

Re: Prevent signal when device is turned on

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- *From:* "john jardine" <john@xxxxxxxxxxxxxxxxxxxxxxxx>
 - *Date:* Fri, 23 Mar 2007 02:09:10 -0000
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<grubertm@xxxxxxxx> wrote in message
news:1174526576.837341.41440@xx

On Mar 21, 3:53 pm, "john jardine" <j...@xxxxxxxxxxxxxxxxxxxxxxxx> wrote:

Hang a capacitor on the connection between the transistor base and it's
base
resistor and the 0V. (something like 1uF).

Okay, I see how that takes care of things while the signal is briefly
high. But what happens if the pin goes low or high impedance? Won't
the capacitor then discharge via the Base-Emitter ?

(assuming of course an NPN transistor)
PIC pin high for a decent period and the cap sits about 0.7V with the
transistor ON. (same action with or without the capacitor)
PIC pin low for a decent period and the capacitor discharges via the
resistor to 0V and the transistor goes OFF. (same action with or without the
capacitor)

If transistor is ON and PIC pin switched to high impedance then capacitor
discharges via BE till transistor switches OFF (about 0.5V on capacitor)

If transistor is OFF and PIC pin switched to high impedance then transistor
stays off. The capacitor even provides some noise filtering.

But ... If the PIC pin is liable to be switched from output to input, then
there should (capacitor or no capacitor) also be an additional pullup or
pulldown resistor fitted somewhere, sufficient to define the transistor
ON-OFF state, under this rather odd operating condition.

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