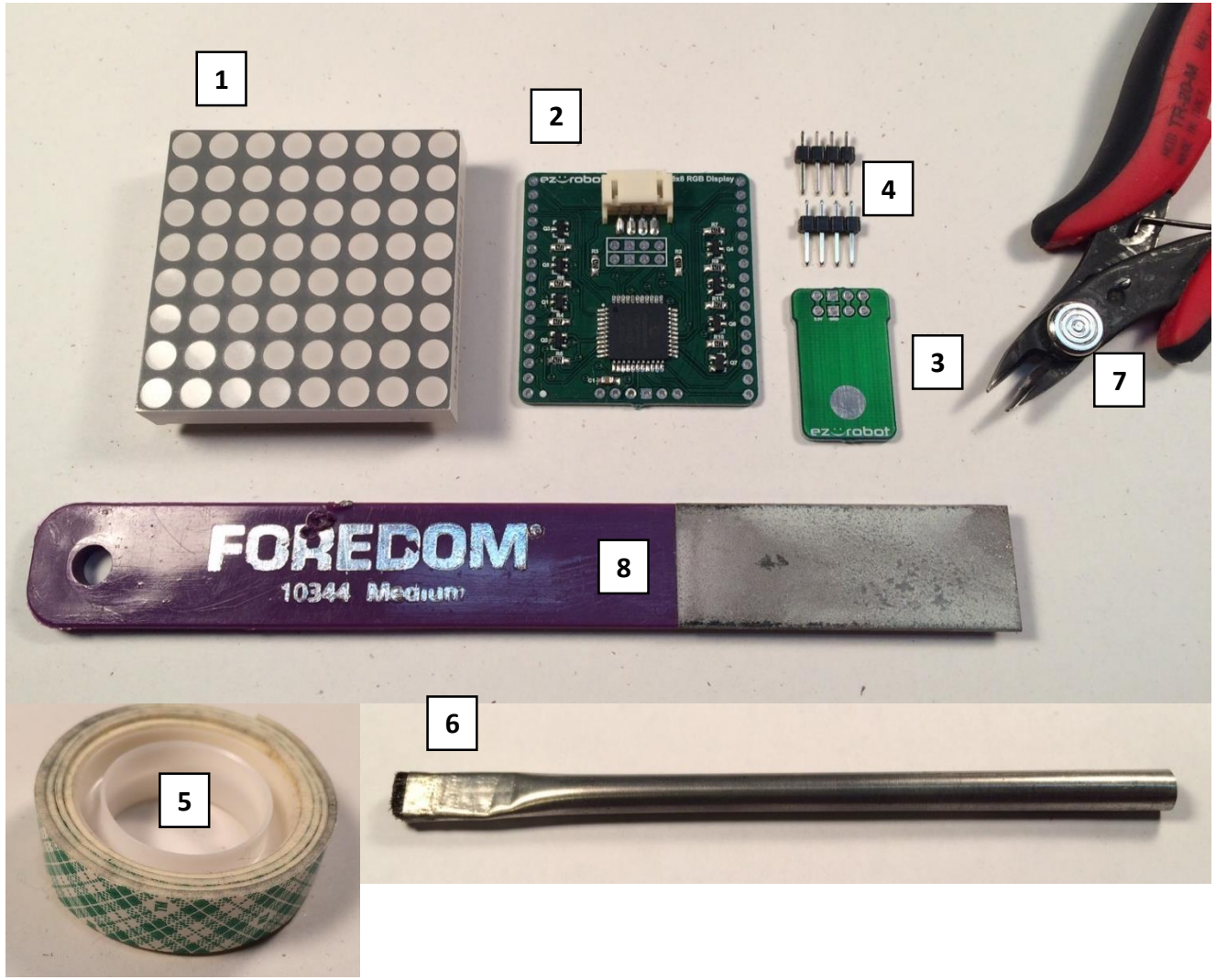
SYNTHIAM

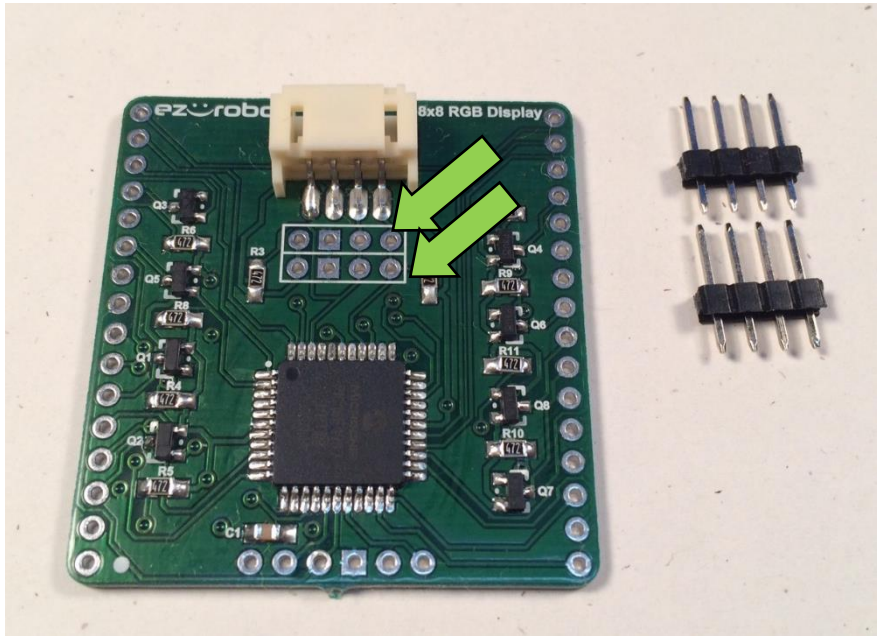
Assembly Instructions

8x8 RGB Display [E-19] Rev 2

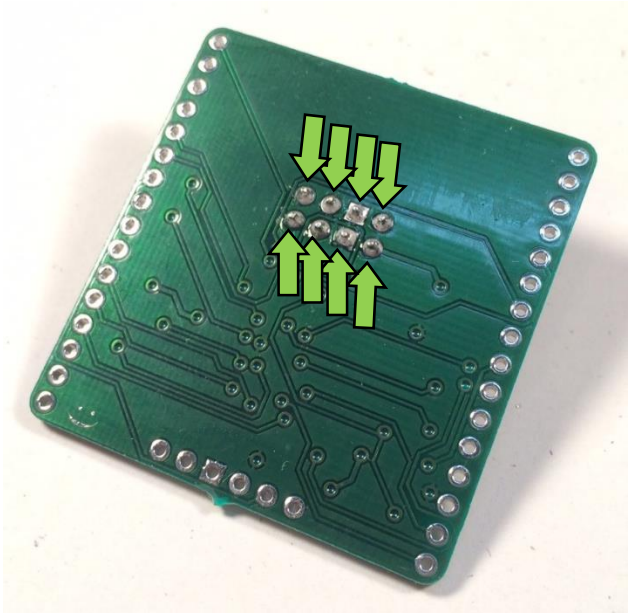


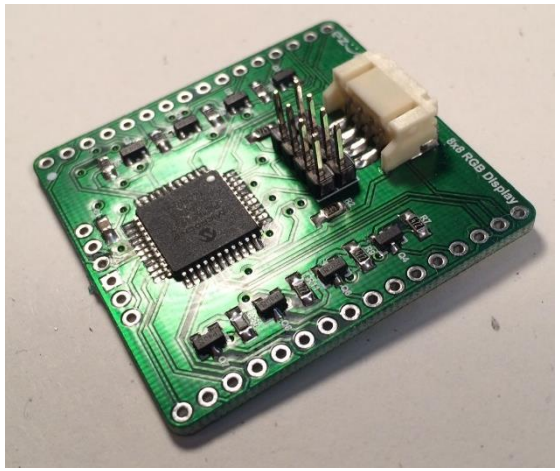
Parts & Tools

#	Qty	Name
1	1	HS-19088BSRND-GG 8x8 RGB LED Matrix
2	1	8x8 RGB Display PCB (populated)
3	1	Ez-clip PCB
4	2	4-position 0.1” spacing male header
5	1	Roll of 10x10x1mm (LxWxH) double sided foam tape
6	1	Tech brush
7	1	Flush cutters
8	1	Medium grit file

