PBL 386 20/1 Subscriber Line Interface Circuit

Description

The PBL 386 20/1 Subscriber Line Interface Circuit (SLIC) is a 90 V bipolar integrated circuit for use in PBX,Terminal adapters and other telecommunications equipment. The PBL 386 20/1 has been optimized for low total line interface cost and a high degree of flexibility in different applications.

The PBL 386 20/1 has constant current feed, programmable to max. 30 mA.

A second lower battery voltage may be connected to the device to reduce short loop power dissipation. The SLIC automatically switches between the two battery supply voltages without need for external components or external control.

The SLIC incorporates loop current, ground key and ring trip detection functions. The PBL 386 20/1 is compatible with loop start signaling.

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 two-wire impedance, complex or real, is set by a simple external network.

Longitudinal voltages are suppressed by a feedback loop in the SLIC and the longitudinal balance specifications meet Bellcore TR909 requirements.

The PBL 386 20/1 package options are 24-pin SOIC and 28 pin PLCC.

Key Features

- High and low battery with automatic switching
- 60 mW on-hook power dissipation in active state
- On-hook transmission
- Long loop battery feed tracks Vbat for maximum line voltage
- Only +5 V feed in addition to battery
- Selectable transmit gain (1x or 0.5x)
- No power-up sequence
- 44V open loop voltage @ -48V battery feed
- Full longitudinal current capability during on-hook state
- Analog over temperature protection permits transmission while the protection circuit is active
- Integrated Ring Relay driver
- Ground key detector
- Programmable signal headroom
- Tertiary Protection

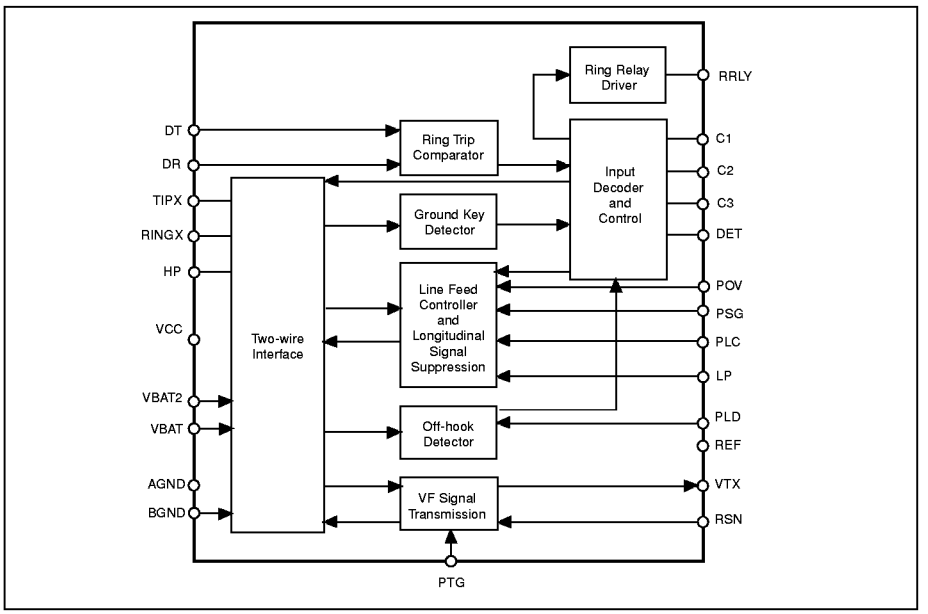
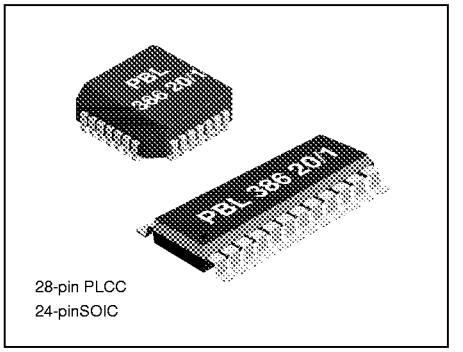


Figure 1. Block diagram.



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Ordering Information

Package	Temp. Range	Part No.
24 pin SOIC	0° - +70° C	PBL 386 20/1SO
28 pin PLCC	0° - +70° C	PBL 386 20/1QN
24 pin SOIC Tape & Reel	0° - +70° C	PBL 386 20/1SO:T
28 pin PLCC Tape & Reel	0° - +70° C	PBL 386 20/1QN:T

1522-PBL 386 20/1 Uen Rev. D

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