

# Re: quadrature to voltage converter

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- *From:* Joerg <[notthisjoergsch@xxxxxxxxxxxxxxxxxxxxxxxx](mailto:notthisjoergsch@xxxxxxxxxxxxxxxxxxxxxxxx)>
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Hello Tim,

I don't have anything against either analog or digital. It's just jumping from one to the other like a hyperactive dolphin that gives me the heebee jeebies.

I have done that sometimes and it also gave the other (client's) engineers the heebee jeebies. But if the accuracy is good enough and it is cheaper, why not? Once a huge hotrod DSP became more or less unemployed in the wake of some anadigital mods. They decided to leave it on there anyway but from a MIPS point of view it could have been replaced by a 4bit Chinese uC.

Ok, can't do ASCII art

It's a cool little program, and free.

Yes, I'll have to get it. Wish Eagle had a routine for converting a schematic to ASCII. Shouldn't be too tough but I am not good at writing these Eagle user language programs.

so I'll describe an alternative:

Replace the cap with a resistor, delete the digital stuff and run A and B directly into the two horizontal resistors but make these of different value. Now there will be four distinct voltage levels coming out. That allows to resolve from the ADC value the status of A as well as B at any time. Basically you now have a 2bit poor man's DAC that feeds the ADC input.

Re: quadrature to voltage converter

I've done similar before. Yes it would work, you'd have to be careful of transitional values and you'd have to sample faster than the encoder would ever go, but you'd keep the digital digital.

I hope Jamie forgives me but I was just waiting for the other shoe to drop. Like that he's also running a bit too tight on MIPS to do this or almost out of ROM space ;-)

Regards, Joerg

<http://www.analogconsultants.com>

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