

Medium Power Differential Line Driver



The EL1511 is a dual operational amplifier designed for customer premise line driving in DMT ADSL solutions. This device features a high drive capability of 360mA while consuming only 7.5mA of supply current per amplifier and operating from a single 5V to 15V supply. This driver achieves a typical distortion of less than -85dBc, at 150kHz into a 25Ω load. The EL1511 is available in the thermally-enhanced 16-pin SO (0.150") and a 16-pin LPP (4x4mm) packages. The EL1511 is specified for operation over the full -40°C to +85°C temperature range. Electrical characteristics are given for typical 15V supply operation.

The EL1511 has two control pins, C₀ and C₁, which allow the selection of full I_S power, ¾-I_S, ½-I_S, and power-down modes.

The EL1511 is ideal for ADSL, SDSL, and HDSL2 line driving applications for single power supply, high voltage swing, and low power.

The EL1511 maintains excellent distortion and load driving capabilities even in the lowest power settings.

Features

- Drives up to 360mA from a +15V supply
- 24V_{P-P} differential output drive into 25Ω and 26V_{P-P} differential output drive into 100Ω
- -85dBc typical driver output distortion at full output at 150kHz
- Low quiescent current of 3.5mA per amplifier at ½-I_S current mode
- Disable down to 1.5mA

Applications

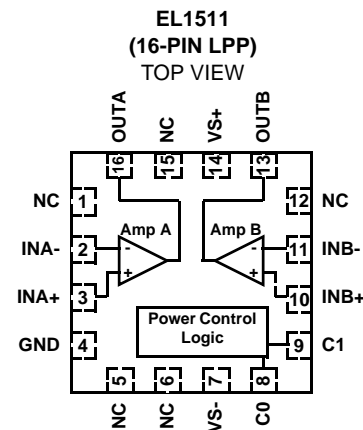
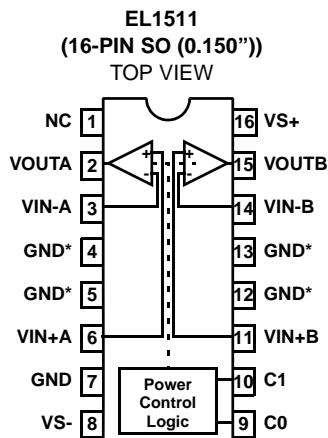
- ADSL CSA line driving
- ADSL full rate CPE line driving
- G.SHDSL, HDSL2 line driver
- Video distribution amplifier
- Video twisted-pair line driver

Ordering Information

PART NUMBER	PACKAGE	TAPE & REEL	PKG. NO.
EL1511CS	16-Pin SO (0.150")	-	MDP0027
EL1511CS-T7	16-Pin SO (0.150")	7"	MDP0027
EL1511CS-T13	16-Pin SO (0.150")	13"	MDP0027
EL1511CL	16-Pin LPP	-	MDP0046
EL1511CL-T7	16-Pin LPP	7"	MDP0046
EL1511CL-T13	16-Pin LPP	13"	MDP0046

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Pinouts



NOTE: * THESE GND PINS ARE HEAT SPREADERS

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