RG8G3122A

2 × 128Gbaud Linear TIA

The RG8G3122A is a dual-channel 128Gbaud linear Trans-Impedance Amplifier (TIA) for 800G and beyond Integrated Coherent Receivers (ICRs).

The RG8G3122A integrates two TIA signal paths for I and Q channels. The high-performance, low power, and compact design of the RG8G3122A also enables optical sub-assembly of u-ICR and IC-TROSA for small form factor integrated optical modules.

Applications

- 800G and beyond coherent systems with 128Gbaud higher-order QAM modulation format
- Optical sub-assembly of u-ICR and IC-TROSA for small form factor optical modules

Features

- Dual-channel integrated 128Gbaud linear TIA with analog control interface
- 50 to 1,500Ω typical differential linear transimpedance
- > 27dB dynamic range
- > 80GHz adjustable SDD21 3dB-bandwidth at room temperature
- Automatic and manual gain control, output voltage control, peak detection and shutdown functionalities
- Low THD, low crosstalk, and low power consumption

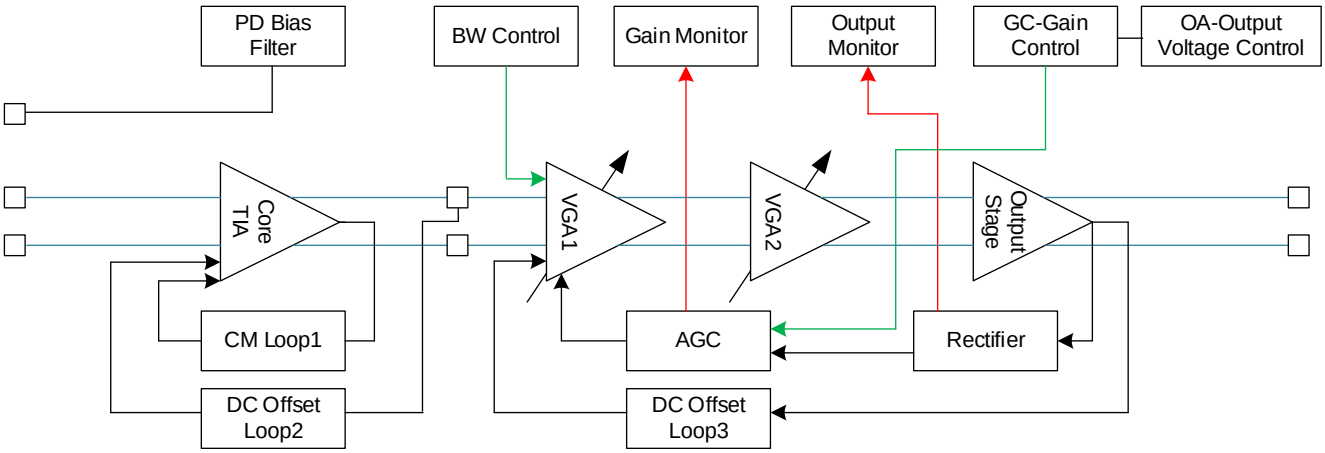

Figure 1. Block Diagram

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