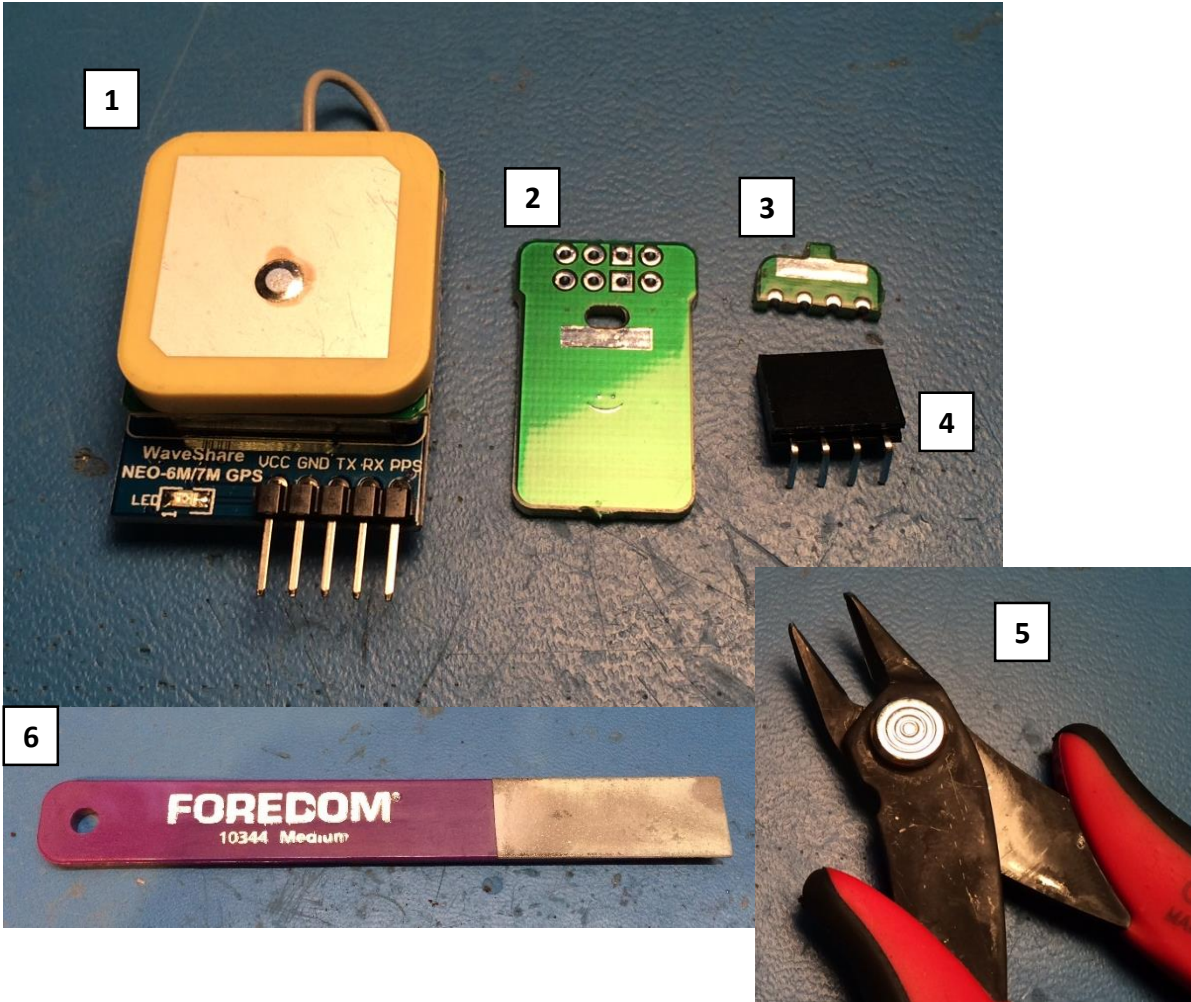


SYNTHIAM

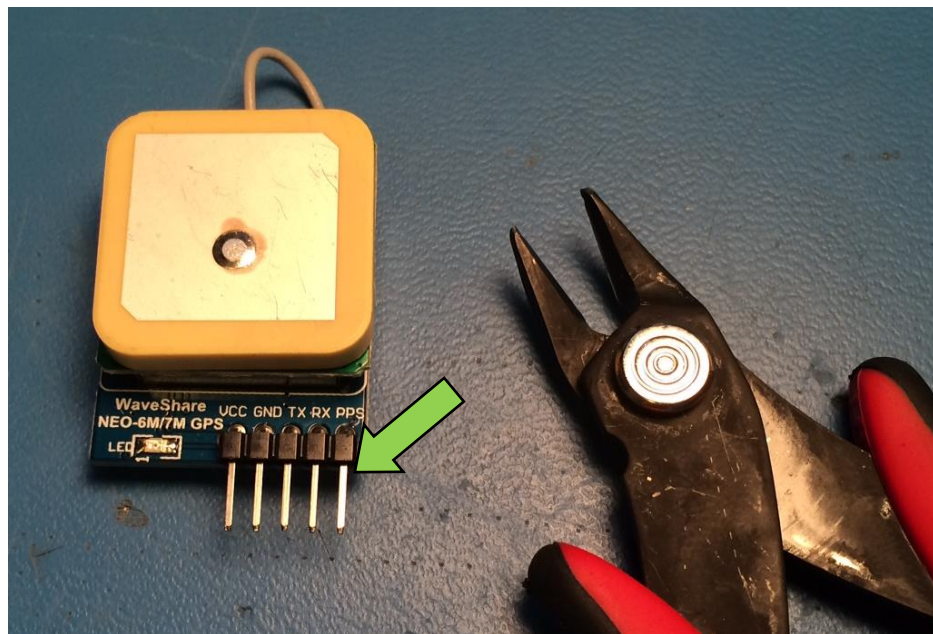
Assembly Instructions

