



L9312 Line Interface and Line Access Circuit Forward Battery SLIC, and Ringing Relay for TR-57 Applications

Introduction

The L9312 is a combination full-feature, ultralow-power SLIC, and solid-state ringing access relay. It is part of a pin-for-pin compatible family of devices designed to serve a wide variety of applications. The L9312 is optimized for TR-57 access, forward battery only, applications.

Features

SLIC

- 5 V and battery operation
- Optional automatic battery switch
- Four operational modes
- Appropriate for 58 dB longitudinal balance applications
- Minimal external components required at all interfaces
- Ultralow power dissipation
- Software/hardware adjustable dc parameters and supervision thresholds

Solid-State Ring Relay

- Low impulse noise
- Current-limited switches/thermal protection

Applications

- Pair Gain
- Digital Loop Carrier (DLC)
- Central Office (CO)
- Fiber-in-the-Loop (FITL)

Description

The L9312 electronic line interface and line access circuit (LILAC) provides all the functions that are necessary to interface a codec to the tip and ring of a subscriber loop, integrating the battery feed and ringing access relay in one low-power, low-cost package.

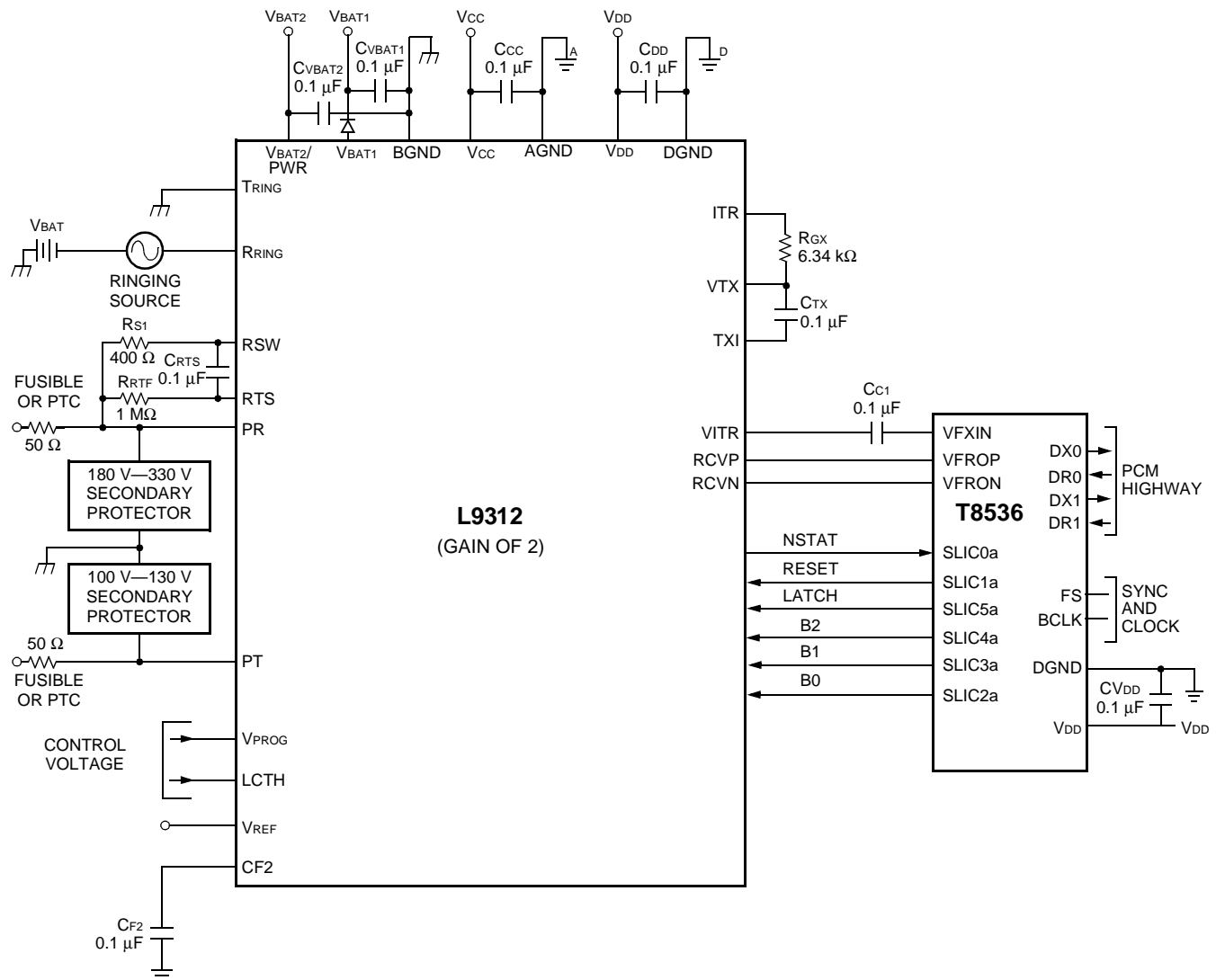
The L9312 requires a 5 V and battery supply to operate. Included is an automatic battery switch. The battery feed offers forward battery and on-hook transmission. It also has a low-power scan and a disconnect mode.

In all operating states, this IC is designed for minimal power dissipation. This device is designed to minimize the number of external components required at all interfaces.

The dc template, current limit, and overhead voltage and loop supervision threshold are programmable via an applied voltage source. The voltage source may be an external programmable voltage source or derived from the V_{REF} SLIC output.

The integrated solid-state switch offers power ringing access. Impulse noise is minimized, thus eliminating the need for external zero-cross switching circuitry.

Application



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