

AD8015 / AD807

155 Mbps Fiber Optic Receiver ICs

HIGH-PERFORMANCE, LOW POWER SOLUTION FOR FIBER OPTIC RECEIVERS

As the demand for bandwidth continues to grow, power and board space constraints placed on the developers of electro-optical interfaces intensify as well. Analog Devices is focused on providing high-performance yet cost-effective interface IC solutions to address the needs of today's optical networking systems.

The AD8015 and AD807 set the standard for 155 Mbps receiver ICs by providing optimal system performance at minimal power consumption and board space.

The AD807 is a 155 Mbps clock and data recovery IC with a fully integrated limiting amplifier and no requirement for external reference clocks. All SONET/SDH jitter specifications are exceeded, including jitter tolerance, jitter transfer, and jitter generation.

The AD8015 is a low power, transimpedance amplifier with wide dynamic range and superior noise performance.

Together, these products provide a high-performance, highly integrated, low power solution specifically designed for fiber optic receivers.

Analog has over 10 years of experience in designing fiber optic components; put our expertise to work for you.

Together, the AD8015 and AD807 are the industry-proven answer for 155 Mbps fiber optic receivers needs.



FEATURES:

AD807: Clock and Data Recovery IC with Integrated Post-Amplifier

- Integrated Limiting Amplifier with 2 mV Sensitivity
- Low Power: 170 mW Typical
- No External Reference Clock or Crystal Required
- Exceed all SONET/SDH Requirements for Jitter Transfer, Jitter Generation, and Jitter Tolerance
- Single Supply: 5 V
- Loss-of-Signal Alarm

AD8015: Transimpedance Amplifier

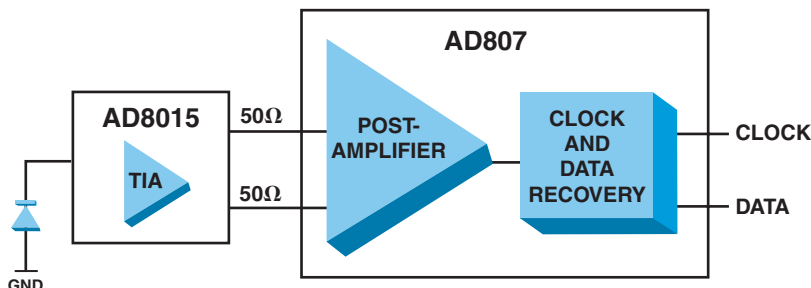
- Low Power: 125 mW Typical
- Total Input RMS Noise: 26.5 nA to 100 MHz
- Optical Sensitivity: -36 dBm @ 155 Mbps, Peak Input Current: $\pm 350 \mu\text{A}$ Typical
- Wide Bandwidth: 240 MHz
- Single Supply: 5 V



MORE THAN 30 YEARS' EXPERIENCE IN HIGH-PERFORMANCE ANALOG CIRCUIT DESIGN

Analog Devices has more than 30 years of design experience, manufacturing and marketing a broad line of high-performance linear, mixed-signal, and digital integrated circuits that address a wide range of real-world signal processing applications sourcing issues that require characterizing each supplier's laser diode product.

155 Mbps Fiber Optic Receiver Solution



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