GX72170

32Gbps Single Channel Linear Driver

The GX72170 is a high-performance low-Vpi linear Mach-Zender Modulator (MZM) driver designed for 100G DP-QPSK and 200G/400G DP-mQAM metro, and long-haul optical Small-Form-Factor (SFF) transmitters.

The GX72170 is a broad band and ultralow power SiGe single-channel amplifier die and integrates a linear pre-amplifier and a post-amplifier with AC-coupled differential input and differential output interfaces. The device can drive a linear output voltage of 3.0Vppd with differential characteristic impedance of around 50Ω.

Features

- 32 Gbaud linear driver
- 100Ω differential input/50Ω differential output impedance
- 0.2 – 0.5Vppd input/1.5 – 3.0Vppd output
- 22GHz 3dB-bandwidth with gain flatness of ±0.5dB up to 10GHz and less than 2dB peaking form 16 to 24GHz
- 10dB variable gain control
- Linear operation with less than 3% total harmonic distortion
- Integration of peak detector and temperature monitor
- 420mW power consumption

Applications

- Next generation small form factor such as CFP2/4
- 200 and 400Gbps Advanced Multi-Level Modulation Systems

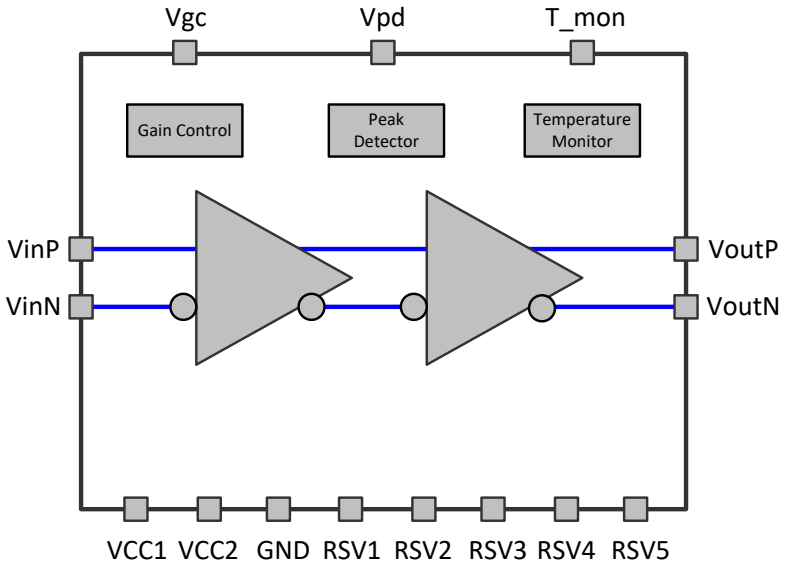

Figure 1. Block Diagram

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