

PBL 386 65/2 Subscriber Line Interface Circuit

Description

The PBL 386 65/2 Subscriber Line Interface Circuit (SLIC) is a 90 V bipolar integrated circuit for use in DLC, Central Office and other telecommunications equipment. The PBL 386 65/2 has been optimized for low total line interface cost and a high degree of flexibility in different applications.

The PBL 386 65/2 emulates a transformer equivalent dc-feed, programmable between $2 \times 25 \Omega$ and $2 \times 900 \Omega$, with short loop current limiting adjustable to max 65 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 65/2 is compatible with loop start and ground start signalling.

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.

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

The PBL 386 65/2 package is 28-pin PLCC.

Key Features

- Selectable overhead voltage principle
 - All adaptive: The overhead voltage follows $0.6 V_{Peak} < signals < 6.2 V_{Peak}$.
 - Semi adaptive: The overhead voltage follows $3.1 V_{Peak} < signals < 6.2 V_{Peak}$.
- Metering $2.2 V_{rms}$
- High and low battery with automatic switching
- Battery supply as low as -10 V
- Only +5 V in addition to GND and battery (VEE optional)
- 39 mW on-hook power dissipation in active state
- Long loop battery feed tracks V_{Bat} for maximum line voltage
- 44V open loop voltage @ -48V battery feed
- Constant loop voltage for line leakage $< 5 \text{ mA}$
- On-hook transmission
- Full longitudinal current capability during on-hook
- Programmable loop & ring-trip detector threshold
- Ground key detector
- Analog temperature guard
- Tip open state with ring ground detector
- Silent polarity reversal
- Line voltage measurement
- -40° C to $+85^\circ \text{ C}$ ambient temperature range

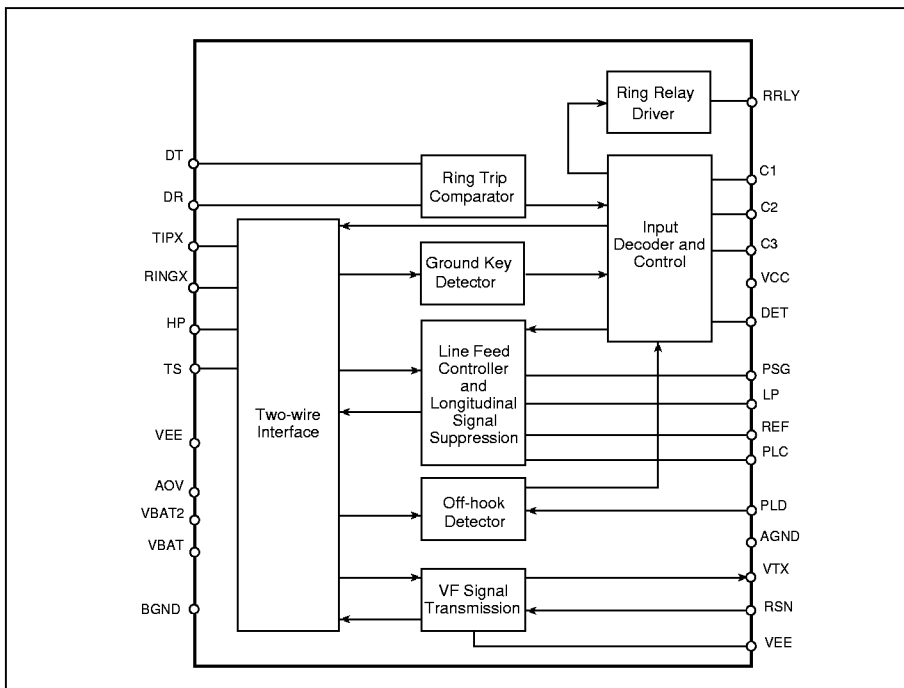
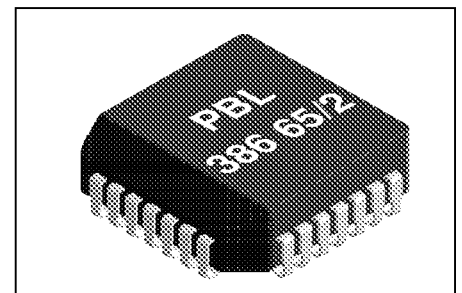


Figure 1. Block diagram.



28-pin plastic PLCC

Ordering Information

Package	Temp. Range	Part No.
28pin PLCC	-40° - + 85° C	PBL 386 65/2QN
28pin PLCC Tape & Reel	-40° - + 85° C	PBL 386 65/2QN:T

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