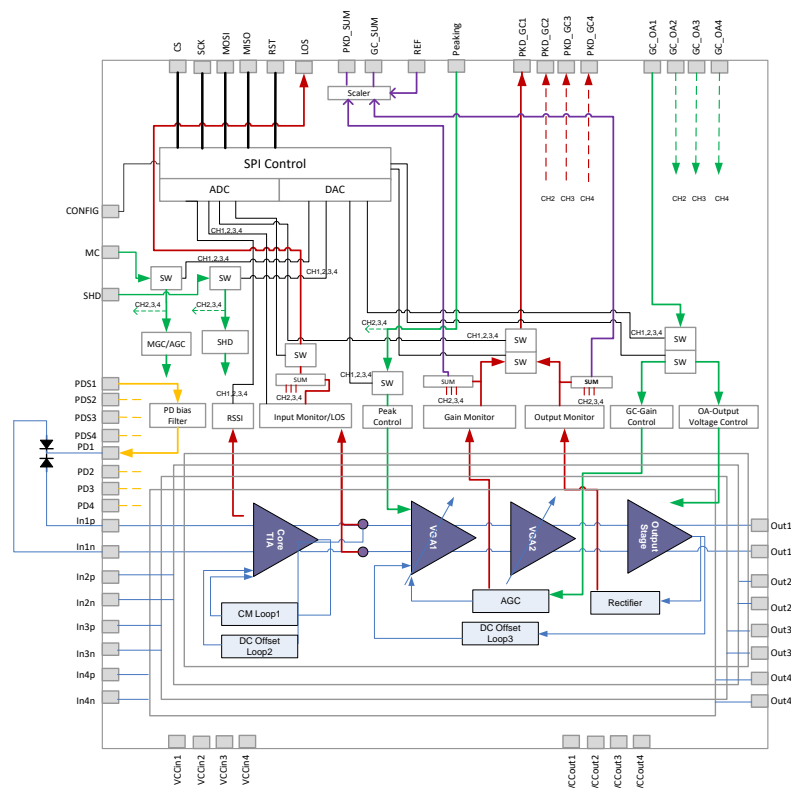


Figure 1: Block Diagram



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