

élantec

# **EL1528C** Dual Channel Differential DSL Line Driver

### PRODUCT BRIEF

### Features

- 450mA output drive capability
- $44.4V_{P-P}$  differential output drive into  $100\Omega$
- -75dBc THD @ 500kHz 16V<sub>P-P</sub>
- MTPR of -70dB
- Operates down to 2mA per amplifier supply current
- · Current control pins
- Channel separation
  - 74dB @ 500kHz
  - 70dB @ 1MHz

## Applications

- Dual port ADSL line drivers
- HDSL line drivers

## **Ordering Information**

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Part No	Package	Tape & Reel	Outline #
EL1528CL	24-Pin LPP		MDP0046
EL1528CRE	20-Pin HTSSOP		MDP0048

# **General Description**

The EL1528C is a dual channel differential amplifier designed for driving full rate ADSL signals at very low power dissipation. The high drive capability of 450mA makes this driver ideal for both CAP and DMT designs. It contains two pairs of wideband, high-voltage, current mode feedback amplifiers optimized for low power consumption in DSL systems.

These drivers achieve an MTPR distortion measurement of better than 70dB, while consuming typically 5mA per DSL channel of total supply current. This supply current can be set using a resistor on the  $I_{ADJ}$  pin. Two other pins ( $C_0 \& C_1$ ) can also be used to adjust supply current to one of four pre-set modes (full-I<sub>S</sub>, 3/4-I<sub>S</sub>, 1/2-I<sub>S</sub>, and full power-down). The EL1528C 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 HTSSOP and the small footprint (4x5mm) 24-pin LPP packages. The EL1528C is specified for operation over the full -40°C to +85°C temperature range.

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Dual Channel Differential DSL Line Driver

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