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**High Power Differential Line Driver/  
Receiver**



The EL1502 is a complete transceiver solution for high speed data transmission over twisted pair wires. It

contains two wideband, high-voltage drivers and two low-noise receive amplifiers. The EL1502 is ideally suited for both ADSL and HDSL2 applications, in which it can supply a 50V<sub>P-P</sub> signal into a 50Ω differential load while exhibiting very low distortion. The receive amplifiers also have very low distortion and low-noise for superior reception of small signals.

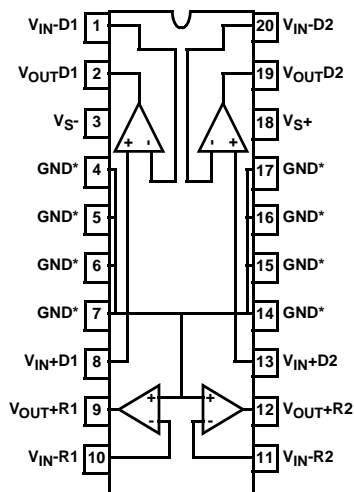
The line drivers of the EL1502 are current-feedback type amplifiers, which achieve a high slew rate while consuming moderate power. They retain their frequency response over a wide range of externally set gains. The receive amplifiers are of the voltage-feedback type and can be used to implement a hybrid coupler or filter functions using external passive components.

The EL1502 operates on ±5V to ±15V supplies. It retains its bandwidth and linearity over the complete supply range.

The device is supplied in a standard form factor, 20-pin SOIC package. The eight center package pins of the package are used as ground connections and heat spreaders, allowing for operation over the full -40°C to +85°C temperature range.

**Pinout**

**EL1502  
(20-PIN WIDE BODY SOIC)  
TOP VIEW**



NOTE: \* GND PINS ARE HEAT SPREADERS

**Features**

- Complete ADSL differential driver and receiver
- 54V<sub>P-P</sub> output drive into 100Ω differential
- 50V<sub>P-P</sub> output drive into 50Ω differential
- Driver 2nd/3rd harmonics of -70dBc/-75dBc at 2V<sub>P-P</sub> into 100Ω
- Low supply current 12.5mA per drive amplifier and 5mA per receive amplifier
- Standard surface-mount package

**Applications**

- ADSL line driver
- HDSL2 line driver
- Video distribution amplifier

**Ordering Information**

PART NUMBER	PACKAGE	TAPE & REEL	PKG. NO.
EL1502CM	20-Pin SO	-	MDP0027

**Get FULL DATASHEET**

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