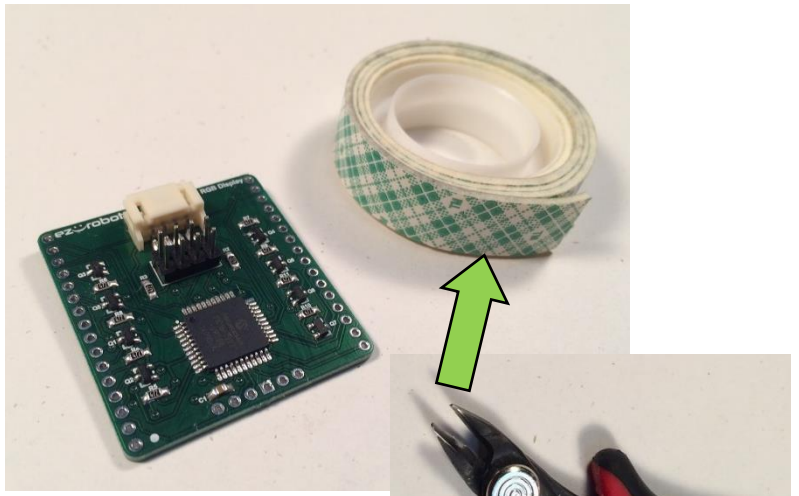


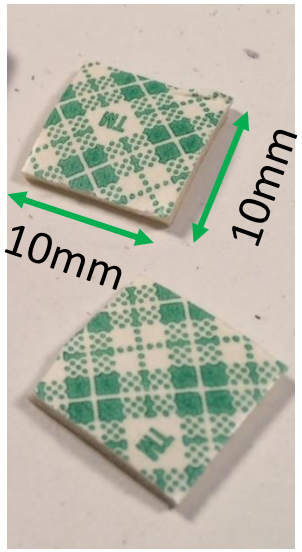
Step 1. Place the C-035 4-pin headers in the P5 and P6 Positions



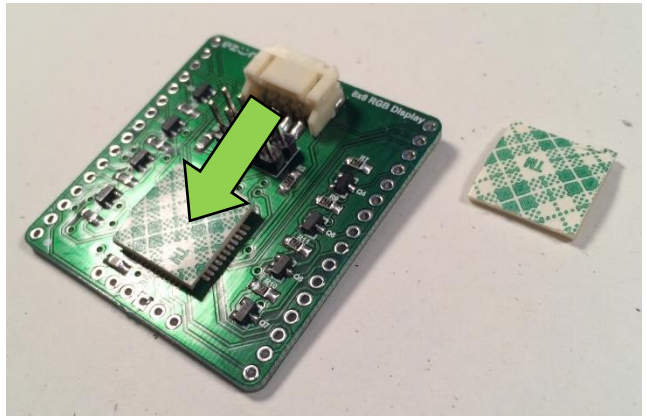


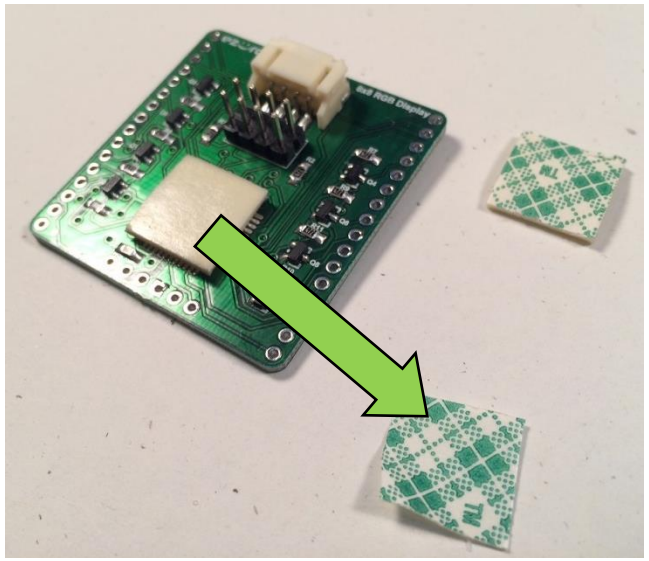
Step 2. Solder the C-035 headers in place



