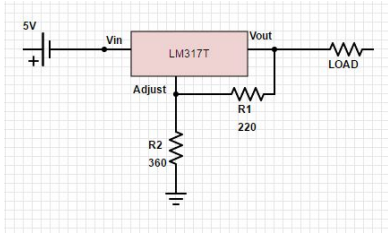


## PHYSICAL CONNECTION

### UART TTL

RASPBERRY PI	DORJI DRA818 V	Purpose / Notes
8 (GPIO14 / UART0_TXD)	16 (RXD)	UART TTL TXD → RXD
10 (GPIO15 / UART0_RXD)	17 (TXD)	UART TTL RXD → TXD
6 (Ground)	10 (GND)	UART TTL GROUND

### POWER BUS

Battery	DORJI DRA818 V	Purpose / Notes
Red	8 (VBATT)	<p>+5V. Note that we may need to use a voltage regulator to drop this to +3.3V. We will probably flow a fuse on the Raspberry Pi if we try to draw off its bus.</p> <p>Voltage Regulation Circuit using LM317T (RadioShack) or NTE956 (Frys). A 220 ohm R1 and 360 ohm R2 (both ¼ Watt, +/- 5%) should result in an output voltage of approximately +3.3V.</p> 
Black	9 (Ground)	Ground

### PTT

RASPBERRY PI	DORJI DRA818 V	Purpose / Notes
11 (GPIO 17)	5 (PTT)	High → RX, Low → TX

		<p>Note that if you use ALT3 mapping, GPIO17 becomes RTS.</p> <p>May want to wire this in series with a LED</p>
13 (GPIO 27)	6 (PD)	High → Normal, Low → Sleep
Ground	7 (H/L)	Floated → 30dBm Ground → 27dBm

## AUDIO

SOUNDCARD	DORJI DRA818 V	Purpose / Notes
Mic Center	3 (AF_OUT)	Radio AF output. Optional.
Mic Ground	10 (GND)	AF Ground. Optional.
Speaker Center	18 (MIC_IN)	Radio AF input.
Speaker Ground	10 (GND)	AF Ground.

## RF

LPF	DORJI DRA818 V	Purpose / Notes
Antenna Center	12 (ANT)	RF out
Antenna Ground	10 (GND)	Ground