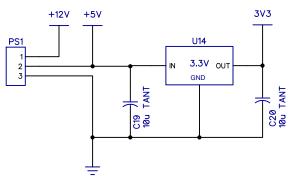
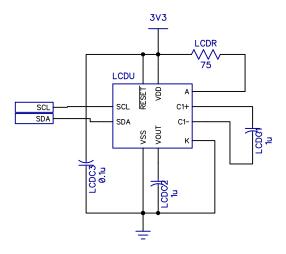
HotPi Raspberry Pi Main Interface 3V3 RS232C2 0.1u RS232C1 RS232U1 0.1u RS232C5 (0.1u C1+ C1-C2+ VCC V+ RS232J1 +5V RPI RS232C3 C2-0.1u GPØ/SDA GP1/SCL GND EXP1 GP14/TXD GP15/RXD GP18/DCLK GP4/CLK0 EXP2 EXP3 EXP4 GP17 GP21/PDOUT EXP8 EXP9 RS232C4 GP23 GP24 GP22 GND ٧-GP10/MOSI GP9/MISO GP11/SCK EXP6 EXP7 EXP11 GP25 EXP12 GP8/CE0 GP7/CE1 EXP13 3V3_{+5V} _{+12V} EXP2 EXP3 EXP4 EXP5 EXP10 EXP6 EXP7 EXP8 EXP11 EXP12 BOX1 General I/O SCL SDA LCD Interface SDA SCL SDA 1-WIRE SDA SCL

Power Supply Section



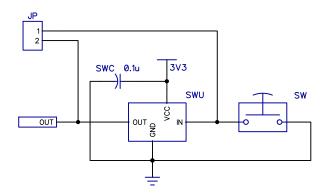
LCD Interface

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



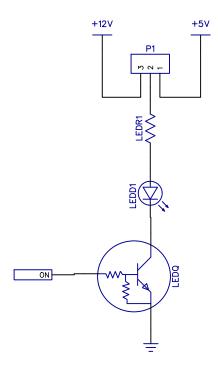
Switch Debounce

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.



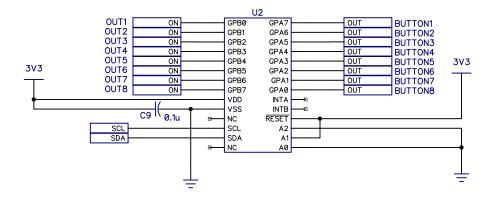
Output Driver

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.

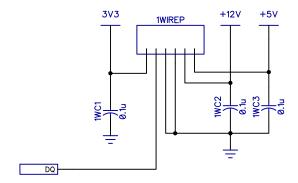


General I/O Module

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.