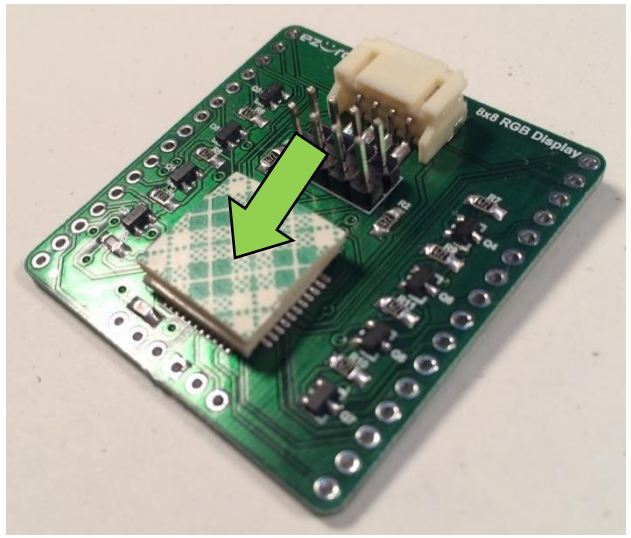


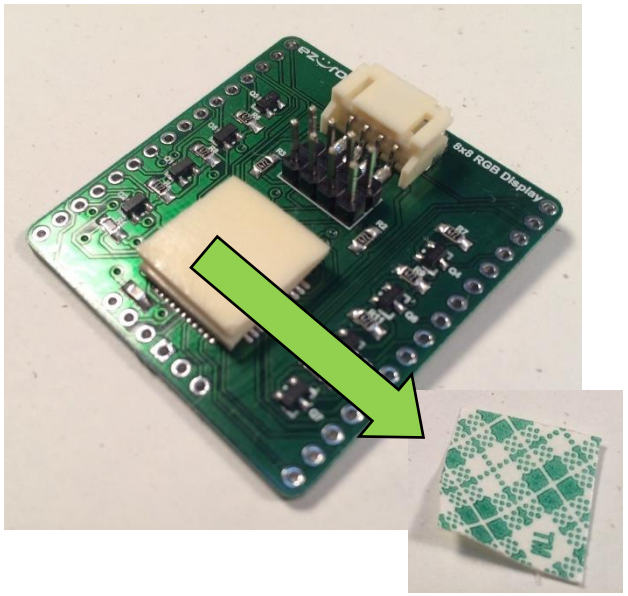
Step 3. Cut 2 x 10mm pieces of the 10mm (wide) x 1mm (thick) double sided foam tape



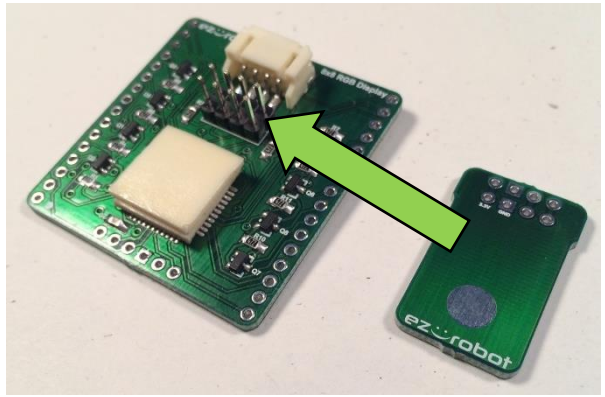


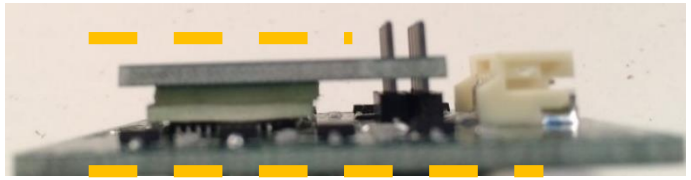
Step 4. Place one piece of 10mm foam tape on the PIC16F1937 chip and remove the sticker backing



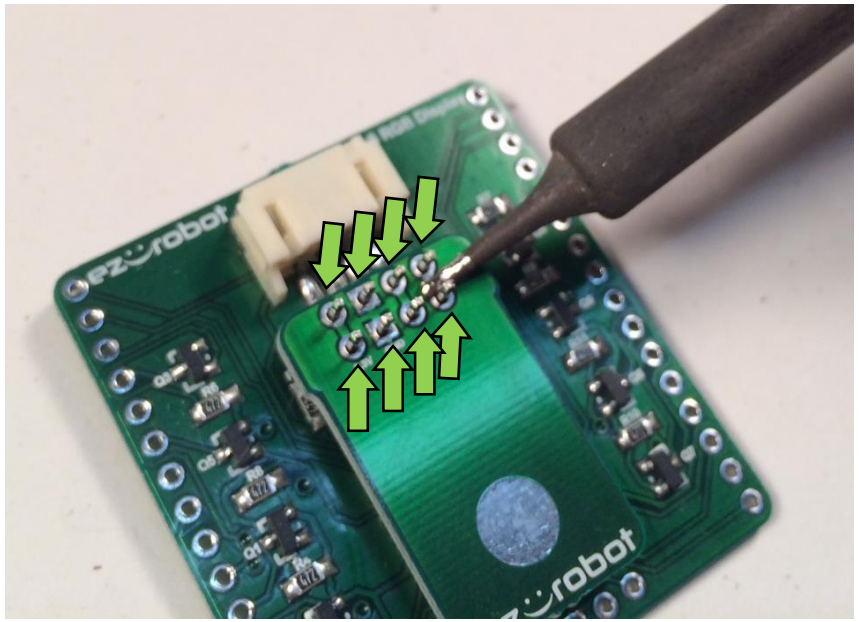


Step 5. Place the second piece of 10mm foam tape on top of the other foam tape and remove the sticker backing

