

Medium Power Differential Line Driver

The EL1506 is a very low power dual operational amplifier designed for central office and customer premise line driving for DMT ADSL solutions. This device features a high drive capability of 400mA while consuming only 3.5mA of supply current per amplifier from ±12V supplies. This driver achieves a typical distortion of less than -75dBc, at 1MHz into a 50Ω load. The EL1506 is available in the 28-pin HTSSOP and the 24-pin thermally-enhanced SO packages. Both parts are specified for operation over the full -40°C to +85°C temperature range.

The EL1506 has an ENABLE pin which can be used to enable and disable the outputs.

In most applications, the EL1506 is an upgrade and pin-compatible drop-in replacement for the AD8016.

Ordering Information

PART NUMBER	PACKAGE	TAPE & REEL	PKG. DWG. #
EL1506CM	24-Pin SO	-	MDP0027
EL1506CRE	28-Pin HTSSOP	-	MDP0048
EL1506CRE-T7	28-Pin HTSSOP	7"	MDP0048
EL1506CRE-T13	28-Pin HTSSOP	13"	MDP0048
EL1506CREZ (See Note)	28-Pin HTSSOP (Pb-free)	-	MDP0048
EL1506CREZ-T7 (See Note)	28-Pin HTSSOP (Pb-free)	7"	MDP0048
EL1506CREZ-T13 (See Note)	28-Pin HTSSOP (Pb-free)	13"	MDP0048

NOTE: Intersil Pb-free 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 360mA at 16V_{P-P} on ±12V supplies
- 40V_{P-P} differential output drive into 100Ω
- -75dBc typical driver output distortion driving 50Ω at 1MHz
- Low quiescent current of 3.5mA per amplifier
- Power-down disable mode
- Pb-Free available (RoHS compliant)

Applications

- ADSL G.DMT and G.lite CO line driving
- G.SHDSL, HDSL2 line driver
- ADSL CPE line driving
- Video distribution amplifier
- Video twisted-pair line driver
- Functional and pin-compatible with AD8016

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