

## GX32424

4 x 32Gbps Linear TIA

The GX32424 is a 32Gbps 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 100G/200G 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**

- 100G/200G coherent systems with 32Gbps QPSK/16QAM modulation format
- Integrated optical modules for CFP/CFP2/CFP4 form factors

#### **Features**

- Quad 32Gbps linear TIA Integrated SPI and analog interface
- Differential linear gain: 150–5,000Ω, and > 30dB dynamic range
- · 25+GHz adjustable 3dB bandwidth
- Automatic and manual gain control, output voltage control, peak detection, RSSI and input current monitor, and shutdown functionalities
- Low THD, low crosstalk, and low power for covering 16QAM applications

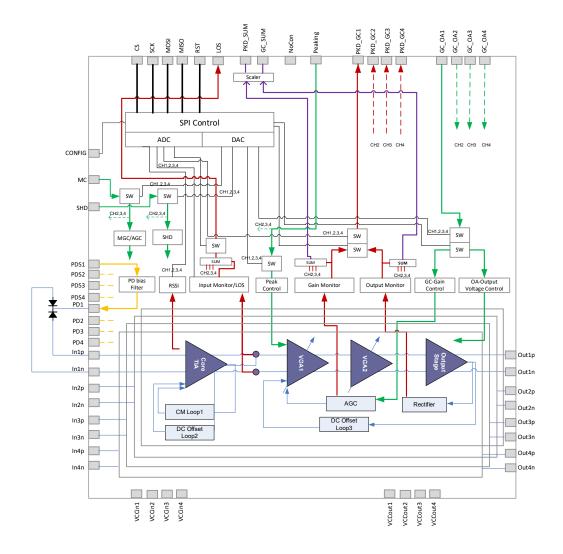


Figure 1. Block Diagram

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## **Corporate Headquarters**

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

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