

Re: Initializing a Flip-Flop on Power-up

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Hello Spehro,

While you can use an RC (typically about 0.1s time constant with a diode to help out the protection diode to Vdd, a series resistor to limit the current in case of a Vdd-to-ground short, and perhaps a drain resistor from Vdd to Vss to make sure that Vdd falls reasonably quickly), it's far from foolproof, more complex and not much cheaper. Another low-cost solution is to use a zener, a BJT and a few resistors, with or without the RC, but that consumes more power, and is even more complex.

My circuit du jour is a BSS123. Drain tugs on input that needs reset low. Gate has cap to VCC and resistor to GND. Plus discharge path if some BOR is required as well. If the 4-5c are too much I'll sometimes use a BJT. There must be a discharge path from VCC to GND if power is turned off. If there isn't that needs some extra parts.

Regards, Joerg

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