GPS [E-17] Rev 2

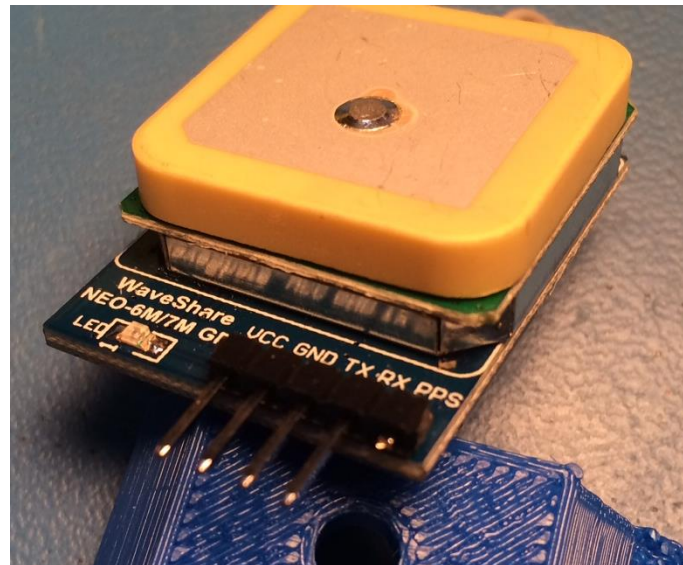
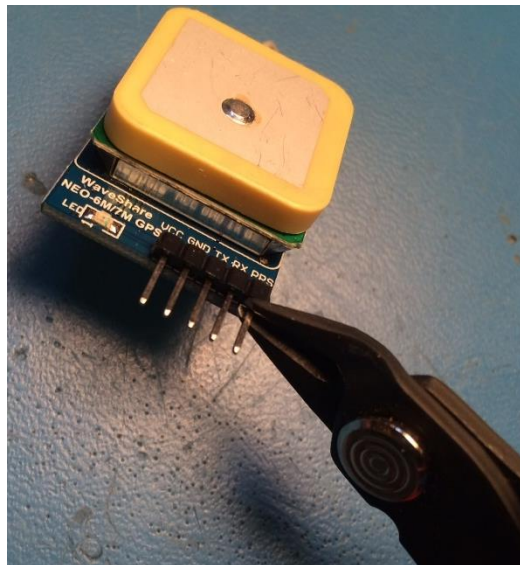


