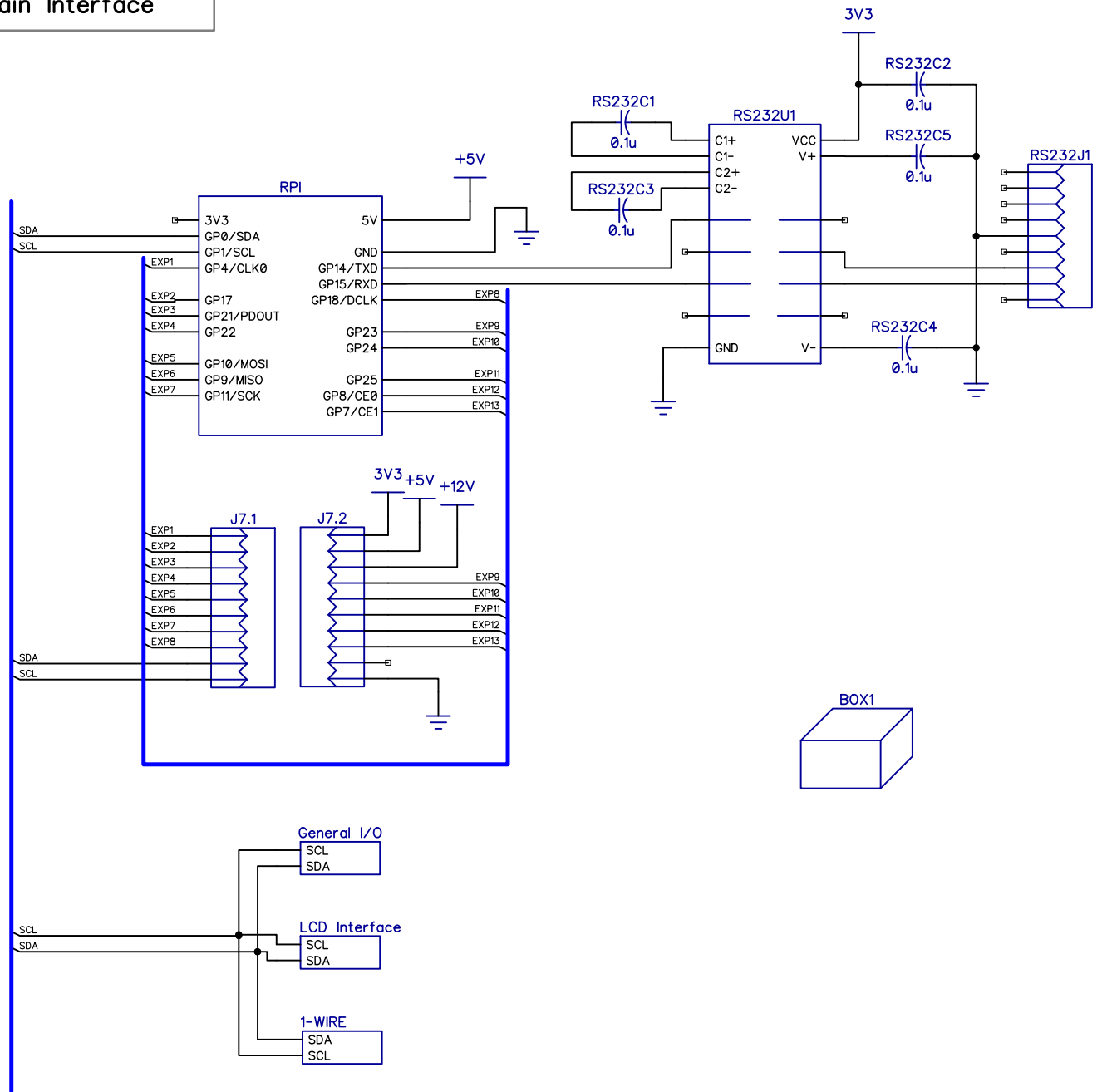
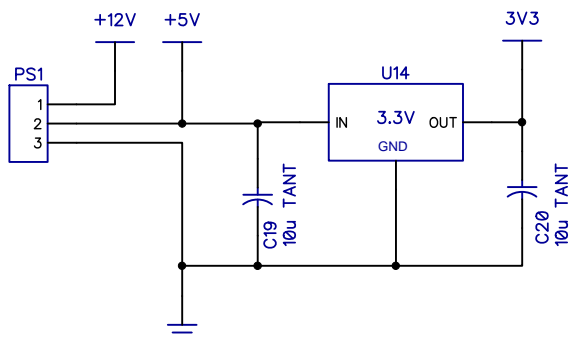


