Audio Ringing Codec Filter Basic Function (ARCOFI®-BA)

General Description
The PSB 2161 ARCOFI-BA provides the Design Engineer with a cost-optimized audio, ringing, codec, filter processor solution for simple digital terminals. It offers the minimum functions necessary to develop a low-cost telephone and thus with the high flexibility by the DSP technics.

Applications
• Low-Cost Voice Terminals and Voice/Data Terminals
• Telephones with PC Interface
• Voice featured PC Cards
• Video Conference Terminals
• Fax Machines and a/b Terminal Adapter

Features
• Programmable Analog Front End (AFE), enables direct connection of microphones, earpiece and loudspeaker
• Digital signal processing performs all CODEC functions
• Fully compatible to the G. 714 CCITT and ETSI (NET33) specification
• PCM A-Law/µ-Law (G. 711 CCITT) and 16-bit linear data
• IOM-2 interface (TE- and non-TE-mode), Serial Control Interface (SCI) and Serial Data Interface (SDI)
• Three analog inputs: two differential, high performance inputs for microphones plus a single-ended auxiliary input
• Two differential outputs for a handset earpiece (200 Ω) and a loudspeaker (50 Ω)
• 100-mW sine wave and 200-mW square wave loudspeaker driver capability
• Separate digital output for a piezo ringer
• Flexible Peripheral Control Interface (PCI) in IOM-2 TE-mode
• Flexible DTMF, tone and ringing generator
• Single 5-V power supply
• Low power consumption: standby < 1 mW