Description

The GX36220 is a dual-channel 64Gbps linear Trans-Impedance Amplifier (TIA) for 400G/600G Integrated Coherent Receivers (ICRs).

The GX36220 integrates two TIA signal paths for I and Q channels. The high-performance, low power, and compact design of the GX36220 also enables a 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

- Dual-channel integrated 64Gbps linear TIA with analog control interface
- Differential linear gain: 150–5,000Ω, and > 30dB dynamic range
- > 40 GHz 3dB-bandwidth and adjustable bandwidth
- Automatic and manual gain control, Output Voltage Control, Peak Detection and Shutdown functionalities
- Low THD, cross talk, and power consumption for covering 64QAM receiver

Block Diagram

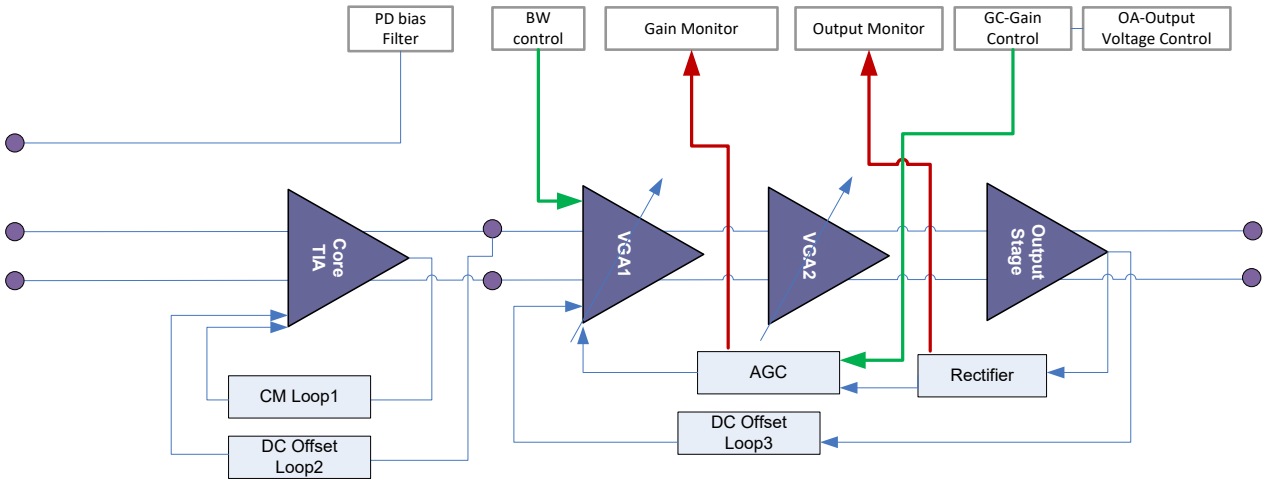


Figure 1: Block Diagram

Corporate Headquarters
6024 Silver Creek Valley Road
San Jose, CA 95138
www.IDT.com

Sales
1-800-345-7015 or
408-284-8200
Fax: 408-284-2775
www.IDT.com/go/sales

Tech Support
www.IDT.com/go/support

DISCLAIMER Integrated Device Technology, Inc. (IDT) and its affiliated companies (herein referred to as "IDT") reserve the right to modify the products and/or specifications described herein at any time, without notice, at IDT's sole discretion. Performance specifications and operating parameters of the described products are determined in an independent state and are not guaranteed to perform the same way when installed in customer products. The information contained herein is provided without representation or warranty of any kind, whether express or implied, including, but not limited to, the suitability of IDT's products for any particular purpose, an implied warranty of merchantability, or non-infringement of the intellectual property rights of others. This document is presented only as a guide and does not convey any license under intellectual property rights of IDT or any third parties.

IDT's products are not intended for use in applications involving extreme environmental conditions or in life support systems or similar devices where the failure or malfunction of an IDT product can be reasonably expected to significantly affect the health or safety of users. Anyone using an IDT product in such a manner does so at their own risk, absent an express, written agreement by IDT.

Integrated Device Technology, IDT and the IDT logo are trademarks or registered trademarks of IDT and its subsidiaries in the United States and other countries. Other trademarks used herein are the property of IDT or their respective third party owners. For datasheet type definitions and a glossary of common terms, visit www.idt.com/go/glossary. All contents of this document are copyright of Integrated Device Technology, Inc. All rights reserved.