Re: 74HC4052 Alternative?

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- *From*: "mkaras" <mkaras@xxxxxxxxxxxxxxxxx>
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jecottrell65@xxxxxxxxx wrote:

> I'm switching the RX & TX lines from an MCU to two different serial
> I/Os (XBee radio & regular old serial). I don't need the 1:4 capability
> in the 74HC4052 and I'd like to get the lowest power option possible.
>
> Does anyone have any suggestions or slick alternatives?
>
> Thanks,
>
> John

You have many choices available. The number of choices is greater if you are switching the TxD and RxD lines at the logic level voltages right at the microcontroller. If on the other hand the switching is being done on the other side of an RS232 transceiver then your choice of available switch parts becomes a lot more limited.

You could look at the MAX303 switching element. It offers two SPDT configured switches that looks like it it would fit your application directly. This part could be designed in to support the switching on either side of the RS232 transceivers. See here:
http://www.maxim−ic.com/quick_view2.cfm/qv_pk/1060

Another choice you could consider is to toss the mux/switch idea all together (and as long as both of your ports already require level translators) you could look at a part similar to the ADM211 (there are many others too) that has a tri−state enable pin. These essentially allow you to tri−state bus multi−drop the microcontroller serial port lines to multiple RS232 ports.

− mkaras

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