PARTS & TOOLS

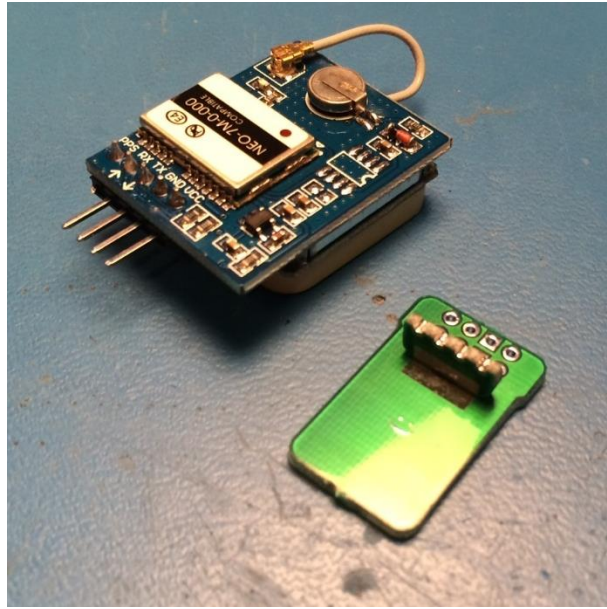
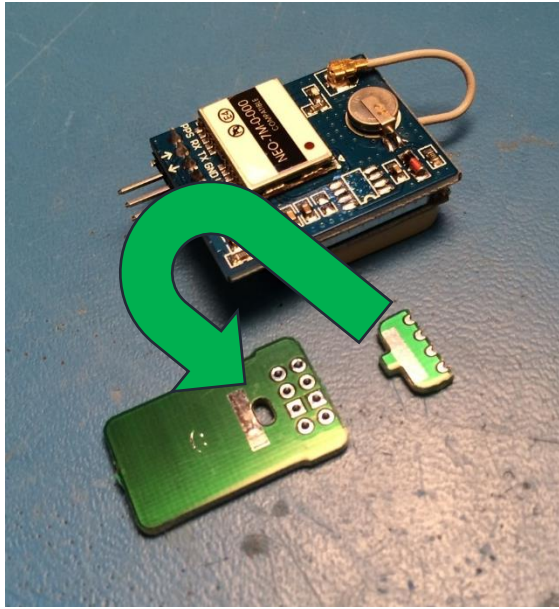
#	Qty	Name
1	1	UART GPS NEO-7M-C from Waveshare
2	1	GPS EZ-Bit PCB
3	1	GPS spacer PCB
4	1	4-position right angle 0.1" spacing female header
5	1	Flush cutters
6	1	Medium grit file



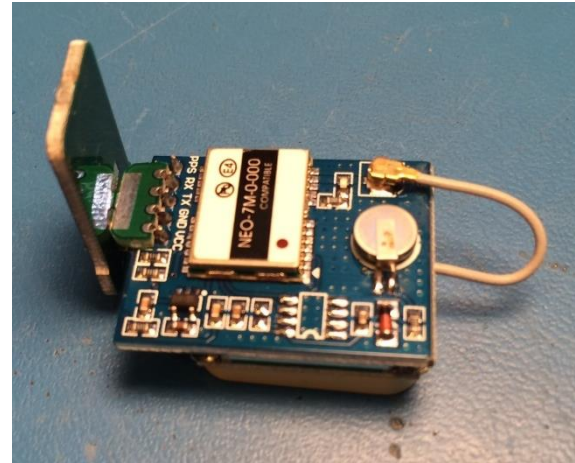
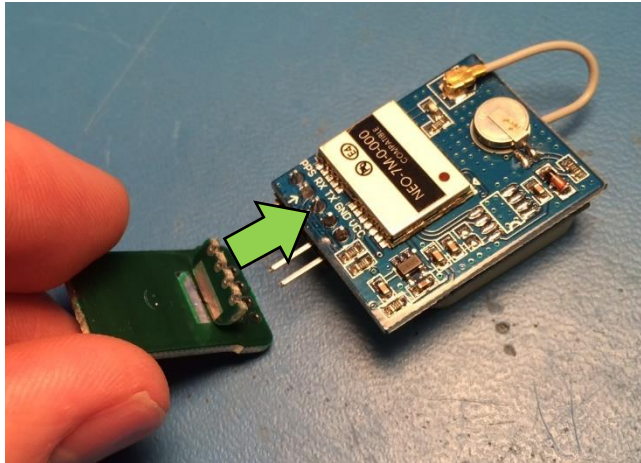
Step 1. Use the flush cutters to remove the PPS pin



