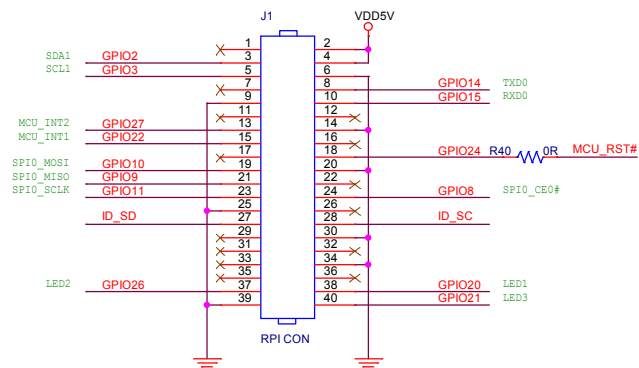
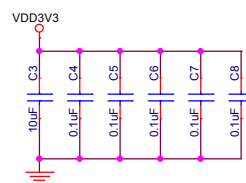
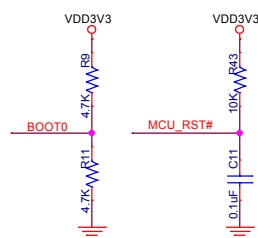
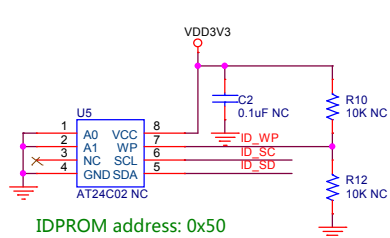
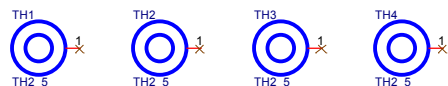


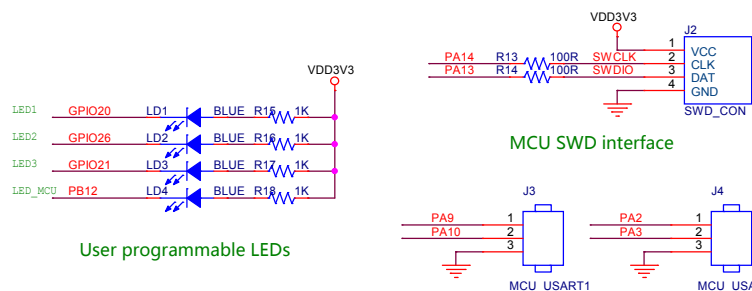
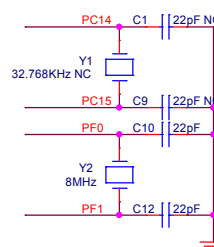
NC unused GPIO pins and the 3.3V power pins.  
Rpi only needs 5V external supply.



Pinout can be found on this website: [pi.gadgetoid.com/pinout](http://pi.gadgetoid.com/pinout)



