

Data Sheet May 13, 2004 FN7406

## Dual Channel Differential DSL Line Driver for Globespan CO Chipsets



The EL1529 is to be used with Globespan's G7566-850 CO chipset for high performance long reach and

high speed applications, including ADSL2, ADSL2+, G.Span, and G.Span+.

The EL1529 is an integral part of the signal chain. The driver has been optimized for flat gain response and reduced harmonic distortion and noise in the bands of interest to improve the overall signal to noise in the system.

These drivers achieve a total harmonic distortion (THD) measurement of typically -70dB @ 1.1MHz, 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 $_S$ , 3/4-I $_S$ , 1/2-I $_S$ , and full power-down). The EL1529 operates on  $\pm 5V$  to  $\pm 12V$  supplies and retains its bandwidth and linearity over the complete supply range.

The device is supplied in the small footprint (4x5mm) 24-pin QFN package and is specified for operation over the full -40°C to +85°C temperature range.

## Features

- · 450mA output drive capability
- $44.1V_{P-P}$  differential output drive into  $100\Omega$
- -85dBc THD @ 1MHz 2V<sub>P-P</sub>
- High slew rate of 500V/µs
- · Bandwidth 46MHz
- Current control pins
- · Channel separation
  - 80dB @ 500kHz
  - 75dB @ 1MHz

## **Applications**

· ADSL line drivers for Globespan G7566-850 CO chipsets

## Ordering Information

| PART<br>NUMBER | PACKAGE    | TAPE &<br>REEL | PKG. DWG. # |
|----------------|------------|----------------|-------------|
| EL1529IL       | 24-Pin QFN | -              | MDP0046     |
| EL1529IL-T7    | 24-Pin QFN | 7"             | MDP0046     |
| EL1529IL-T13   | 24-Pin QFN | 13"            | MDP0046     |

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