# HotPi Raspberry Pi Main Interface

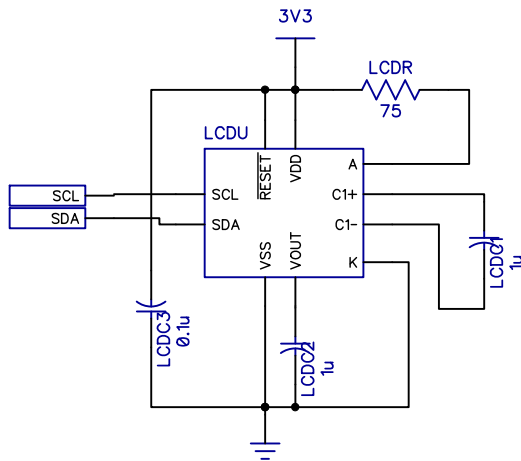


## Power Supply Section



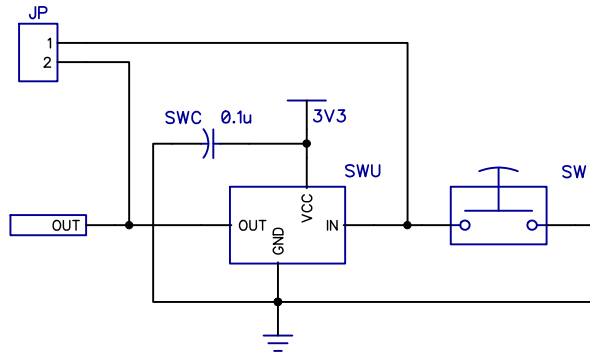
## LCD Interface

Optional LCD interface. Designed for the NHD-C0220BiZ 2x20 LED-backlight unit, but may be able to control others as well.



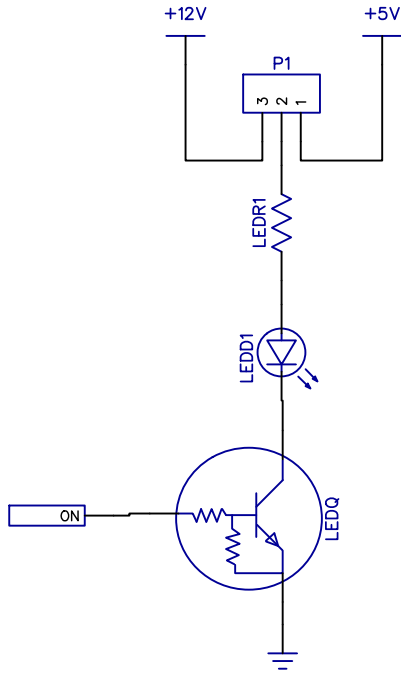
## Switch Debounce

Hardware debounce circuit provides some advantages over software. Can jumper IN and OUT pads via supplied test points and leave SWU/SWC unpopulated for general I/O.



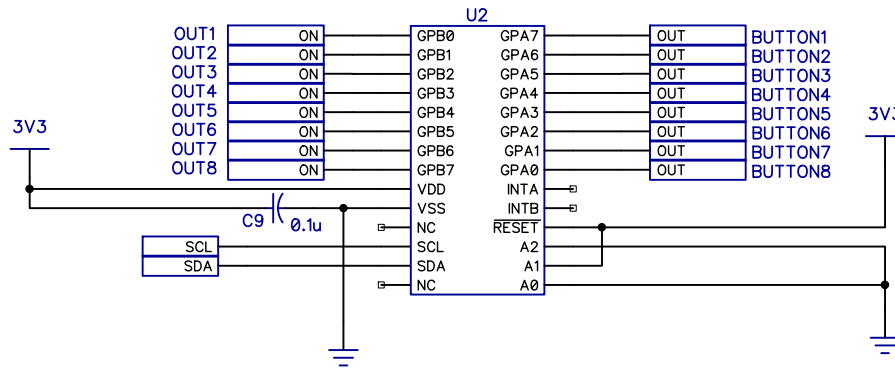
## Output Driver

User-selectable D1 and R1 values for flexibility.  
User-selectable supply voltage via a jumper.  
May also drive a relay or other device if LEDR1 is jumpered. Limit output current to 50-80mA.  
If using relays, use snubber diodes across them.

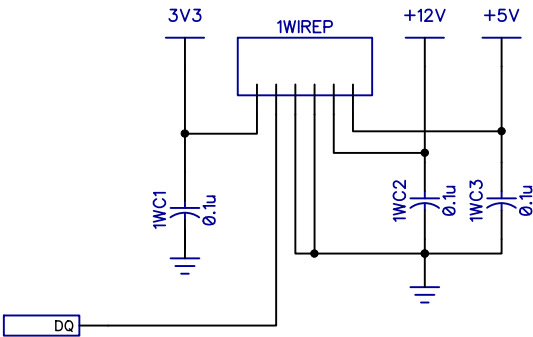


## General I/O Module

Two banks of eight I/O channels each. Bank "A" provides additional circuitry for switch/button inputs. Bank "B" provides circuitry for driving LEDs or relays.



Individual 1-Wire Port



## 1-Wire Sensor I/O Input Section

Recommend DS18B20 and other 1-Wire sensors.  
It is acceptable to daisy-chain from one device  
to the next with splices. Limit each branch to  
100m if possible.

