![Microsemi logo - a Microchip company]

LE792388

Next Generation Carrier Chipset (NGCC) Octal SLAC (Codec)

The Le792388 Next Generation Octal Subscriber Line Audio processing Circuit (SLAC) device, in combination with the Le79271 SLIC device, implements a DSL friendly, high density eight-channel 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 via a microprocessor interface. The Le792388 has an integrated test tool box and uses VCP test primitives and host routine capabilities to resolve faults to the line or line circuit.

Detailed Block Diagram
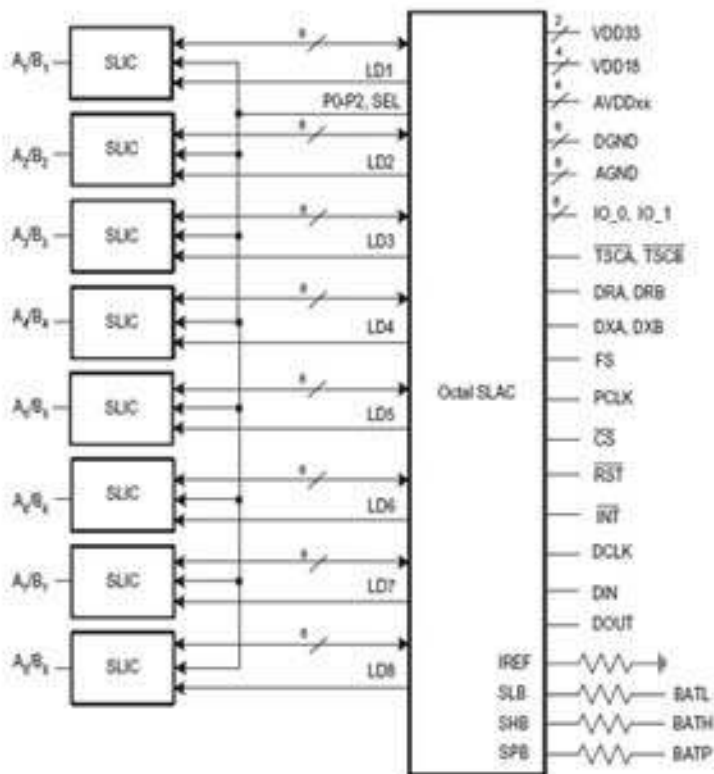
Features & Benefits

- Optimized for Next Generation Broadband xDSL and triple play applications

- Eliminates transients that could cause CRC errors

- Best-in-class GR-844 equivalent testing capability

- Ideal for high density, medium and large line count applications

- API-compatible with VE790 Series designs

- High performance digital signal processor provides programmable control of all major line card functions

  - A-law/µ-law and linear codec/filter

  - Transmit and receive gain, Two-wire AC impedance, Transhybrid balance, Equalization

  - DC loop feeding

  - Loop supervision

  - Internal ringing generation and integrated ring-trip detection

  - Metering generation at 12 kHz and 16 kHz

    - Envelope shaping and level control

- Enhanced line control and line-test support

  - DTMF and Modem Tone Detection

  - GR-909 and GR-844 Line and circuit testing capability

  - Tone generation (DTMF, FSK, and arbitrary tone)

- Standard PCM and MPI digital interfaces

- General purpose I/O pins, can be used as relay drivers

- Features with Le79124 NGVCP

  - 72 channel call aggregation

  - GR-844 equivalent line testing