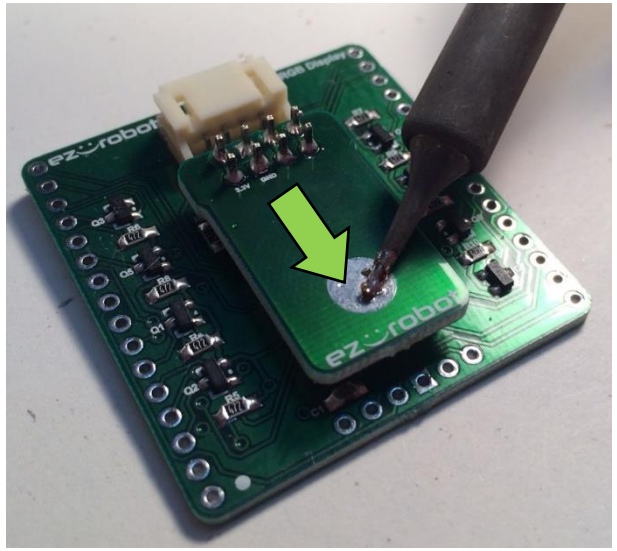


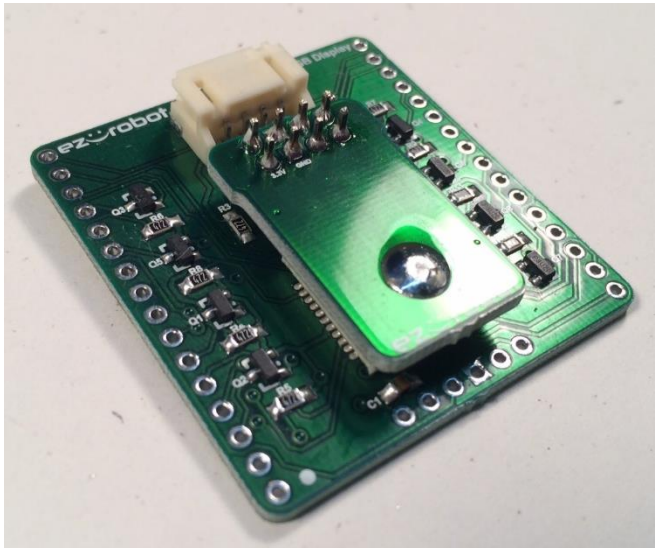


Step 6. Mount the ezclip PCB onto the foam tape and P5 and P6 headers. Keep the ezlip PCB parallel with the 8x8 RGB Display PCB



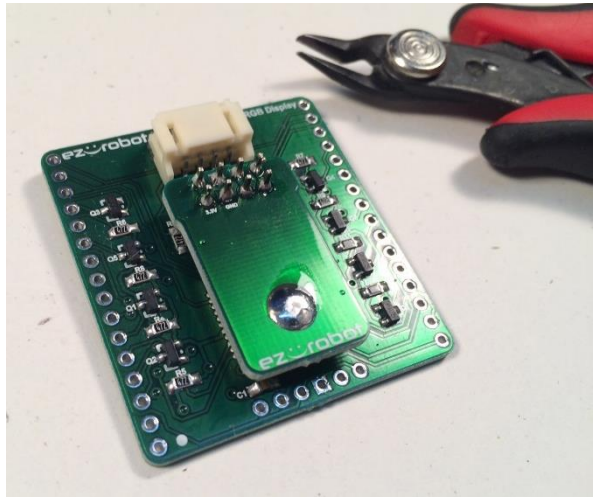
Step 7. Solder the ezclip PCB to the P5 and P6 Headers

