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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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12V xDSL Differential Line Driver with Enhanced Output Protection

The ISL1557A is a dual operational amplifier designed for VDSL2 and ADSL line driving in DMT based solutions. This device features a high drive capability of 750mA while consuming only 6mA of supply current per amplifier and operating from a single 4.5V to 12V supply. The driver achieves a typical distortion of -80dBc, at 150kHz into a 25Ω load. ISL1557A is design with stronger output clamps to enhance protection against lightning transients.

The ISL1557A is available in the thermally-enhanced 16 Ld QFN and 10 Ld HMSOP package and is specified for operation over the full -40°C to +85°C temperature range. The ISL1557A has control pins C₀ and C₁ for controlling the bias and enable/disable of the outputs. These controls allow for lowering the power to fit the performance/power ratio for the application.

The ISL1557A is ideal for ADSL2+, SDSL, HDSL2 and VDSL line driving applications, including both 14.5dBm and 21dBm applications.

Features

- 21dBm output power capability
- Drives up to 750mA from a +12V supply
- 20V_{P-P} differential output drive into 21Ω
- -80dBc typical driver output distortion at full output at 150kHz
- -75dBc typical driver output distortion at 4MHz
- -82dBc typical driver output distortion at 10MHz
- -79dBc typical driver output distortion at 17MHz
- Low quiescent current of 6mA per amplifier
- Supply range
 - For ISL1557AIUEZ 4.5V to 12V
 - For ISL1557AIRZ ±2.25V to ±6V, 4.5V to 12V
- 300MHz bandwidth
- Thermal shutdown
- Pb-free (RoHS compliant)

Applications

- VDSL2 line drivers
- ADSL2+ CPE line driving
- G.SHDSL, HDSL2 line drivers

Ordering Information

PART NUMBER (Note)	PART MARKING	TEMP. RANGE (°C)	PACKAGE (Pb-Free)	PKG. DWG. #
ISL1557AIRZ	155 7AIRZ	-40 to +85	16 Ld 4x4 QFN	MDP0046
ISL1557AIRZ-T7*	155 7AIRZ	-40 to +85	16 Ld 4x4 QFN (Tape and Reel)	MDP0046
ISL1557AIUEZ	BBBGA	-40 to +85	10 Ld HMSOP	MDP0050
ISL1557AIUEZ-T7*	BBBGA	-40 to +85	10 Ld HMSOP (Tape and Reel)	MDP0050

*Please refer to TB347 for details on reel specifications

NOTE: These Intersil Pb-free plastic packaged products employ special Pb-free material sets, molding compounds/die attach materials, and 100% matte tin plate plus anneal (e3 termination finish, which is RoHS compliant and compatible with both SnPb and Pb-free soldering operations). Intersil Pb-free products are MSL classified at Pb-free peak reflow temperatures that meet or exceed the Pb-free requirements of IPC/JEDEC J STD-020.

All Intersil U.S. products are manufactured, assembled and tested utilizing ISO9001 quality systems.
Intersil Corporation's quality certifications can be viewed at www.intersil.com/design/quality

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