

Dual Channel Differential DSL Line Driver

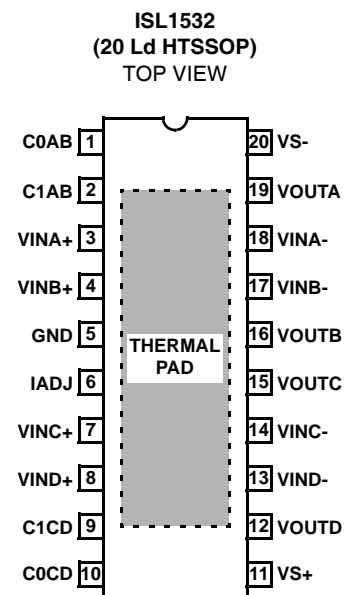
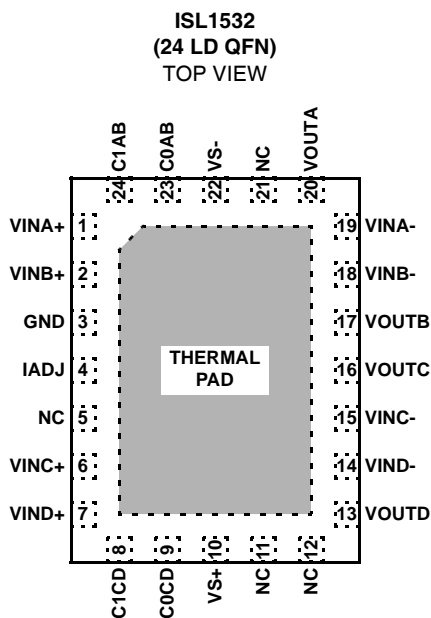
The ISL1532 is a dual channel differential amplifier designed for driving full rate ADSL2+ signals at very low power dissipation. The high drive capability of 450mA makes this driver ideal for DMT designs. It contains two pairs of wideband, high-voltage, current mode feedback amplifiers designed on Intersil's HS30 Bipolar SOI process 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 and 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 ISL1532 operates on ±5V to ±15V supplies and retains its bandwidth and linearity over the complete supply range.

The device is supplied in a thermally-enhanced 20 Ld HTSSOP and the small footprint (4x5mm) 24 Ld QFN packages. The ISL1532 is specified for operation over the full -40°C to +85°C temperature range.

The ISL1532 provides larger output swing at heavy loads, higher slew rate, and higher bandwidth while maintaining pin-to-pin drop-in compatibility with the EL1528. The ISL1532 integrates 50k pull-up resistors on C₀ and C₁ pins.

Pinout



Features

- 450mA output drive capability
- 44.4V_{P-P} differential output drive into 100Ω
- ±5V to ±15V supply operation
- MTPR of -70dB
- Operates down to 2mA per amplifier supply current
- Current control pins
- Channel separation
 - 80dB @ 500kHz
- Direct pin-to-pin replacement for EL1528
- Pb-free plus anneal available (RoHS compliant)

Applications

- Dual port ADSL2+ line drivers
- HDSL line drivers

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