

Re: LM34 to A/D

Source: <http://sci.tech-archive.net/Archive/sci.electronics.design/2007-08/msg06037.html>

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 - *Date:* Fri, 31 Aug 2007 10:01:41 -0700
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On Fri, 31 Aug 2007 12:44:09 -0400, Fred Bloggs <nospam@xxxxxxxx>
wrote:

But you could oversample and average. Temperature changes slowly, and code is cheap.

John

I don't, and will never, trust averaging an acquisition synchronized to a digital clock.

These days, it's hard to make any other kind of acquisition. I almost always software lowpass filter stuff like this, slow things like temperature acquired by a fast sampling ADC. There's usually enough natural noise floating around to dither a 12-bit system up to 14 or even 16 bits of usable resolution. And if there's a high temp shutdown or something like that, filtering avoids false alarms from spikes or whatever.

Use the cheap code to correct for gain and offset of the cheap gain amp, which can be calibrated with a cheap voltage input.

He can calibrate based on a temperature standard, in the extreme. We don't know if he wants to store custom cal factors per system.

John

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