



# EL1508C - Product Brief

## Differential DSL Line Driver

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### Features

- 450mA output drive capability
- 43.6V<sub>P-P</sub> differential output drive into 100Ω
- 2<sup>nd</sup>/3<sup>rd</sup> harmonics of -85dBc/-75dBc
- MTPR of -70dB
- Operates down to 3mA per amplifier supply current
- Power control features
- Pin-compatible with EL1503C

### Applications

- ADSL line driver
- HDSL line driver
- Video distribution amplifier
- Video twisted-pair line driver

### Ordering Information

Part No	Package	Tape & Reel	Outline #
EL1508CS	16-Pin SO (0.150")		MDP0027
EL1508CM	20-Pin SO (0.300")		MDP0027
EL1508CL	24-Pin LPP		MDP0046

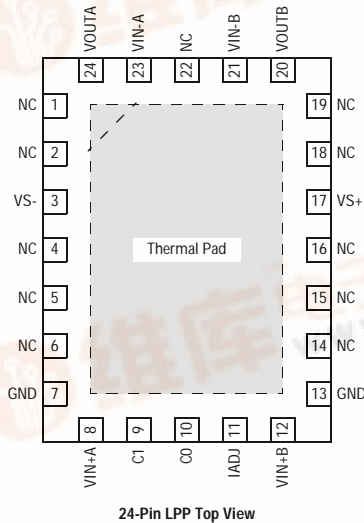
### General Description

The EL1508C is designed for driving full rate ADSL signals in both CO and CPE applications at very low power dissipation. The high drive capability of 450mA makes this driver ideal for both CAP and DMT designs. It contains two wideband, high-voltage, current mode feedback amplifiers with a number of power dissipation reduction features.

These drivers achieve an MTPR distortion measurement of better than 70dB, while consuming typically 6mA of total supply current. This supply current can be set using a resistor on the I<sub>ADJ</sub> pin. Two other pins (C<sub>0</sub> & C<sub>1</sub>) can also be used to adjust supply current to one of four pre-set modes (full-I<sub>S</sub>, 2/3-I<sub>S</sub>, 1/3-I<sub>S</sub>, and full power-down). The EL1508C operates on ±5V to ±12V supplies and retains its bandwidth and linearity over the complete supply range.

The device is supplied in a thermally-enhanced 20-pin SO (0.300"), a thermally-enhanced 16-pin SO (0.150"), and the small footprint (4x5mm) 24-pin LPP packages. The EL1508C is specified for operation over the full -40°C to +85°C temperature range.

### Pin Configurations



Pin Configurations continues on Page 3

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Note: All information contained in this data sheet has been carefully checked and is believed to be accurate as of the date of publication; however, this data sheet cannot be a "controlled document". Current revisions, if any, to these specifications are maintained at the factory and are available upon your request. We recommend checking the revision level before finalization of your design documentation.



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