

ISD4002 Series

Single-Chip Voice Record/Playback Devices

120-, 150-, 180-, and 240-Second Durations

GENERAL DESCRIPTION

The ISD4002 ChipCorder[®] products provide high-quality, 3-volt, single-chip record/playback solutions for 2- to 4-minute messaging applications ideal for cellular phones and other portable products. The CMOS-based devices include an on-chip oscillator, anti-aliasing filter, smoothing filter, AutoMute[™] feature, audio amplifier, and high density, multilevel Flash storage array. The ISD4002 series is designed to be used in a microprocessor- or microcontroller-based system. Address and control are accomplished through a Serial Peripheral Interface (SPI) or Microwire Serial Interface to minimize pin count.

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 solid-state memory in their natural form, providing high-quality voice reproduction.

Figure: ISD4002 Series Block Diagram

