64 Gbaud Quad-Channel, Differential Mach-Zehnder Driver

**Part No.**
IN6426DZ

**Product Type**
Linear Drivers

**Market Segments**
Long Haul/Metro

**Applications**
Highly integrated 200G/400G coherent systems
HB-CDM, COSA, IC-TROSA applications
Direct drive SiPho and InP modulators

**Features**

- Supports baud rates up to 64 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 IN6426DZ 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 IN6426DZ supports differential input voltages to deliver a differential output swing, while designed to drive flexible output termination loads.

The IN6426DZ 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 IN6426DZ allows the user to inject a low frequency tone into the signal path that modulates the data signal.

The IN6426DZ is available in die form and is intended to be co-packaged with InP or SiPho MZ modulators.

To deliver the data infrastructure technology that connects the world, we’re building solutions on the most powerful foundation: our partnerships with our customers. Trusted by the world’s leading technology companies for 25 years, we move, store, process and secure the world’s data with semiconductor solutions designed for our customers’ current needs and future ambitions. Through a process of deep collaboration and transparency, we’re ultimately changing the way tomorrow’s enterprise, cloud, automotive, and carrier architectures transform—for the better.

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