

Features

- AC'97 2.1 compliant codec
- 18-bit stereo full duplex $\Sigma\Delta$ codec
- VSR (Variable Sampling Rate), 1Hz resolution
- 3D stereo expansion for simulated surround
- 4 stereo analog line-level inputs
- 2 mono analog line-level inputs
- MIC level input switchable from two sources
- Second line-level output with volume control
- Multiple codec mode
- External Audio Amplifier Control
- Power management support
- Low Power consumption mode
- Exceeds Microsoft® PC'9x requirements
- 3.3V, 5V or split analog/digital power supply
- 48-pin TQFP or LQFP package

Description

IC Ensemble's ICE1232™ 18-bit $\Sigma\Delta$ audio codec conforms to the AC'97 2.1 specification with excellent analog performance. The ICE1232 integrates a sophisticated Sample Rate Converter that can be adjusted in 1Hz increments. This makes it ideal for host-based signal processing motherboard applications which lacks a hardware accelerator. The mixer circuitry integrates a stereo enhancement to provide a pleasing 3D surround sound effect for stereo media. This codec is designed with aggressive power management to achieve ultra low power consumption when used with a 3.3V supply. The primary applications for this part are desktop and portable personal computers multimedia subsystems. However, it is suitable for any system requiring audio domain conversion, mixing and volume control at competitive prices.