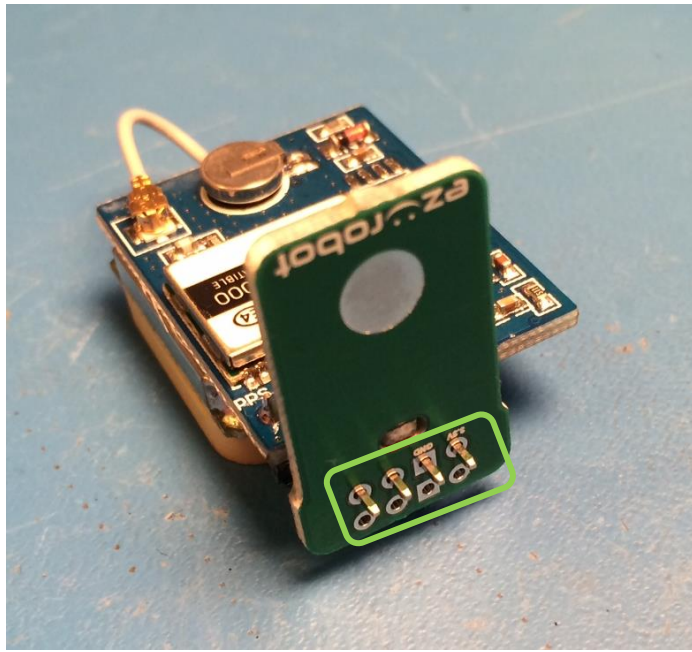
Cut the PPS pin close to the black plastic



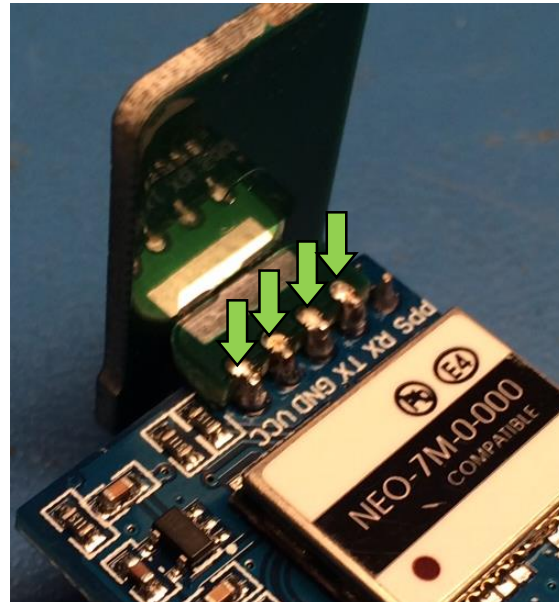
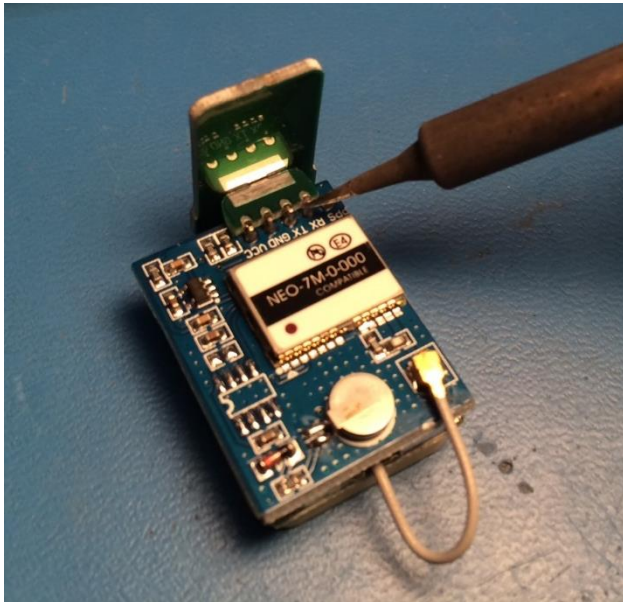
Step 2. Mount the spacer PCB on to the ez-bit PCB



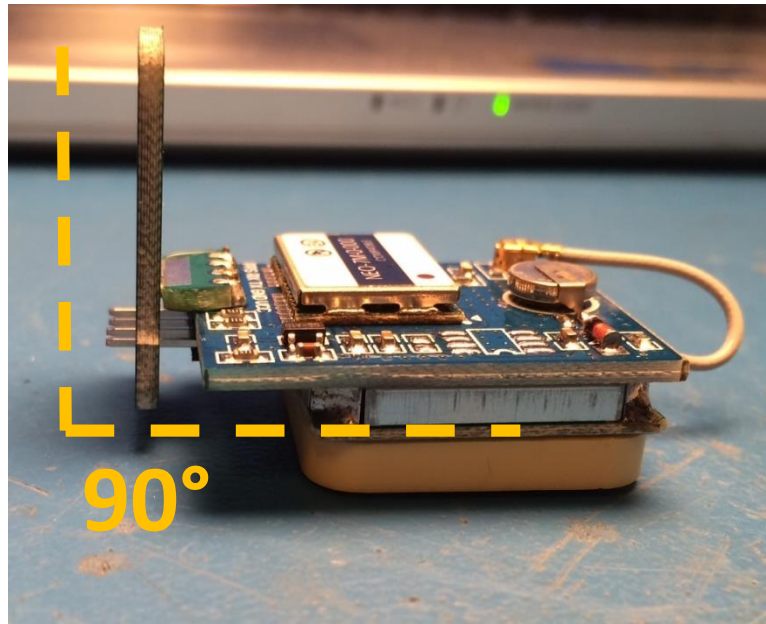
Step 3. Mount the PCBs onto the GPS module



