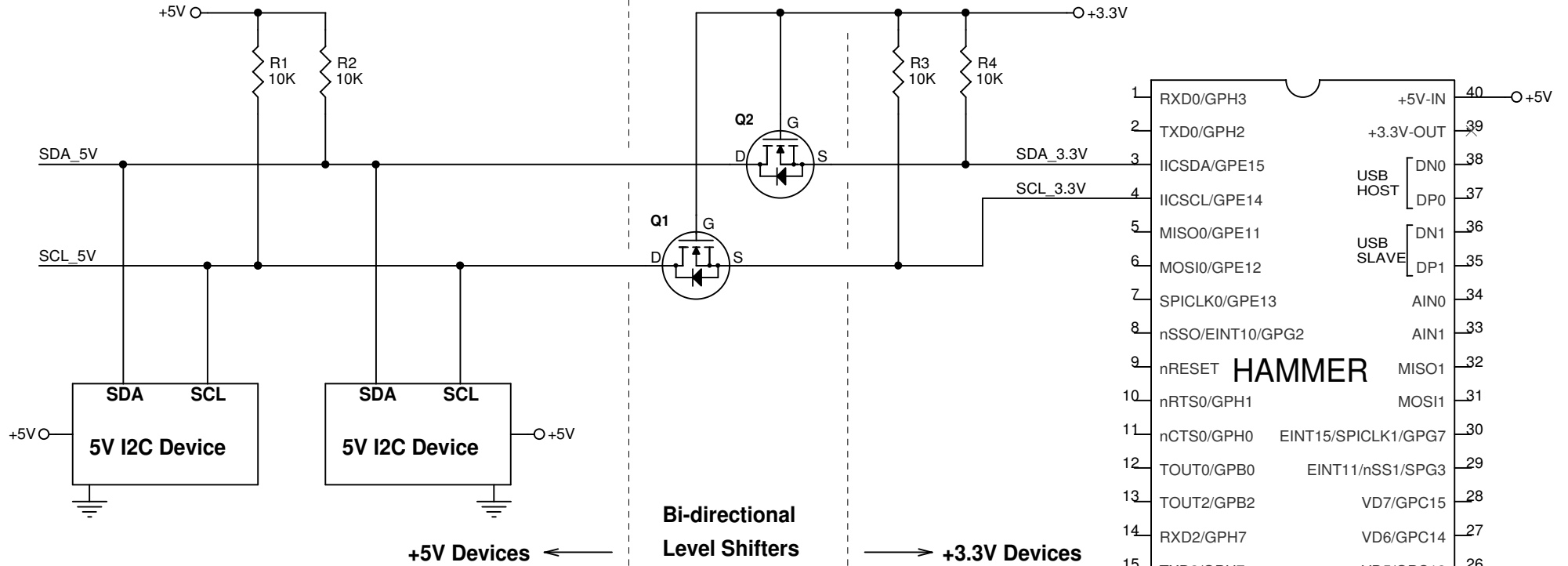


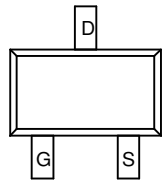
Hammer: How to Interface to 5V I2C-bus Devices

+5V Devices ← **Bi-directional Level Shifters** → +3.3V Devices



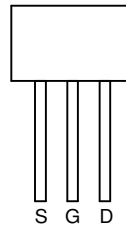
Parts Required: 4 - 10K Ohm Resistors
2 - N-Channel MOSFET's

MOSFET: BSS138



**TOP VIEW
SOT-23 PACKAGE**

**MOSFET: VN2222L
MOSFET: 2N7002**



**TOP/FRONT VIEW
TO-92 PACKAGE**

www.TinCanTools.com