



# STEVAL-ICV001V1

Sound/voice playback demonstration board based on the ST7LITE02Y0

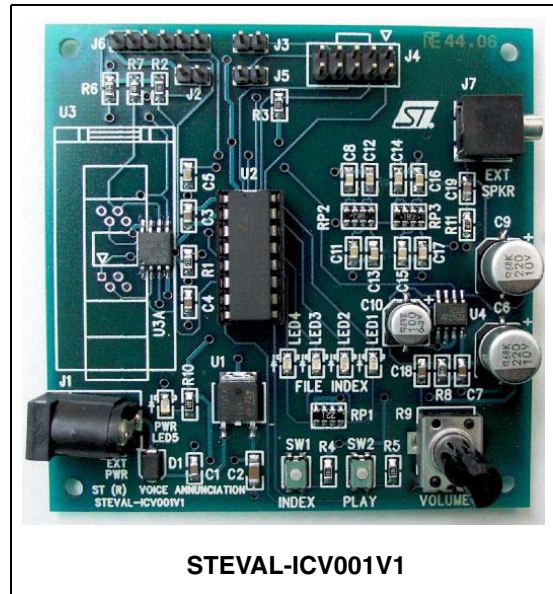
Data Brief

## Features

- 1% calibrated on-chip RC oscillator
- Low-voltage detector (LVD) on chip
- Small footprint
- Low-power operation
- Supports lower density serial Flash if fewer messages needed
- Order of filter can be reduced for further cost savings

## Description

This board demonstrates how to add audio playback to any application using a general-purpose ST7 microcontroller. The audio player demonstration board reconstructs audio signals through the PWM of the ST7FLITES2 microcontroller, and a serial Flash is used to store the audio data in a binary file format. Once the data is stored, the microcontroller reads it through an SPI interface and generates the sound using the PWM feature. A sixth order low-pass filter removes any unwanted high-frequency components from the signal before passing it to a speaker.