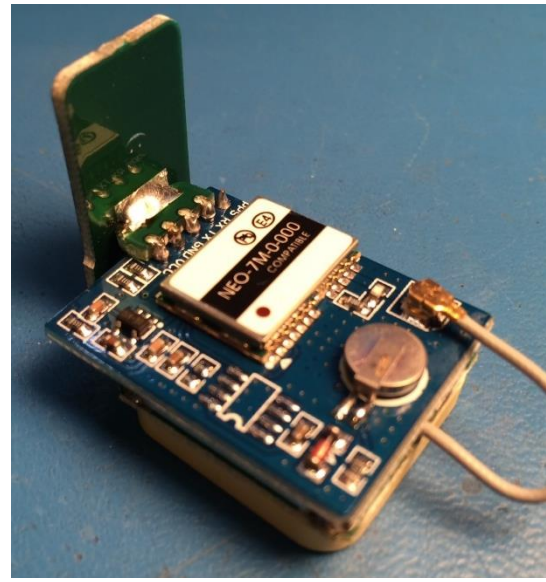
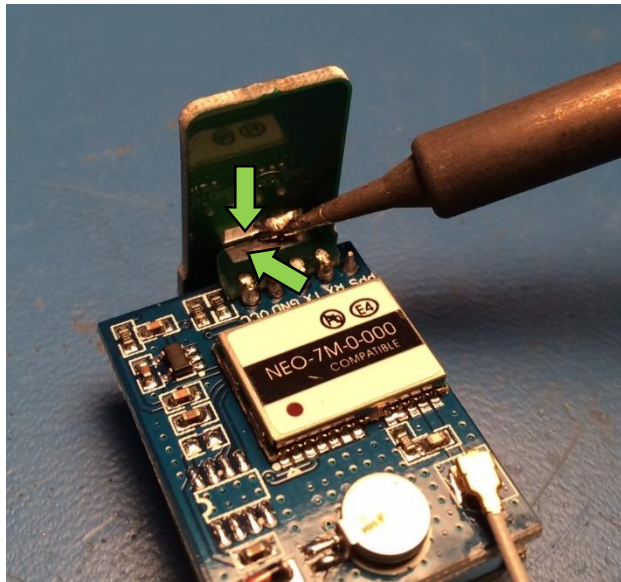
The GPS pins will fit into the holes shown



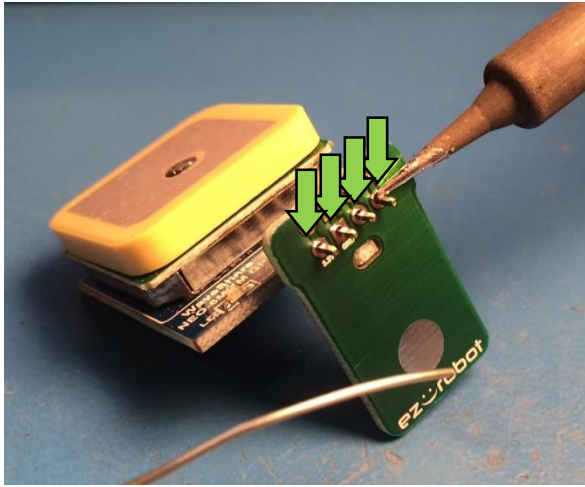
Step 4. Solder the spacer PCB castellated pads to the VCC, GND, TX, and RX pins on the GPS. Do not solder the PPS pin.