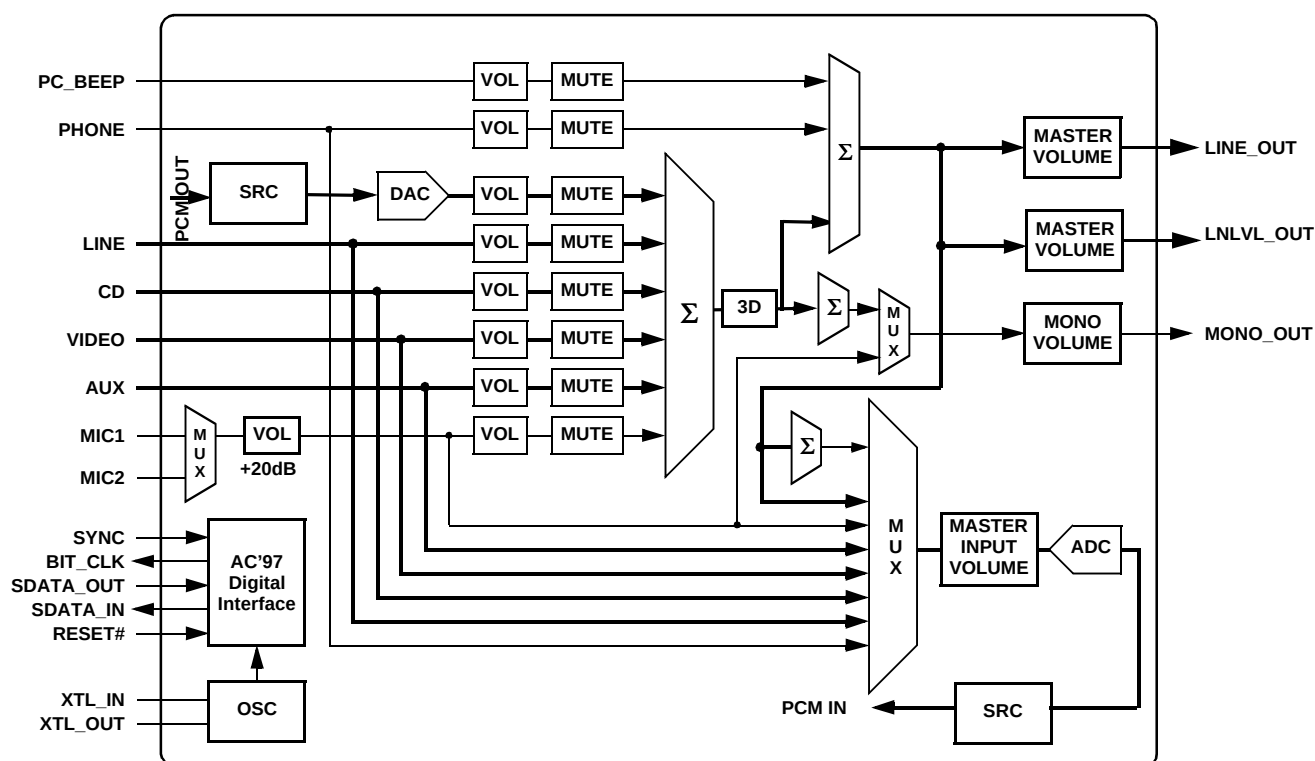


Figure 1. Functional Block Diagram

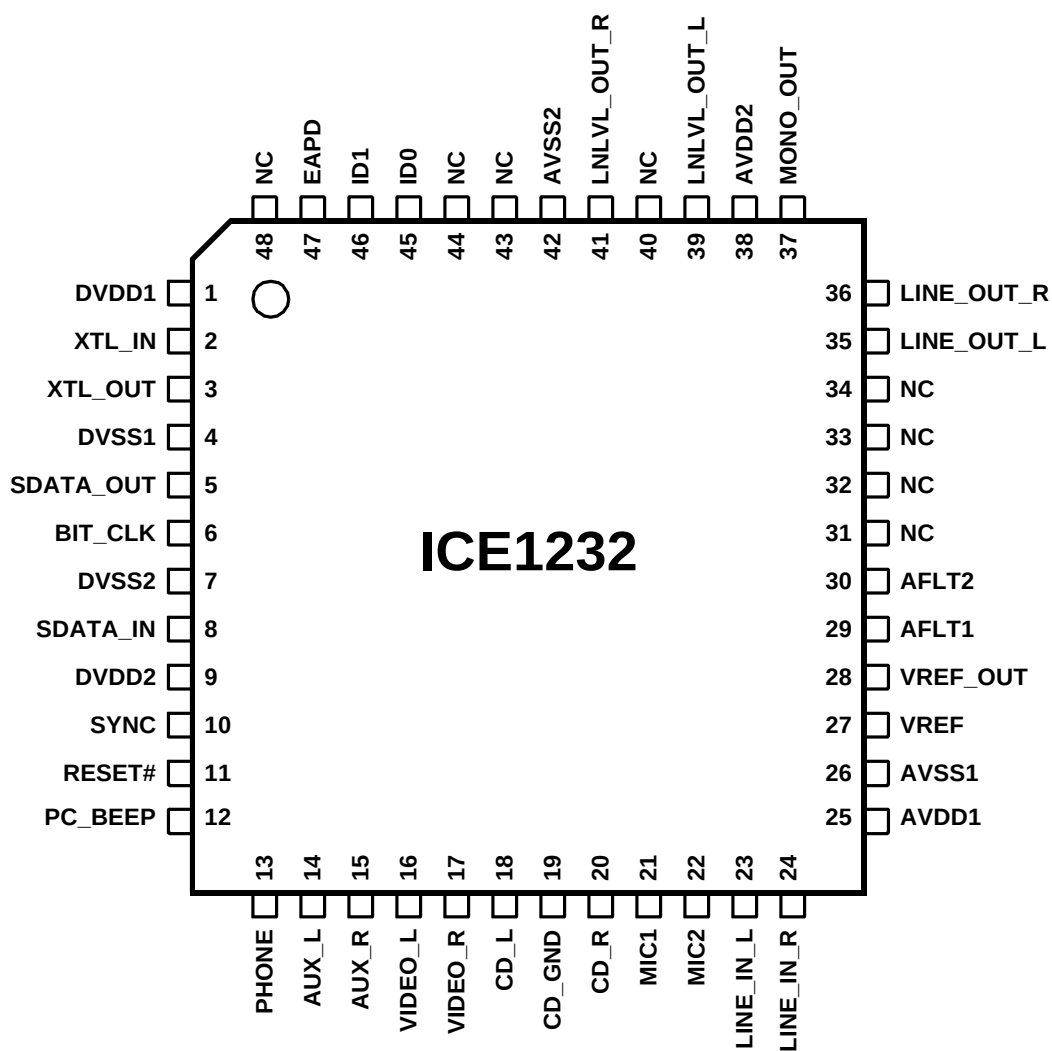


Figure 2. 48-pin TQFP/LQFP