PBL 387 10/1 Subscriber Line Interface Circuit

Description

The PBL 387 10/1 ring SLIC (Subscriber Line Interface Circuit) is a bipolar integrated circuit in 90 V technology which replaces the conventional transformer based analog line interface circuit and ringrelay in FITL, WLL, ISDN-TA and other telecommunications equipment with a modern, compact solid state design. Not only is required PCB area reduced, but lesser component weight and height result as well. The PBL 387 10/1 has been optimized for low cost and to require only a minimum of external components.

The PBL 387 10/1 programmable, constant-current feed system can operate with battery supply voltages down to 21 V to reduce line card power dissipation.

The SLIC incorporates loop current, ground key and ring trip detection functions.

Two-to four-wire and four- to two-wire voice frequency (vf) signal conversion is accomplished by the SLIC in conjunction with either a conventional CODEC/filter or with a programmable CODEC/filter (e.g. SLAC, SiCoFi, Combo II). The programmable line terminating impedance could be complex or real to fit every market.

The PBL 387 10/1 package is 28-pin PLCC.

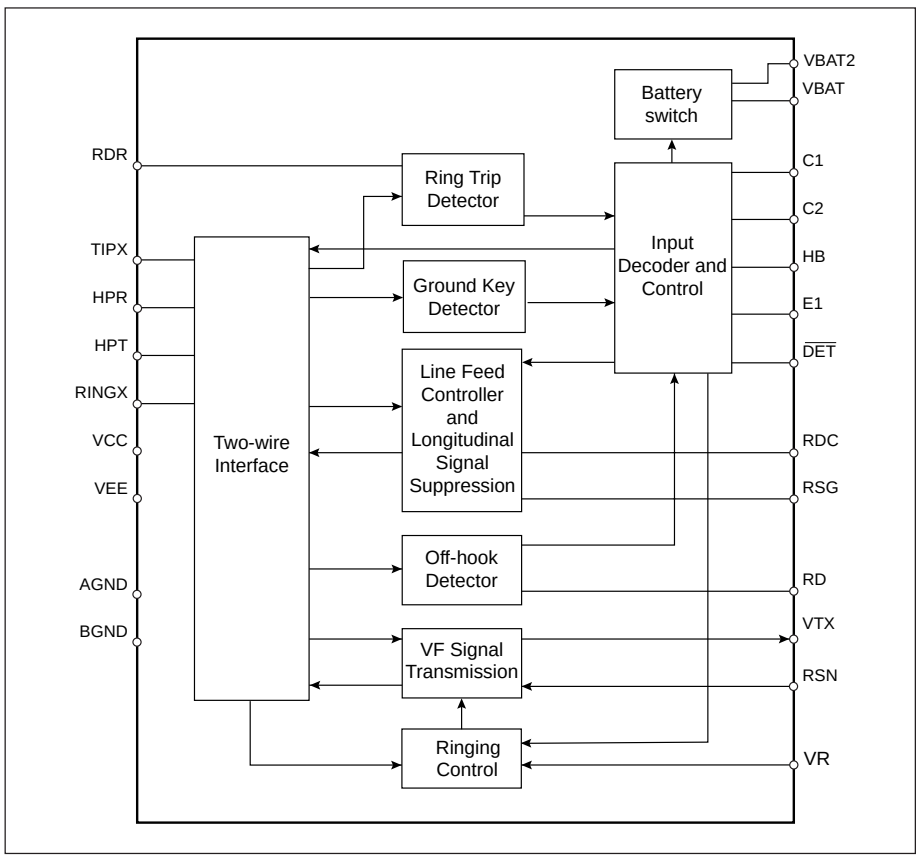
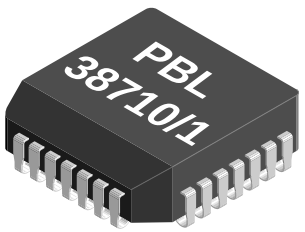


Figure 1. Block diagram.

Key Features

- Ring SLIC eliminates ring relay and conventional ring-generator
- Supports sine wave and trapezoidal ringing
- -85 V battery feed for high voltage ring signal
- On chip automatic battery switch
- Programmable battery feed characteristics
- Battery supply voltage as low as 21 V for power efficient line card designs
- Low on-hook power dissipation, 35 mW @-24 V battery
- Loop current, ring trip and ground key detection functions
- Programmable loop current detector threshold
- Hybrid function with all types of CODEC/filter devices
- Programmable line terminating impedance, complex or real
- On-hook transmission
- Tip-ring open circuit state for subscriber loop power denial



28-pin PLCC