

ISD1200 Series

Single-Chip Voice Record/Playback Devices

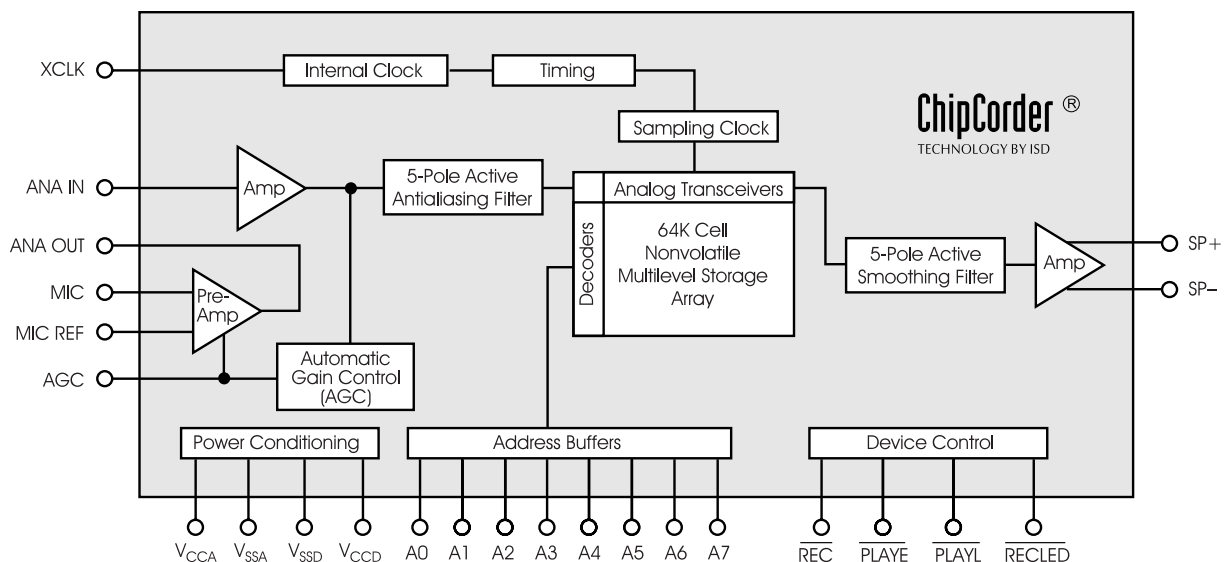
10- and 12-Second Durations

GENERAL DESCRIPTION

Information Storage Devices' ISD1200 ChipCorder® series provides high-quality, single-chip record/playback solutions to 10- and 12-second messaging applications. The CMOS devices include an on-chip oscillator, microphone preamplifier, automatic gain control, antialiasing filter, smoothing filter, and speaker amplifier. A minimum Record/Playback subsystem can be configured with a microphone, a speaker, several passives, two push-buttons, and a power source.

Recordings are stored in on-chip nonvolatile memory cells, providing zero-power message storage. This unique, single-chip solution is made possible through ISD's patented multilevel storage technology. Voice and audio signals are stored directly into memory in their natural form, providing high-quality, solid-state voice reproduction.

Figure: ISD1200 Series Block Diagram



FEATURES

- Easy-to-use single-chip voice record/playback solution
 - High-quality, natural voice/audio reproduction
 - Push-button interface
 - Playback can be edge- or level-activated
 - Single-chip durations of 10 and 12 seconds
 - Automatic power-down mode
 - Enters standby mode immediately following a record or playback cycle
 - Standby current 0.5 μ A (typical)
 - Zero-power message storage
 - Eliminates battery backup circuits
 - Fully addressable to handle multiple messages
 - 100-year message retention (typical)
 - 100,000 record cycles (typical)
 - On-chip clock source
 - No programmer or development system needed
 - Single +5 volt power supply
 - Available in die form, DIP, and SOIC packaging
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Table: ISD1200 Series Summary

Part Number	Minimum Duration (Seconds)	Input Sample Rate (KHz)	Typical Filter Pass Band (KHz)
ISD1210	10	6.4	2.6
ISD1212	12	5.3	2.2

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