



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 $\pm 12V$ supplies. This driver achieves a typical distortion of less than -75dBc, at 1MHz into a 50 Ω 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 $\pm 12V$ supplies
- 40V_{P-P} differential output drive into 100 Ω
- -75dBc typical driver output distortion driving 50 Ω 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

[Get Full Datasheet](#)



EL1506

All Intersil U.S. products are manufactured, assembled and tested utilizing ISO9000 quality systems.
Intersil Corporation's quality certifications can be viewed at www.intersil.com/design/quality

Intersil products are sold by description only. Intersil Corporation reserves the right to make changes in circuit design, software and/or specifications at any time without notice. Accordingly, the reader is cautioned to verify that data sheets are current before placing orders. Information furnished by Intersil is believed to be accurate and reliable. However, no responsibility is assumed by Intersil or its subsidiaries for its use; nor for any infringements of patents or other rights of third parties which may result from its use. No license is granted by implication or otherwise under any patent or patent rights of Intersil or its subsidiaries.

For information regarding Intersil Corporation and its products, see www.intersil.com
