43 Gbaud Quad-Channel, Differential Mach-Zehnder Driver

Part No.  
IN4326DZ

Product Type  
Linear Driver

Market Segments  
Long Haul/Metro

Applications  
Highly integrated 200G/400G coherent systems

Features  
• Supports baud rates up to 43 Gbaud  
• Low distortion for 64QAM performance  
• Differential outputs  
• Differential AC-coupled inputs  
• High electrical bandwidth  
• Adjustable gain  
• Low power consumption  
• Temperature diodes  
• Peak detector per channel  
• Excellent THD  
• External modulation tone control pin  
• SPI with optional analog gain control  
• Available in die form

Description  
The IN4326DZ is a low power, quad-channel, differential Mach Zehnder (MZ) modulator driver that is designed to support 200G to 400G coherent metro transponder and transceiver applications. The IN4326DZ supports differential input voltages to deliver a differential output swing, while designed to drive flexible output termination loads.

The IN4326DZ includes peak detectors and temperature monitoring circuits. The peak detector output and the temperature monitor reading can be read directly in the analog domain or in the digital domain via the SPI interface.

The IN4326DZ allows the user to inject a low frequency tone into the signal path that modulates the data signal. The IN4326DZ is available in die form and is intended to be co-packaged with InP or SiPho MZ modulators.