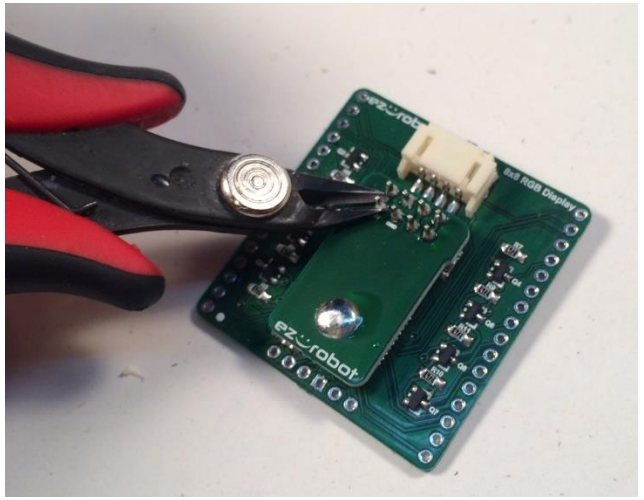




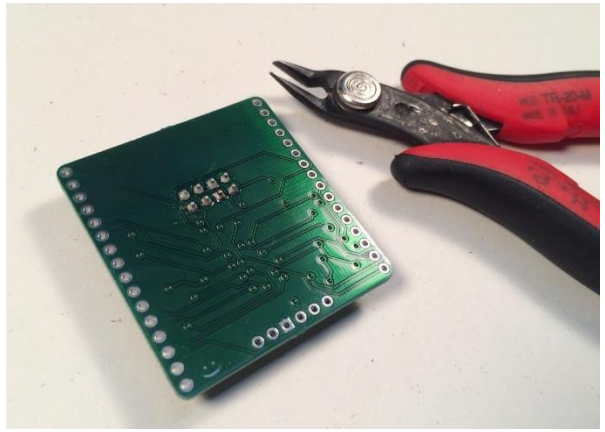
Step 8. Solder a ~0.020” high circular blob on the ezclip PCB

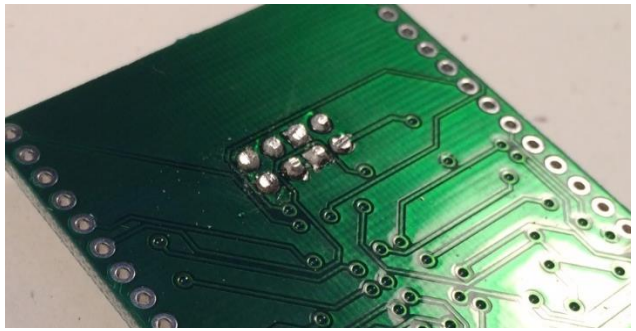
IMPORTANT
This is step is imperative for precision fit with ez-clip slots.



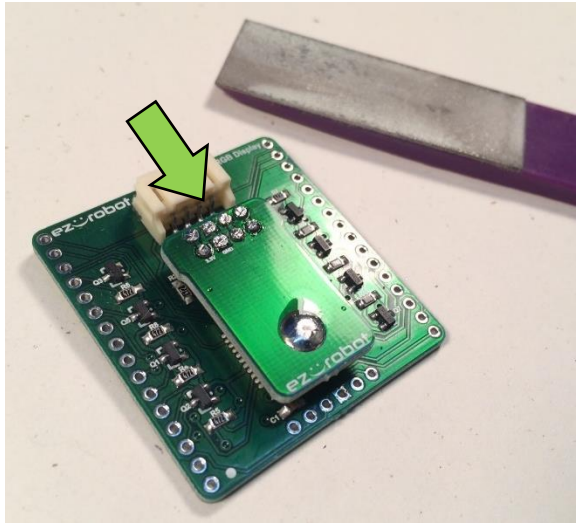


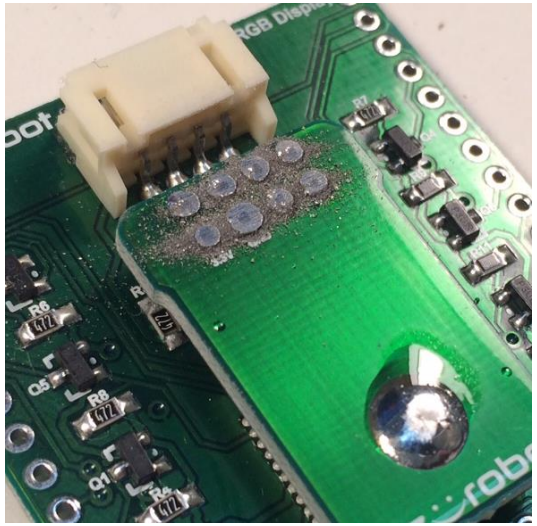
Step 9. Clip the P5 and P6 header pins as close to the PCB as possible



