

EL1528

Dual Channel Differential DSL Line Driver

OBSOLETE PRODUCT
NO RECOMMENDED REPLACEMENT
 contact our Technical Support Center at
 1-888-INTERSIL or www.intersil.com/tsc

FN7002
 Rev 1.00
 September 21, 2004

The EL1528 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 (C₀ & C₁) 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 EL1528 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 QFN packages. The EL1528 is specified for operation over the full -40°C to +85°C temperature range.

Features

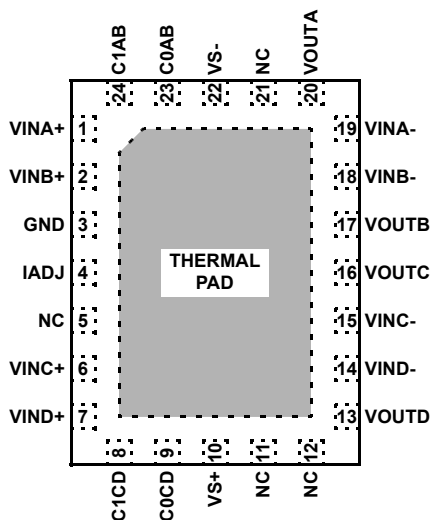
- Pb-free available
- 450mA output drive capability
- 44.4V_{P-P} differential output drive into 100Ω
- -75dBc THD @ 500kHz 16V_{P-P}
- MTPR of -70dB
- Operates down to 2mA per amplifier supply current
- Current control pins
- Channel separation
 - 80dB @ 500kHz
 - 75dB @ 1MHz
- Pb-free available (RoHS compliant)

Applications

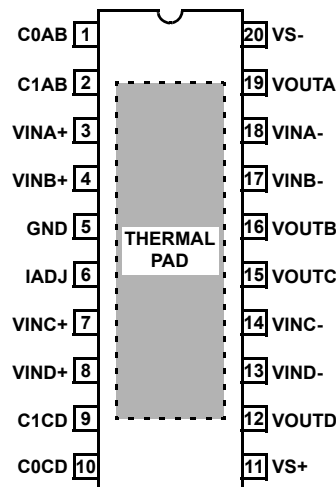
- Dual port ADSL line drivers
- HDSL line drivers
- VDSL line drivers

Pinouts

EL1528
 (24-PIN QFN)
 TOP VIEW



EL1528
 (20-PIN HTSSOP)
 TOP VIEW



© Copyright Intersil Americas LLC 2002-2004. All Rights Reserved.
All trademarks and registered trademarks are the property of their respective owners.

For additional products, see www.intersil.com/en/products.html

Intersil products are manufactured, assembled and tested utilizing ISO9001 quality systems as noted in the quality certifications found at www.intersil.com/en/support/qualandreliability.html

Intersil products are sold by description only. Intersil may modify the circuit design and/or specifications of products at any time without notice, provided that such modification does not, in Intersil's sole judgment, affect the form, fit or function of the product. Accordingly, the reader is cautioned to verify that datasheets 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