# 1 Board schematic

Figure 1. Voice annunciation: schematic 1

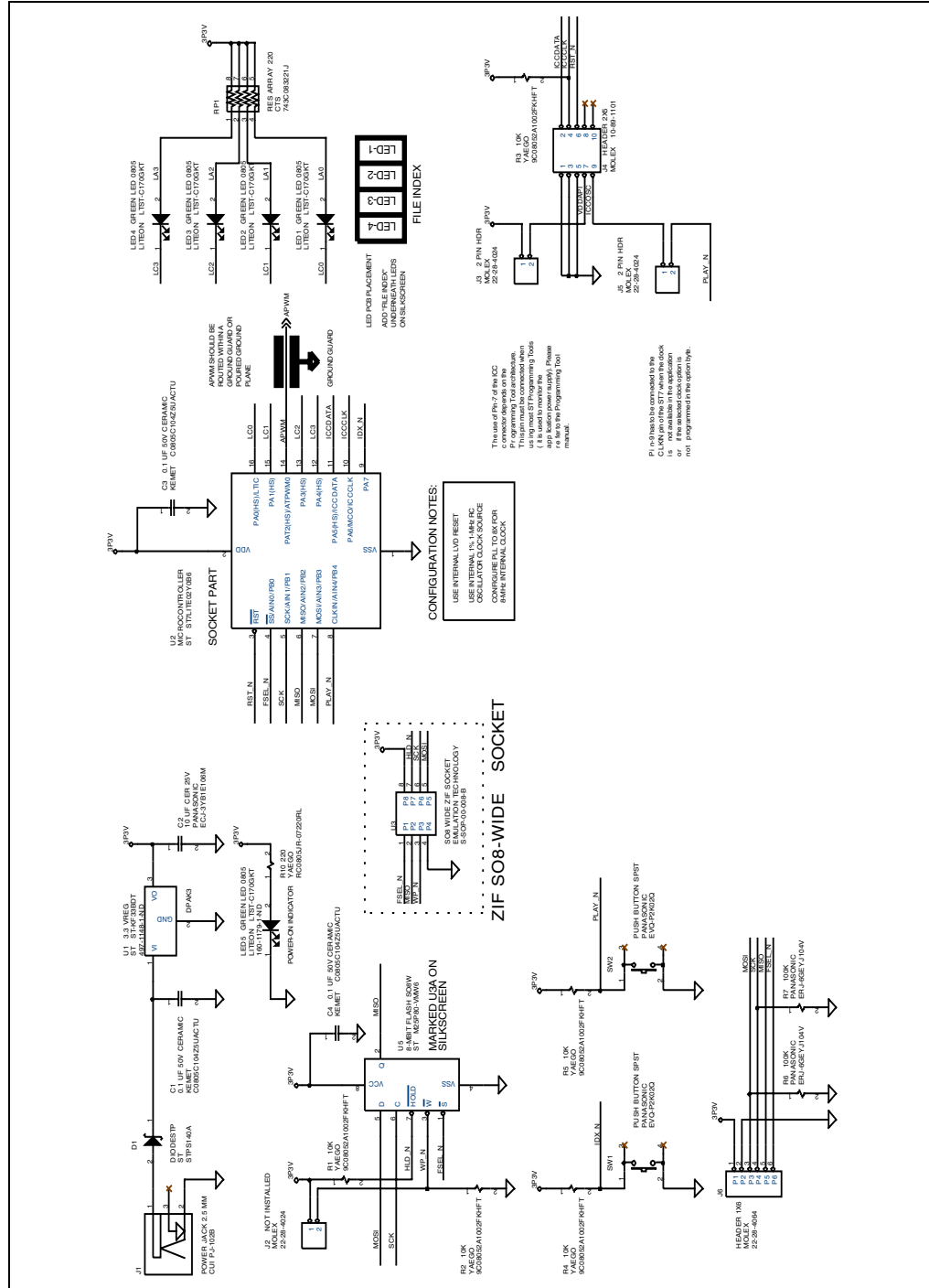
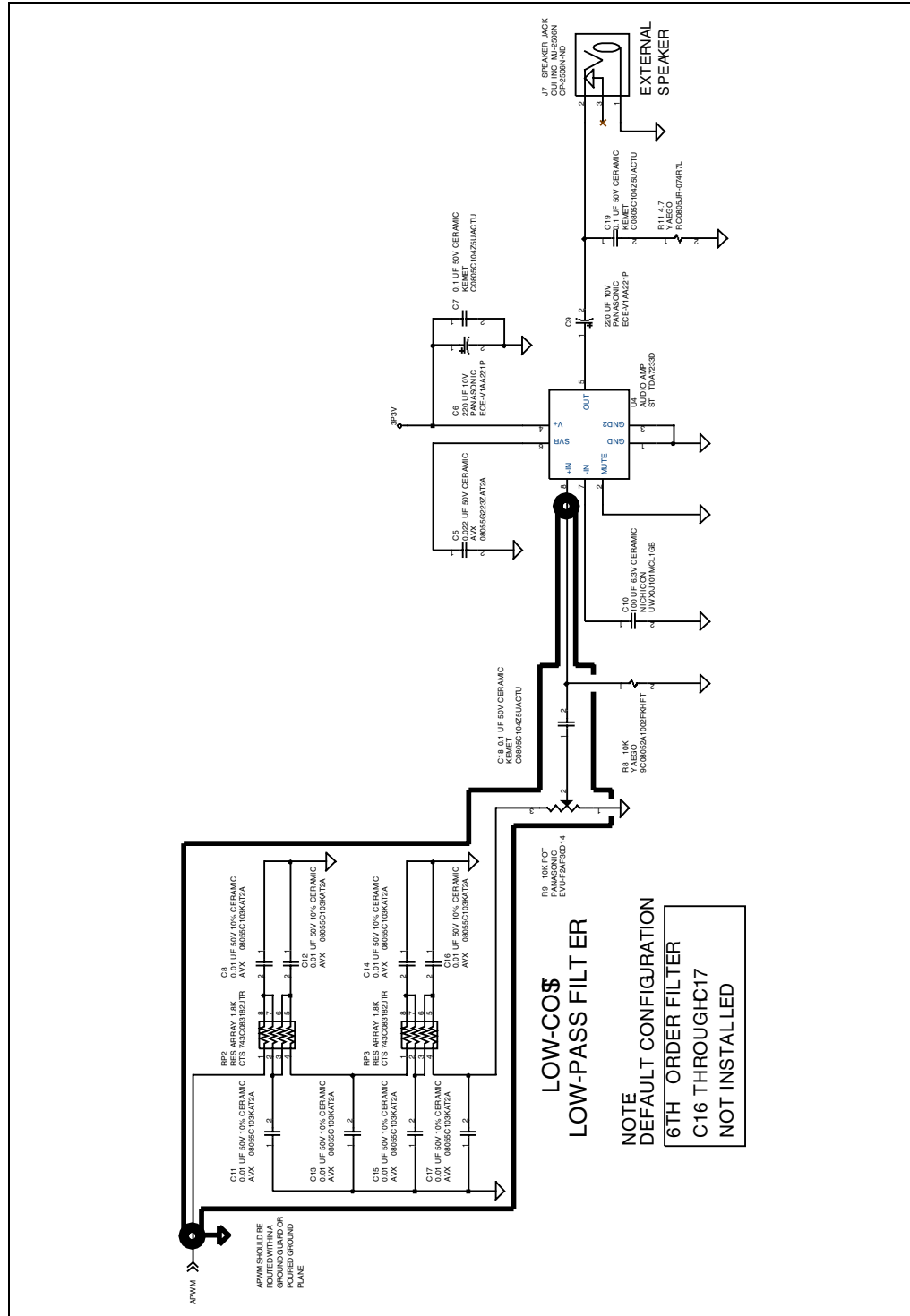


Figure 2. Voice annunciation: schematic 2



## 2 Revision history

**Table 1. Document revision history**

Date	Revision	Changes
21-Aug-2008	1	Initial release

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