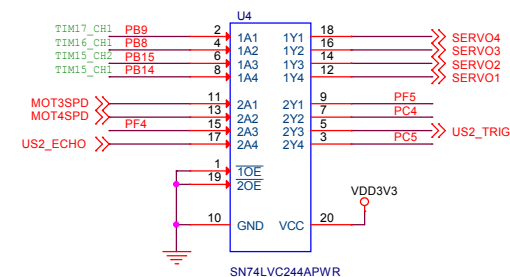
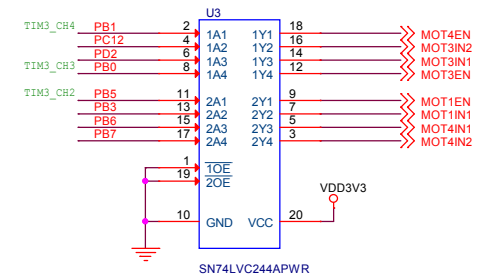
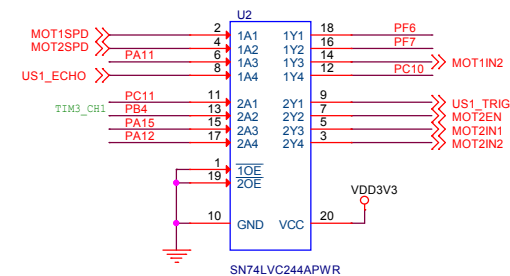
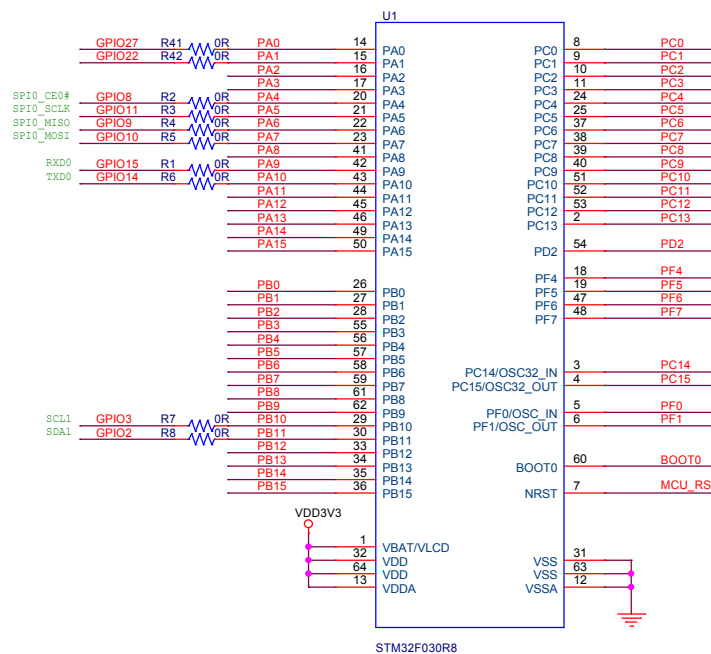
For MCU power pins



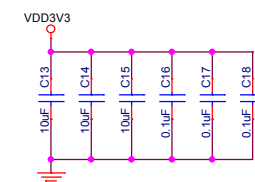
MCU SWD interface

## User programmable LEDs

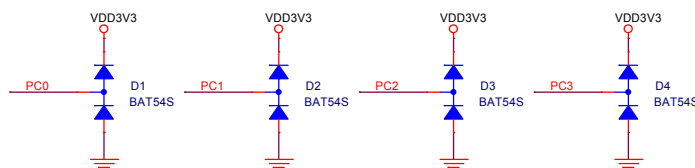
## MCU USART interfaces



These 244s work as IO buffers for the MCU  
MCU -> MOT/SRV: driver & isolator  
MOT/US -> MCU: 5V to 3.3V converter



