

## intersil

#### Data Sheet

## February 25, 2008

## FN6271.4

## Dual Channel CO ADSL2+ Line Driver

The EL1537B is a very low power dual channel differentiated amplifier designed for central office line driving for DMT ADSL solutions. This device features a high drive capability of 400mA while consuming only 7.5mA of supply current per amplifier from  $\pm 12V$  supplies. This driver achieves a typical distortion of less than -75dBc, at 1MHz into a 50 $\Omega$  load. The EL1537B is available in the thermally-enhanced 28 Ld HTSSOP package. This device is specified for operation over the full -40°C to +85°C temperature range.

The EL1537B has two control pins,  $C_0$  and  $C_1$ , per channel. With the selection of  $C_0$  and  $C_1$ , the device can be set into full-I<sub>S</sub> power, 3/4-I<sub>S</sub> power, 1/2-I<sub>S</sub> power, and power-down disable modes. The EL1537B maintains excellent distortion and load driving capabilities even in the lowest power settings. The EL1537B has extended bandwidth and improved THD and slew rate for ADSL2+ and VDSL applications.

## **Ordering Information**

PART NUMBER	PART	PACKAGE	PKG.
(Note)	MARKING	(Pb-free)	DWG. #
EL1537BIREZ*	1537BIREZ	28 Ld HTSSOP	MDP0048

\*Add "-T7" or "-T13" suffix for tape and reel. Please refer to TB347 for details on reel specifications.

NOTE: These Intersil Pb-free plastic packaged products employ special Pb-free material sets; molding compounds/die attach materials and 100% matte tin plate PLUS ANNEAL - e3 termination finish, which is RoHS compliant and compatible with both SnPb and Pb-free soldering operations. Intersil Pb-free products are MSL classified at Pb-free peak reflow temperatures that meet or exceed the Pb-free requirements of IPC/JEDEC J STD-020.

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## Features

- Drives 400mA at 16V<sub>P-P</sub> on ±12V supplies
- $44V_{P-P}$  differential output drive into  $100\Omega$
- $37.2V_{P-P}$  minimum differential output drive into  $60\Omega$
- 75dBc typical driver output distortion driving 50  $\Omega$  at 1MHz and 1/2-I\_S bias current
- Low quiescent current of 4.75mA per amplifier in 1/2-I<sub>S</sub> mode
- 50MHz BW at  $A_V = 10$
- Power-down disable mode
- Pin-to-Pin replacement for EL1527
- Pb-free (RoHS compliant)

## Applications

- ADSL, ADSL2, ADSL2+ line drivers
- G.SHDSL, HDSL2 line drivers
- VDSL line drivers
- Video distribution amplifiers
- Video twisted-pair line drivers

#### Pinout



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