



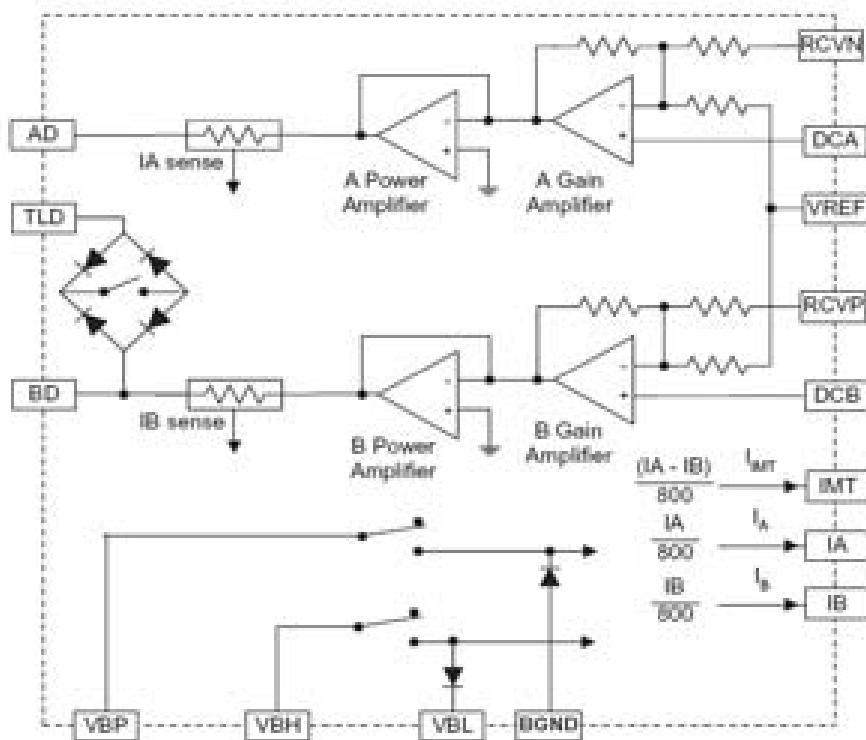
a  **MICROCHIP** company

LE79271

Next Generation Carrier Chipset (NGCC) Subscriber Line Interface Circuit (SLIC)

The Le79271 Next Generation Subscriber Line Interface Circuit (SLIC) device, in combination with an Le79238 SLAC device, implements a DSL friendly, high density universal telephone line interface. This enables the design of a low cost, high performance, fully software programmable line interface with worldwide applicability. All AC, DC, and signaling parameters are programmable. Additionally, the NGCC has integrated self-test and line-test capabilities to resolve faults to the line or line circuit.

Detailed Block Diagram



Features & Benefits

- Designed to minimize POTS transients, optimizing CRC performance for triple play applications
- Best-in-class GR-844 equivalent testing
 - o Fully validated test primitives and host routines
 - o Guaranteed performance parameters
- Optimized for best-in-class density
- Monitor of two-wire interface voltages and currents supports:
 - o Voice transmission
 - o Internal ringing generation
 - o Programmable DC feed characteristic
 - Current limited and independent of battery
 - o Selectable off-hook and ground-key thresholds
 - o Subscriber line diagnostics
 - Leakage and loop resistance
 - Line capacitance and bell capacitance
 - Foreign voltage sensing
 - o Power cross and fault detection
- Supports 85 Vrms internal ringing
 - o Supports balanced and unbalanced ringing
- 3.3 V and battery supplies
 - o Supports two negative and one positive battery
- Dual battery operation for system power saving
 - o Automatic battery switching
 - o Intelligent thermal management
- Compatible with inexpensive protection networks
- Metering capable
 - o 12 kHz and 16 kHz
 - o Smooth polarity reversal
- Tip-open mode supports ground start signaling
- Integrated test load switch
- 5 REN with DC offset

- Features with Le79124 VCP
 - o 72 channel call aggregation
 - o GR-844 equivalent line testing