## 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 generalpurpose 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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