CDR SONET/SDH 3.3V 48-Pin LFCSP EP Tray

Manufacturer:	Analog Devices, Inc
Package/Case:	48-LFCSP
Product Type:	Clock & Timer ICs
RoHS:	RoHS Compliant/Lead free RoHS
Lifecycle:	NRND

Images are for reference only

Inquiry

General Description

The ADN2807 provides the receiver functions of quantization,signal level detect, and clock and data recovery at rates of OC-3,OC-12, and 15/14 FEC. All SONET jitter requirements are met,including jitter transfer, jitter generation, and jitter tolerance.All specifications are quoted for –40°C to +85°C ambienttemperature, unless otherwise noted.

The device is intended for WDM system applications and canbe used with either an external reference clock or an on-chiposcillator with external crystal. Both native rates and 15/14 ratedigital wrappers are supported by the ADN2807, without anychange of reference clock.

This device, together with a PIN diode and a TIA preamplifier,can implement a highly integrated, low cost, low power, fiberoptic receiver.

The receiver front end signal detect circuit indicates when theinput signal level has fallen below a user adjustable threshold.The signal detect circuit has hysteresis to prevent chatter at theoutput.

The ADN2807 is available in a compact 7 mm × 7 mm 48-leadchip-scale package (LFCSP).

Key Features

Meets SONET requirements for jitter transfer/generation/tolerance

Quantizer sensitivity: 4 mV typical

Adjustable slice level: ±100 mV

Patented clock recovery architecture

Loss-of-signal detect range: 3 mV to 15 mV

Single-reference clock frequency for all rates, including15/14 (7%) wrapper rate

Choice of 19.44 MHz, 38.88 MHz, 77.76 MHz, or 155.52 MHz REFCLK

REFCLK inputs: LVPECL/LVDS/LVCMOS/LVTTL compatible (LVPECL/LVDS only at 155.52 MHz)

Optional 19.44 MHz on-chip oscillator to be used with external crystal

Loss-of-lock indicator

Loopback mode for high speed test data

Output squelch and bypass features

Single-supply operation: 3.3 V

Low power: 540 mW typical

7 mm × 7 mm, 48-lead LFCSP

Application

SONET OC-3/-12, SDH STM-1/-4 and, 15/14 FEC rates

WDM transponders

Regenerators/repeaters

Test equipment

Passive optical networks

Recommended For You

AD9517-3ABCPZ

Analog Devices, Inc

QFN

AD9954YSV

Analog Devices, Inc

QFP

ADCLK914BCPZ-WP

Analog Devices, Inc

LFCSP-16

AD7008JP50

Analog Devices, Inc

PLCC44

AD9952YSV

Analog Devices, Inc

QFP

AD9516-3BCPZ

Analog Devices, Inc

QFN

ADCLK944BCPZ-R2

Analog Devices, Inc

LFCSP16

AD9577BCPZ

Analog Devices, Inc

LFCSP-40

AD9543BCPZ

Analog Devices, Inc

LFCSP-48

AD9853AS

Analog Devices, Inc

QFP

ADN2805ACPZ

Analog Devices, Inc

LFCSP

AD9515BCPZ-REEL7

Analog Devices, Inc

LFCSP-32

AD9520-4BCPZ

Analog Devices, Inc

LFCSP

AD9831AST

Analog Devices, Inc

QFP

ADN2855ACPZ

Analog Devices, Inc

LFCSP32