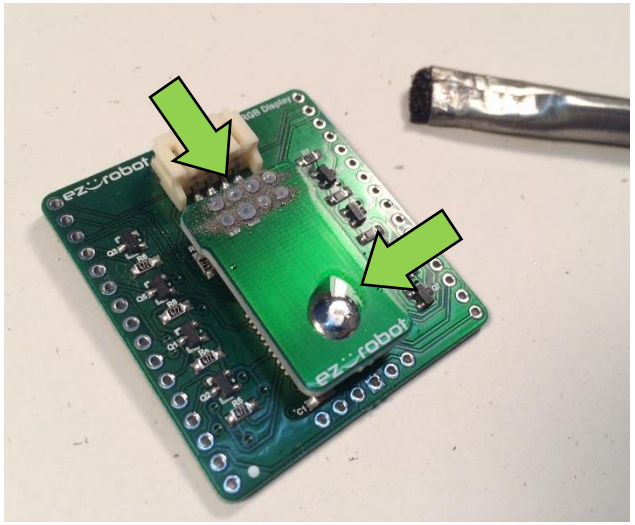


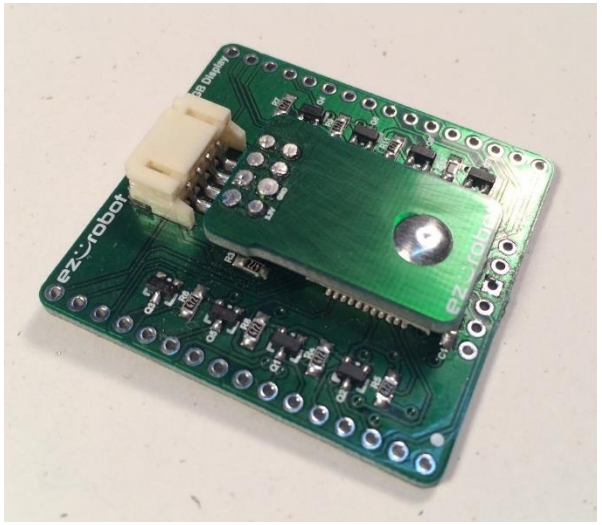
Step 10. Turn the board upside down and trim the P5 and P6 header pins as close to the PCB as possible too



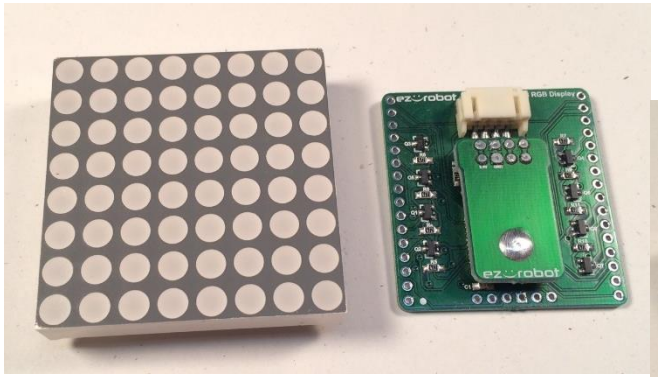


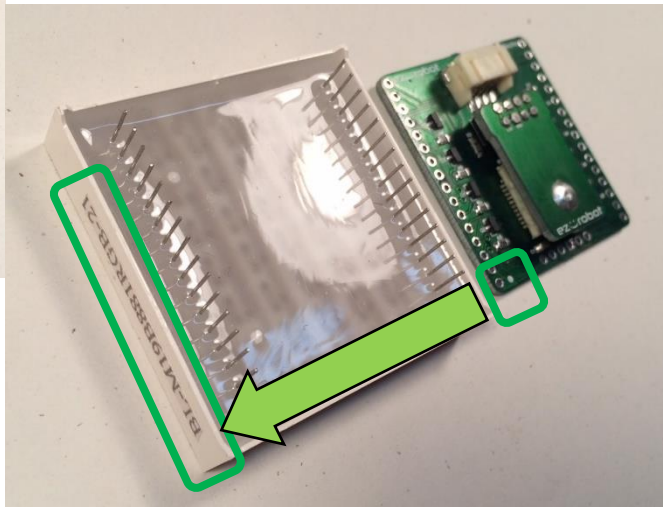
Step 11. Flip the board back up and file down the P5 and P6 header pins until they are flat and smooth