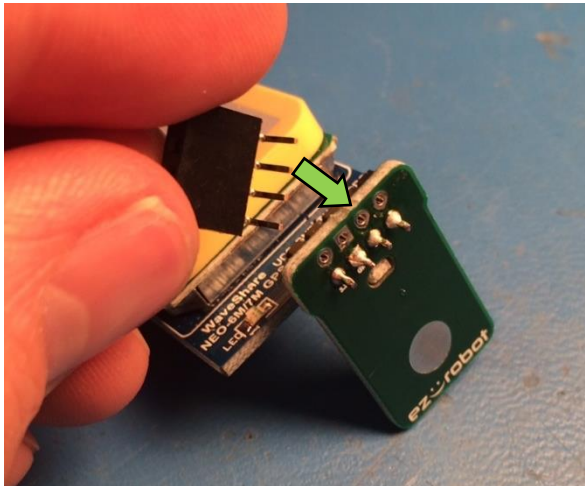
Step 5. Position the EZ-bit PCB exactly perpendicular to the GPS PCB



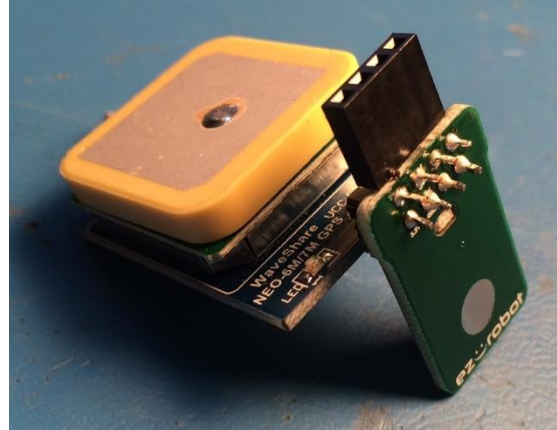
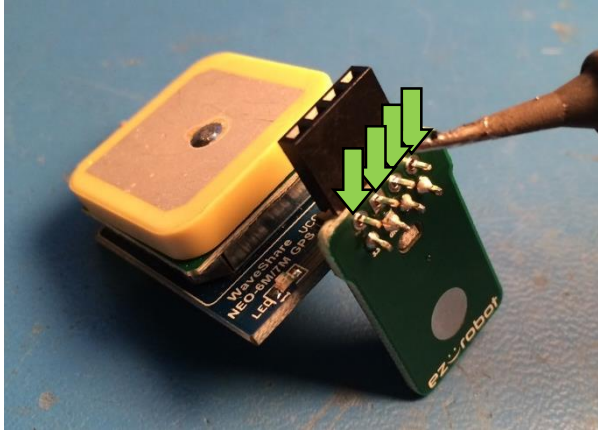
Step 6. Solder the Spacer PCB to the EZ-Bit PCB with a 90 degree solder joint



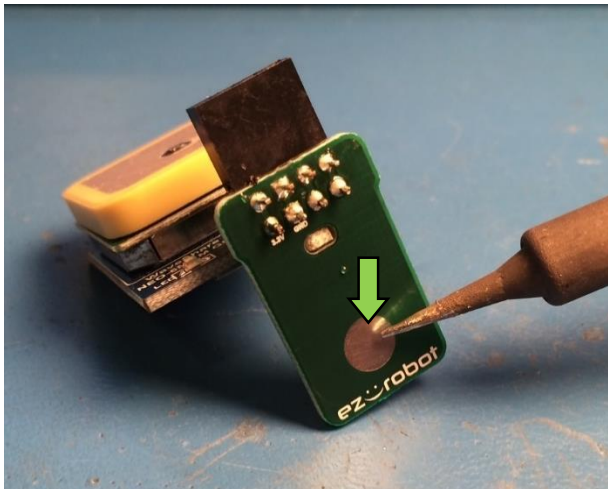
Step 7. Solder the GPS pins to the EZ-Bit PCB



