

General Description

The PSB 2163 ARCOFI-SP provides the subscriber with an DSP-based audio, ringing, codec, filter-processor solution for a digital telephone. It fulfills all the necessary requirements for the completion of a low-cost digital telephone featuring digital speakerphone and controlled loudhearing.

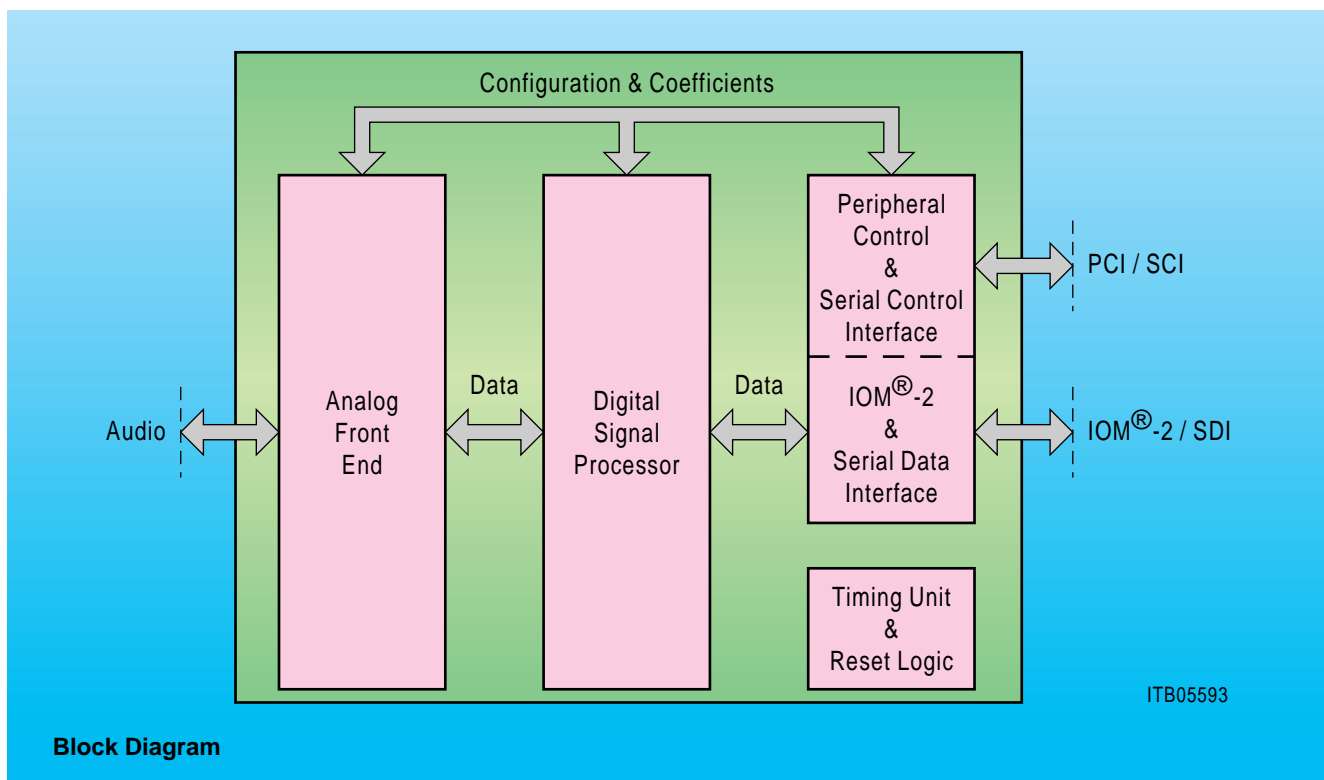
Applications

- Voice Terminals and Voice/Data Terminals
- Telephones with PC Interface
- Voice Featured PC Cards
- Video Conference Terminals
- Fax Machines and a/b Terminal Adapter

| Type | Package |
|------------|------------------|
| PSB 2163-N | P-LCC-28-1 (SMD) |
| PSB 2163-P | P-DIP-28-1 |
| PSB 2163-T | P-DSO-28-1 (SMD) |

Features

- Programmable Analog Front End (AFE), enables direct connection of microphones, earpiece and loudspeaker
- 42+3 dB transmit amplification on chip, allows the direct connection of the speakerphone microphone without external OpAmp
- Digital signal processing performs all CODEC functions Fully compatible to the G.714/CCITT and NET33/ETSI specifications
- PCM G.711/CCITT A-Law/ μ -Law and 16-bit linear data
- IOM-2 TE, IOM-2 (4 MHz) and SCI/SDI serial data interfaces
- Enhanced digital speakerphone support without any external devices:
 "Stronger-Wins" Algorithm enables mode switching by just speaking louder
 Controlled monitoring (loudhearing) without any external devices
 Automatic Gain-Control (AGC) in transmit and receive direction
- 200 mW (square) / 100 mW (sine wave) loudspeaker driver capability
- Flexible DTMF, tone and ringing generator
- Low power consumption (standby < 1 mW)



Block Diagram