

## EL1506

Medium Power Differential Line Driver

**OBSOLETE PRODUCT**  
**NO RECOMMENDED REPLACEMENT**  
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**1-888-INTERSIL or [www.intersil.com/tsc](http://www.intersil.com/tsc)**

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 Rev 1.00  
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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 $\Omega$  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<br>(See Note)     | 28-Pin HTSSOP<br>(Pb-free) | -           | MDP0048     |
| EL1506CREZ-T7<br>(See Note)  | 28-Pin HTSSOP<br>(Pb-free) | 7"          | MDP0048     |
| EL1506CREZ-T13<br>(See Note) | 28-Pin HTSSOP<br>(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<sub>P-P</sub> on  $\pm 12V$  supplies
- 40V<sub>P-P</sub> differential output drive into 100 $\Omega$
- -75dBc typical driver output distortion driving 50 $\Omega$  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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