

Re: Initializing a Flip-Flop on Power-up

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Hello Jim,

Douwe Egbert makes coffee too? I used to smoke their Cavendish until the management decreed no smoking in the new house ;-)

Ah, a pipe smoker. Did that in my 20's for a couple years, on and off. Usually Skandinavik Mixture or Irish tobaccos. That, and a nice glass of single malt.

IIRC coffee is Douwe Egbert's mainstream product. But Frank would know better, it's been two decades since I lived in the Netherlands. And I always liked the other brand better, Kanis&Gunninck or something like that.

Personal opinion: Anyone who relies on an edge detector for POR is a bit of a fool. In recent months it's been an almost weekly event to patch some chip that won't POR properly.

Agree. It's pathetic what young engineers consider a POR these days. It's actually sad that they have to make a distinction between POR and BOR. Every reset should be good enough on brown-outs. What's really sad is that even our (rather expensive) Motorola cordless phone appears to perform dirty resets on occasion. Got enough honey-do projects so I am not going to fix their design.

When VCC is low or the circuits are picky I use a BJT because it makes for a better threshold. Or a TLV431 but that's expensive. If there is a regulator I take it off before that and after, then issue the reset before it is too close to dropout.

I prefer a level detect with hysteresis AND delay... easy to do if the chip design includes my bandgap reference ;-)

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Us circuit designers have to pay extra for that bandgap. But a hysteresis is a good thing though I have to confess that I sometimes forego it, but only if there is enough margin between threshold and the circuit actually conking out. Plus enough decoupling capacitance to tide it over the reaction time.

Regards, Joerg

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