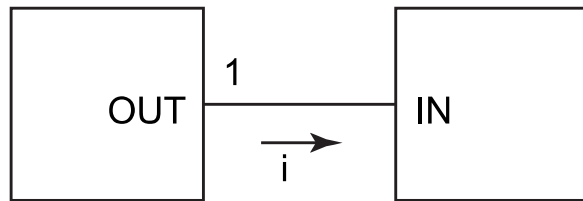


Interface Checklist (revised 10/09/17)
ESE280 Ken Short

AVR128DB48
A

SCD41
B

$$3.3 \text{ V} - 10 \text{ k} \cdot 1 \text{ uA} \quad 0.65 \cdot \text{VDD}$$



**VDD = 3.3 V

$$V_{OHmin(A)} > V_{IHmin(B)}$$

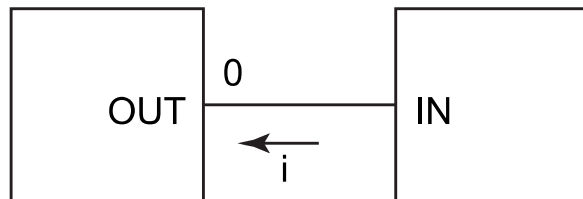
$$\underline{3.29 \text{ V}} > \underline{2.145 \text{ V}}$$

$$(3.3 - 2.145) / 10000 \quad I_{OHmax(A)} > I_{IHmax(B)}$$

$$\underline{115.5 \text{ uA}} > \underline{1 \text{ uA}}$$

A

B



$$V_{OLmax(A)} < V_{ILmax(B)}$$

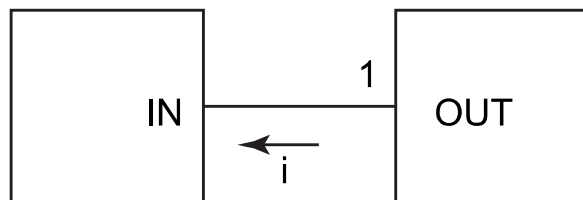
$$\underline{0.6 \text{ V}} < \underline{0.99 \text{ V}}$$

$$I_{OLmax(A)} > I_{ILmax(B)}$$

$$\underline{6 \text{ mA}} > \underline{1 \text{ uA} + 0.33 \text{ mA}}$$

A

B



$$V_{IHmin(A)} < V_{OHmin(B)}$$

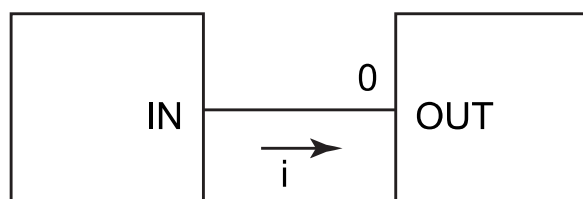
$$\underline{2.31 \text{ V}} < \underline{3.29 \text{ V}}$$

$$I_{IHmax(A)} < \frac{(3.3 - 2.31)}{10000} \quad I_{OHmax(B)}$$

$$\underline{5 \text{ nA}} < \underline{99 \text{ uA}}$$

A

B



$$V_{ILmax(A)} > V_{OLmax(B)}$$

$$\underline{0.99 \text{ V}} > \underline{0.66 \text{ V}}$$

$$I_{ILmax(A)} < I_{OLmax(B)}$$

$$\underline{5 \text{ nA}} < \underline{3 \text{ mA}}$$