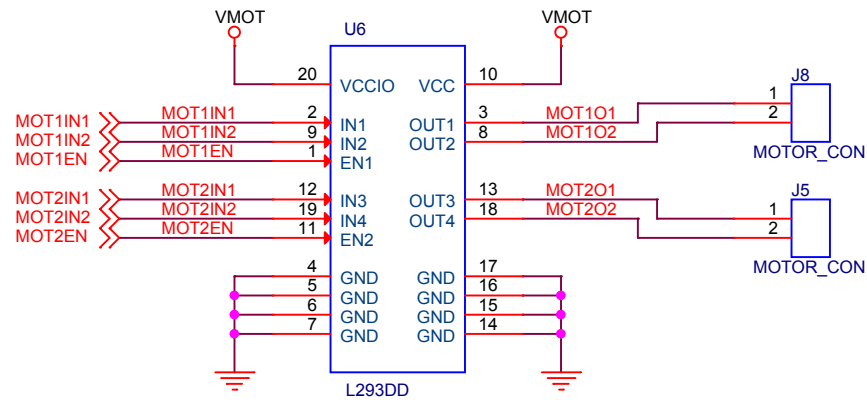
For 244 power pins



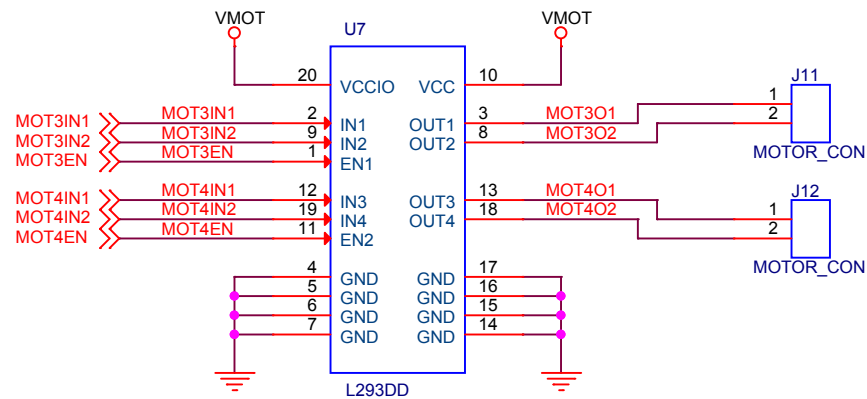
### Protect the analog input channels



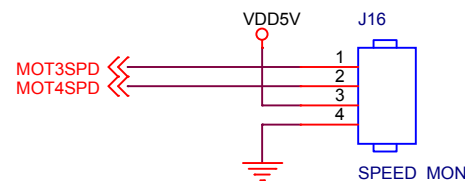
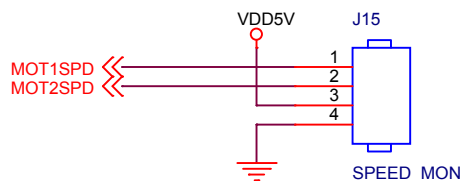
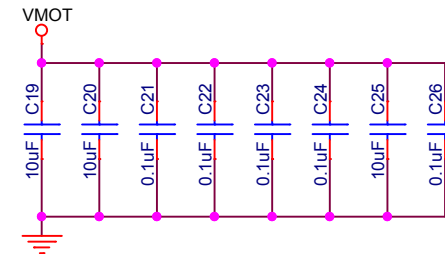
Title				<i>MOT HAT for Raspberry Pi</i>			
Size	Document Number						Rev
A3	MCU						R0
Date:	Thursday, August 06, 2015			Sheet	1	of	3



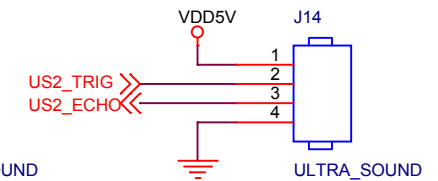
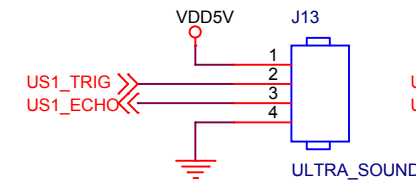
MOTxIN1 & IN2: direction control (GPIO)  
MOTxEN: speed control (PWM)