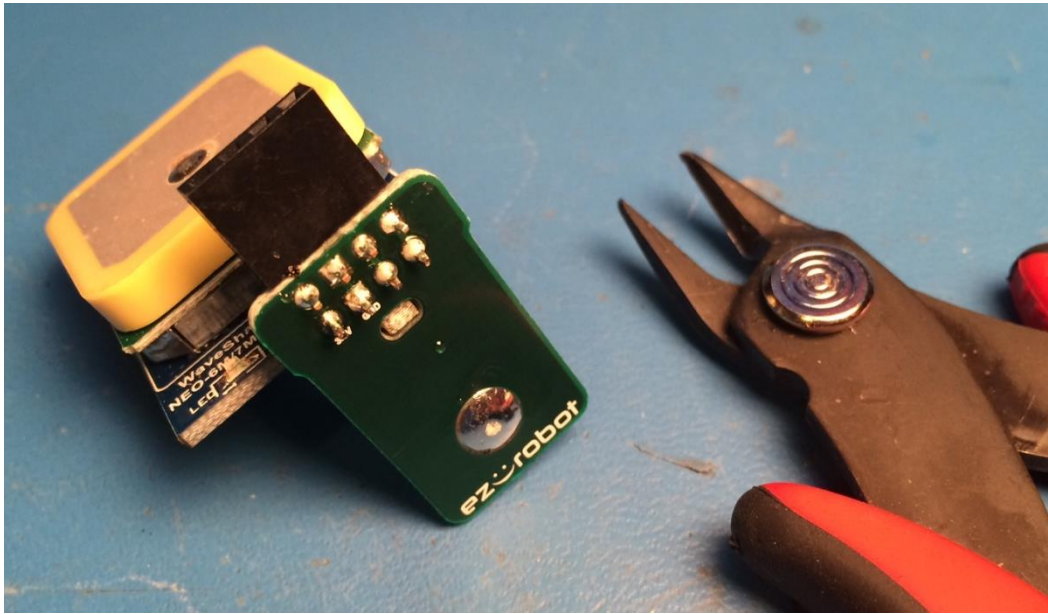
Step 8. Insert the 4 position female header as shown. Ensure the header fits over the top of the ez-bit PCB



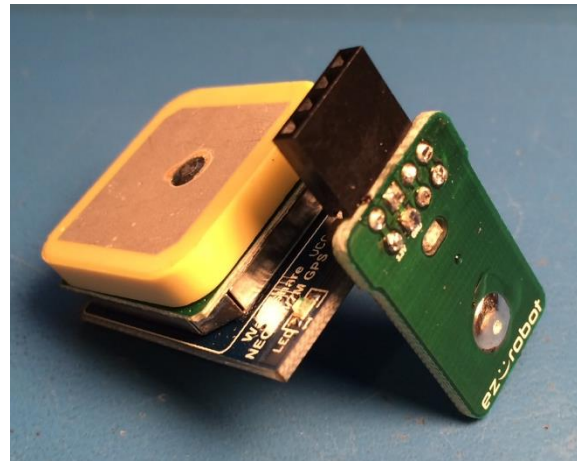
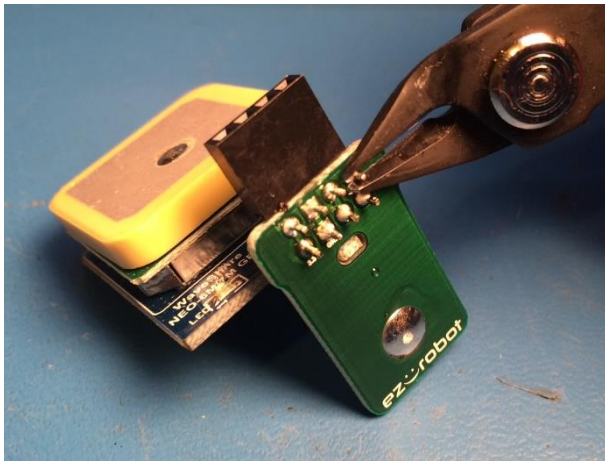
Step 9. Solder the female header pins to the ez-bit PCB



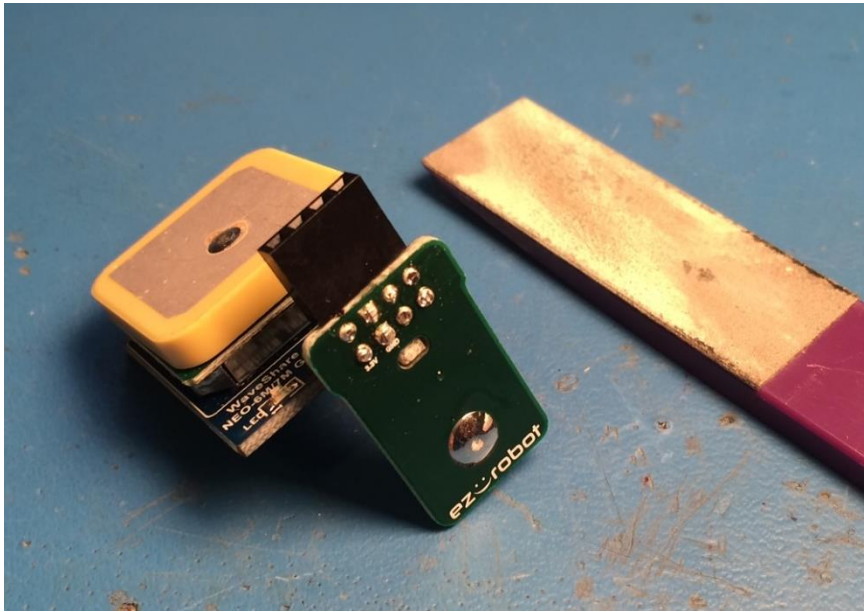
Step 10. Solder a circular blob onto the ez-bit PCB



