

Re: Lowest power tune detector.

Re: Lowest power tune detector.

Source: <http://sci.tech-archive.net/Archive/sci.electronics.design/2006-04/msg03446.html>

- *From:* "Luhan" <luhanis@xxxxxxxx>
 - *Date:* 24 Apr 2006 07:44:36 -0700
-

Ian Stirling wrote:

I'd like a keyring that responds to a whistled tune, rather than a simple tone, for better noise rejection.

Are there micros that can do this?

ADC at ~8Khz, clocking at a few tens of Khz, and do the MAC thing for maybe 8 tones?

Maybe a low power op amp on the mic providing a logic level output to a PIC in sleep mode. The PIC wakes up on any noise and does FFT to check for the tone. PIC12F675 is a good choice, very low current in sleep mode and 10-bit a/d for the tone input. Run the whole thing on a 3 volt watch battery.

Luhan

.