EL1520C - Product Brief

DSL Line Transceiver

Features

- Drives 360mA at 16V_{P-P} on ±12V supplies
- $40V_{P-P}$ differential output drive into 100Ω
- -75dBc typical driver output distortion driving 50Ω at 1MHz
- Receiver voltage noise of 1.9nV/√Hz
- Receiver current noise of 1.1pA/√Hz
- Separate receiver/driver supplies for low power optimization

Applications

- Very low power dissipation, high density ADSL G.DMT CO line driver/receiver
- G.SHDSL, HDSL2 line driver/receiver
- · ADSL CPE line driver/receiver

Ordering Information

Part No	Package	Tape & Reel	Outline #
EL1520CRE	20-Pin TSSOP-EP		MDP0044
EL1520CL	24-Pin LPP		MDP0046

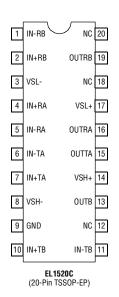
Get FULL DATA SHEET

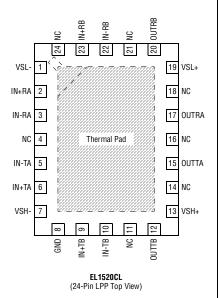
General Description

The EL1520C is a combination of a very low power line driver and very low noise receiver designed for central office and customer premise line driving for DMT ADSL solutions. The driver features a high drive capability of 360mA and a ± 5 to $\pm 12V$ supply range. This driver achieves a typical distortion of less than -75dBc, at 1MHz into a 50Ω load. The receiver achieves ultra low voltage and current noise specifications of $1.9 nV/\sqrt{Hz}$ and $1.1 pA/\sqrt{Hz}$. This transceiver is optimum for very low power dissipation applications using active termination techniques. EL1520C is available in the 20-pin TSSOP-EP (with exposed pad) package as well as a 24-pin LPP package. Both are specified for operation over the full -40°C to +85°C temperature range.

The EL1520C has separate supply pins for the driver and receiver sections. This allows optimization of the supply voltages for each function at minimal power dissipation.

Connection Diagram





Note: All information contained in this data sheet has been carefully checked and is believed to be accurate as of the date of publication; however, this data sheet cannot be a "controlled document". Current revisions, if any, to these specifications are maintained at the factory and are available upon your request. We recommend checking the revision level before finalization of your design documentation.

EL1520C - Product Brief

DSL Line Transceiver

General Disclaimer

Specifications contained in this data sheet are in effect as of the publication date shown. Elantec, Inc. reserves the right to make changes in the circuitry or specifications contained herein at any time without notice. Elantec, Inc. assumes no responsibility for the use of any circuits described herein and makes no representations that they are free from patent infringement.



Elantec Semiconductor, Inc.

675 Trade Zone Blvd. Milpitas, CA 95035

Telephone: (408) 945-1323

(888) ELANTEC (408) 945-9305

European Office: +44-118-977-6020 Japan Technical Center: +81-45-682-5820

WARNING - Life Support Policy

Elantec, Inc. products are not authorized for and should not be used within Life Support Systems without the specific written consent of Elantec, Inc. Life Support systems are equipment intended to support or sustain life and whose failure to perform when properly used in accordance with instructions provided can be reasonably expected to result in significant personal injury or death. Users contemplating application of Elantec, Inc. Products in Life Support Systems are requested to contact Elantec, Inc. factory headquarters to establish suitable terms & conditions for these applications. Elantec, Inc.'s warranty is limited to replacement of defective components and does not cover injury to persons or property or other consequential damages.