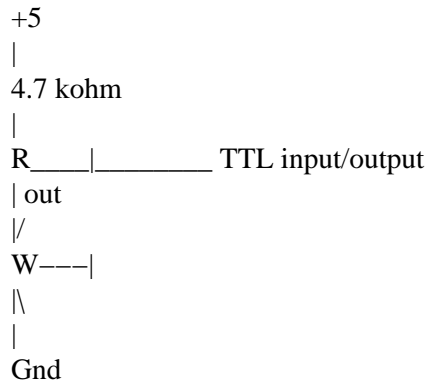


Parallel port hardware

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Does anyone know how the open collector control port in the SPP is



I can't seem to find anything that shows how the port is read from and I'm trying to understand its behavior when reading based on it. The above is just what I think it probably is but I could be wrong. When reading from the port W must be 0 and then R follows out. But this isn't quite true because R seems to latch W to 1 and I have to write W = 0 to allow R to follow out again.

Basically I'm trying to setup an input and output line into a control port pin. I read that I have to use all the pins as either input or output but not mixed? This is probably because I have to reset the pin and I cannot do them individually? If this is the case then I have to use a status port pin to read the line when it is working as an input?... which makes it more complicated.

This is where I'm getting most of my info:

<http://www.beyondlogic.org/spp/parallel.htm>

and this is specifically where I'm having trouble:

"An external 4.7k resistor can be used to pull the pin high. I wouldn't use anything lower, just in case you do have an internal pull up resistor, as the external resistor would act in parallel giving effectively, a lower

Parallel port hardware

value pull up resistor. When in high impedance state the pin on the Parallel Port is high (+5v). When in this state, your external device can pull the pin low and have the control port change read a different value. This way the 4 pins of the Control Port can be used for bi-directional data transfer. However the Control Port must be set to xxxx0100 to be able to read data, that is all pins to be +5v at the port so that you can pull it down to GND (logic 0)."

Not sure why I have to really do all port pins for bi-direction. (Obviously I can't read and write at the same time but I think I can interleave them to get what I want)

Any ideas?

Thanks,
Jon

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