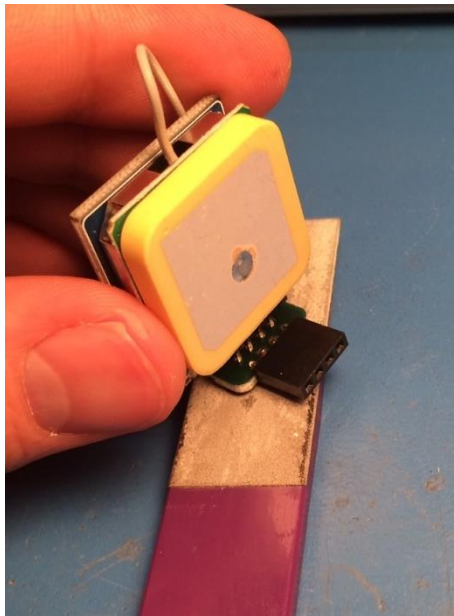
Step 11. Use the flusher cutters to remove the protruding pins



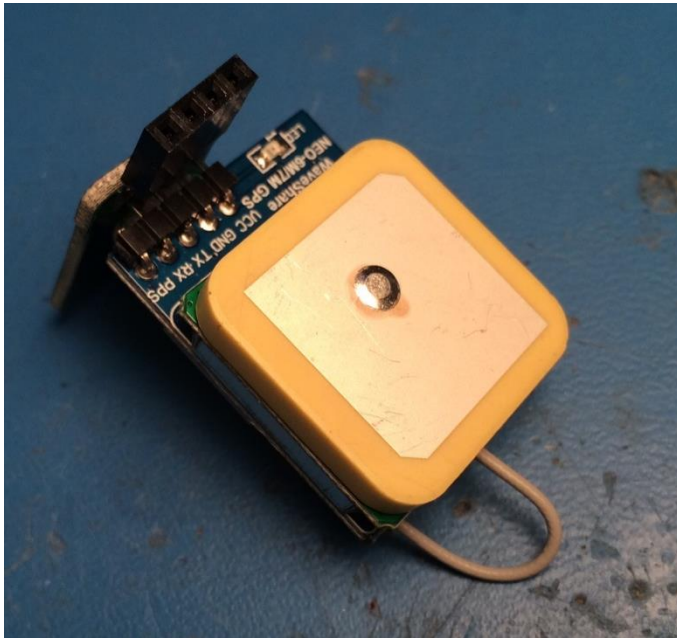
Cut the pins as close to the EZ-bit PCB as possible



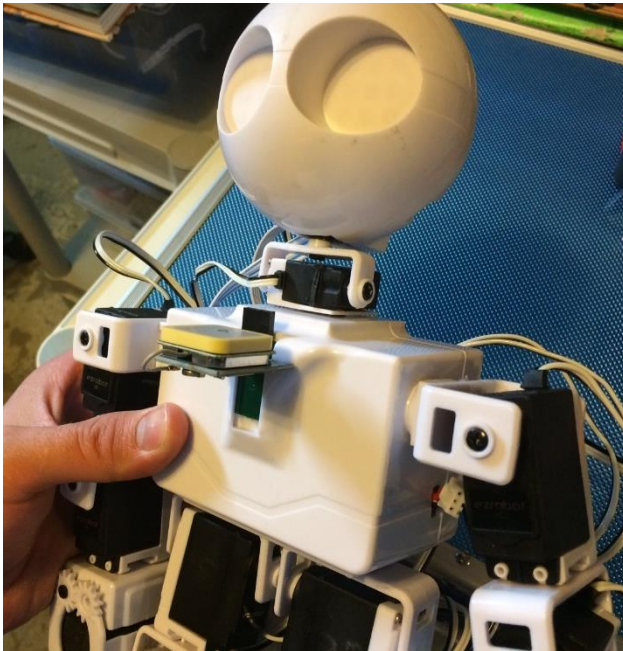
Step 12. File down the solder joints that were cut



The solder joints are now smooth and low profile



The GPS ez-bit has now been completed! Great work!



The GPS ez-bit can be clipped onto a robot as shown