Low Power, High Output Current, Quad Op Amp, Dual-Channel ADSL/ADSL2+ Line Driver

AD8394

OBSOLETE

FEATURES

- 4 current feedback, high output current amplifiers
- Ideal for use as ADSL/ADSL2+ dual-channel, central office (CO) line drivers
- Dual-supply operation from ±6 V to ±12 V
- Single-supply operation from 12 V to 24 V
- Low power consumption
  - 700 mW internal power dissipation while driving 20.4 dBm ADSL2+ signal (CF = 5.5)
  - 3 active power modes plus shutdown
  - Low leakage current in shutdown mode
- High output voltage and current drive
- Low distortion
  - MTPR down to −70 dBc
  - High speed: 300 V/µs slew rate

APPLICATIONS

- ADSL/ADSL2+ CO line drivers
- xDSL line drives
- High output current, low distortion amplifiers
- DAC output buffers

GENERAL DESCRIPTION

The AD8394 is comprised of four high output current, low power consumption operational amplifiers. It is particularly well suited for the CO driver interface in digital subscriber line systems, such as ADSL and ADSL2+. The driver can deliver 20.4 dBm to a line, yet compensates for losses due to hybrid insertion and back termination resistors. In addition, the low distortion, fast slew rate, and high output current capability make the AD8394 ideal for other applications, such as medical instrumentation, DAC output drivers, and other high peak current circuits. Four bias modes are selectable via two digital inputs (PD0 and PD1).

The AD8394 is available in two thermally enhanced packages, a 20-lead TSSOP_EP (AD8394AREZ) and a 4 mm × 5 mm 24-lead LFCSP (AD8394ACPZ).

PIN CONFIGURATIONS

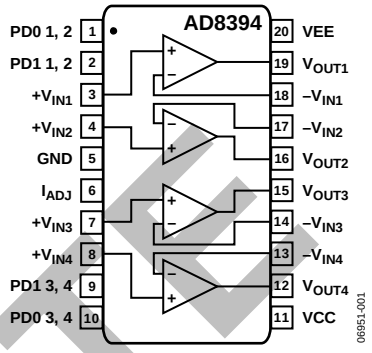


Figure 1. AD8394AREZ, 20-Lead TSSOP_EP

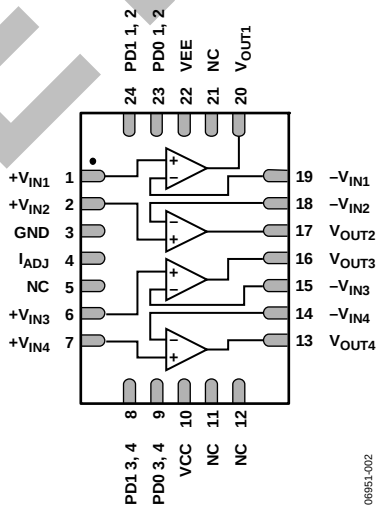


Figure 2. AD8394ACPZ, 24-Lead LFCSP, 4 mm × 5 mm

For more information about the AD8394 email: broadband.products@analog.com.

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