

# ISD1100 Series

Single-Chip Voice Record/Playback Devices  
10- and 12-Second Durations



The ISD1100 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.

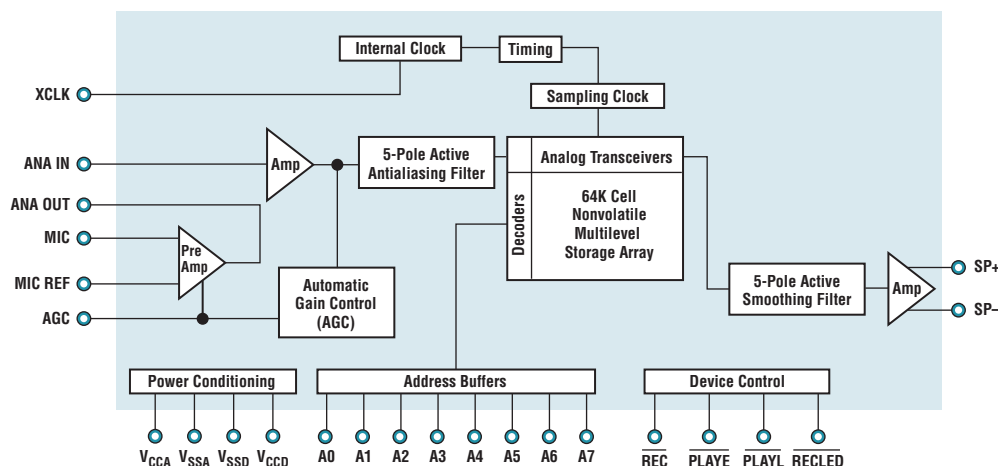
## ISD1100 SERIES CAN BE USED IN VARIOUS APPLICATIONS:

- Toys
- Portable recorders
- Promotional items
- Greeting cards
- Warning signs
- Novelties

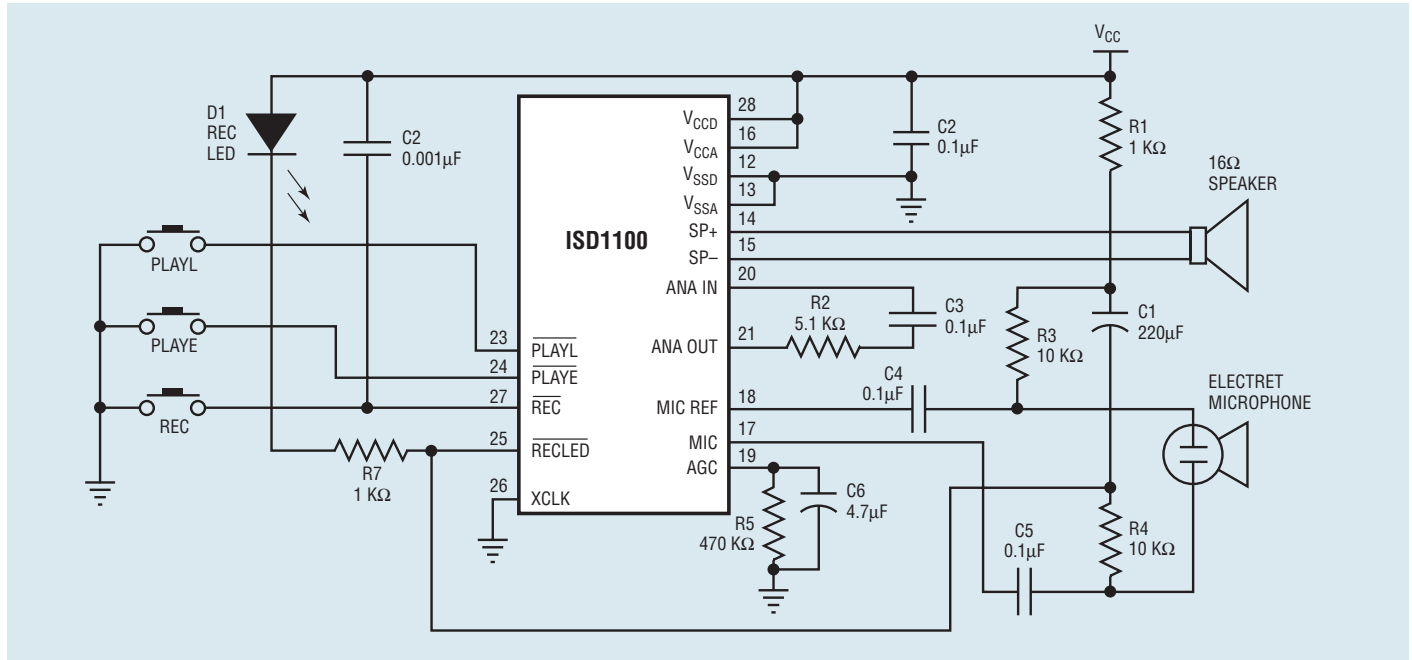
## FEATURES

- 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  $\mu$ A (typical)
- Zero-power message storage
- Eliminates battery backup circuits
- Fully addressable to handle multiple message
- 100,000 record cycles (typical)
- On-chip clock source
- Single +5 volt power supply
- 100-year message retention (typical)
- Available in die form, PDIP and SOIC packaging

## ISD1100 SERIES BLOCK DIAGRAM



## ISD1100 SERIES APPLICATION EXAMPLE



## ISD1100 SERIES PACKAGE AND TEMPERATURE AVAILABILITY

	ISD1110 (10 Seconds)			ISD1112 (12 Seconds)		
	PDIP	SOIC	DIE	PDIP	SOIC	DIE
Commercial Die (0° to +50°)			•			•
Commercial Packaged (0° to +70°)	•	•		•	•	

## ORDERING THE ISD1100 PRODUCTS

Product Series	Duration	Package Type	Special Temperature Field
ISD1100 Series	10 = 10 seconds 12 = 12 seconds	P = 28 Lead 0.600-inch PDIP S = 28 Lead 0.300-inch SOIC X = Die	Blank = Commercial Die (0°C to +50°C) or Commercial Packaged (0°C to +70°C)



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To Order Products or More Information:

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