

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 50Ω load. The EL1537B is available in the thermally-enhanced 28 Ld HTSSOP package. This device is specified for operation over the full $-40^{\circ}C$ to $+85^{\circ}C$ 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_S power, $3/4-I_S$ power, $1/2-I_S$ 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 MARKING	TAPE & REEL	PACKAGE	PKG. DWG. #
EL1537BIREZ (See Note)	1537BIREZ	-	28 Ld HTSSOP (Pb-free)	MDP0048
EL1537BIREZ-T13 (See Note)	1537BIREZ	13"	28 Ld HTSSOP (Pb-free)	MDP0048
EL1537BILZ (See Note)	1537BILZ	-	24 Ld QFN (Pb-free)	MDP0046
EL1537BILZ-T13 (See Note)	1537BILZ	13"	24 Ld QFN (Pb-free)	MDP0046

NOTE: Intersil Pb-free plus anneal products employ special Pb-free material sets; molding compounds/die attach materials and 100% matte tin plate termination finish, which are 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.

Features

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

Applications

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

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