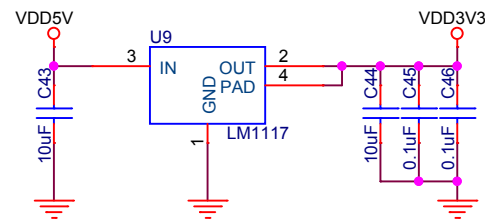
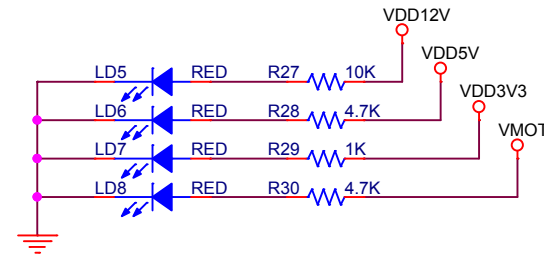
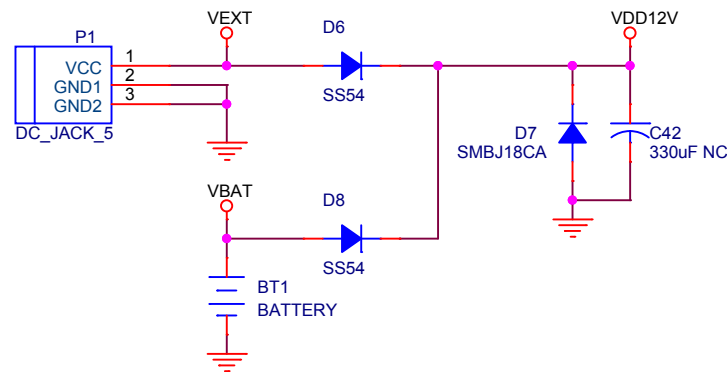
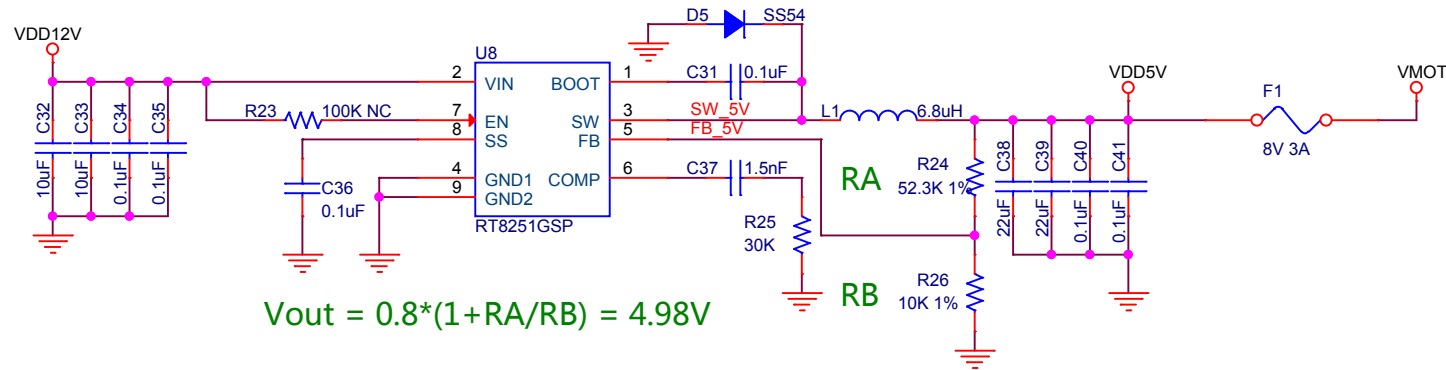
4-channel servos for robotic arm



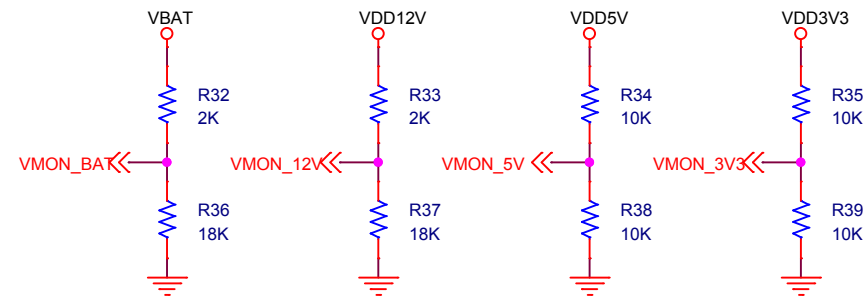
IR motor velometer interface



Ultrasound sensor module interface



For MCU power, not RPi



Power voltage monitor

Title			
MOT HAT for Raspberry Pi			
Size	Document Number		Rev
A4	Power		R0A
Date:	Wednesday, August 05, 2015	Sheet	3 of 3