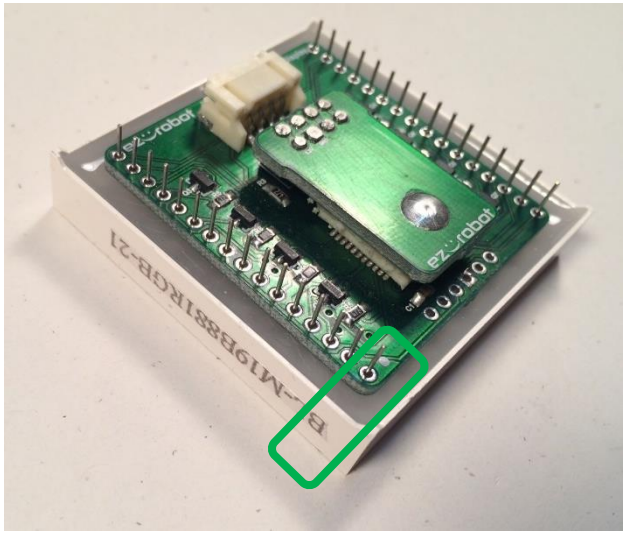


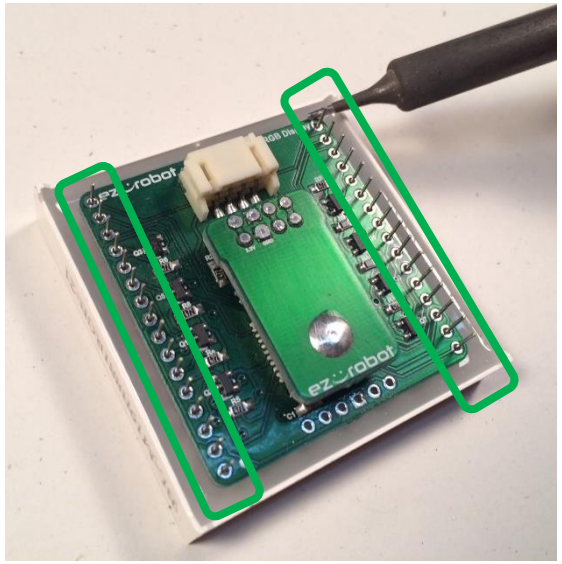
Step 12. Clean off the metal filings and flux on the ezclip PCB with a tech brush



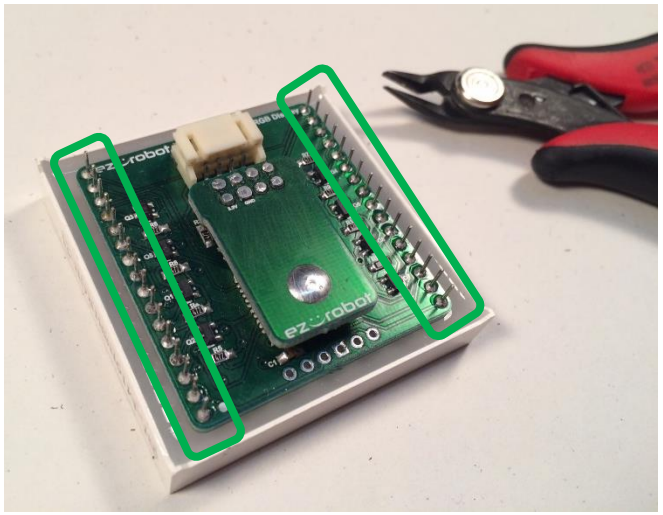


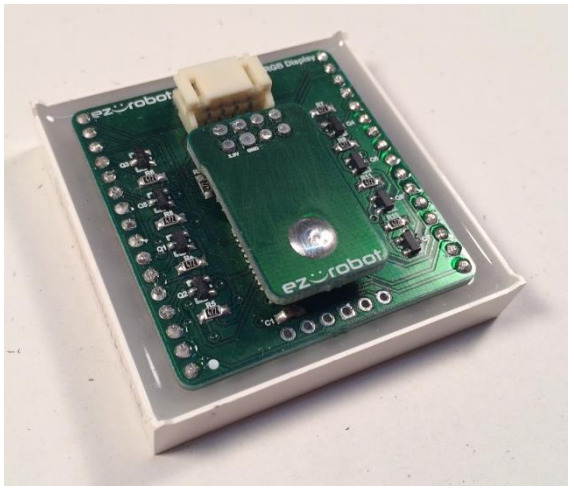
Step 13. Place the 8x8 RGB Display PCB onto the HS-19088BSRND-GG 8x8 RGB LED Matrix. Align the pin 1 dot on the PCB with the Matrix serial number writing



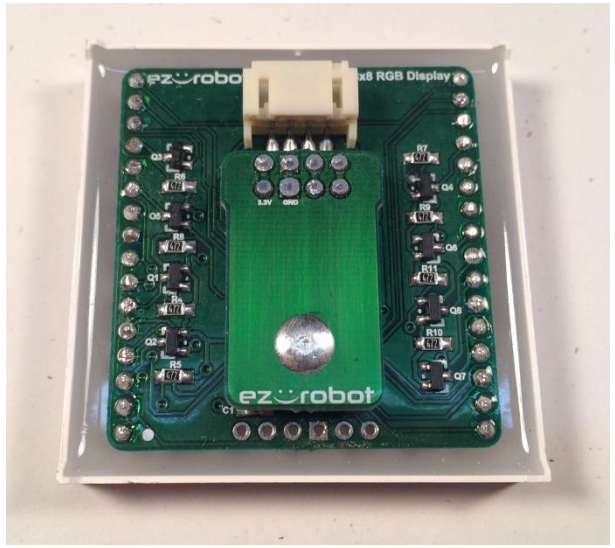


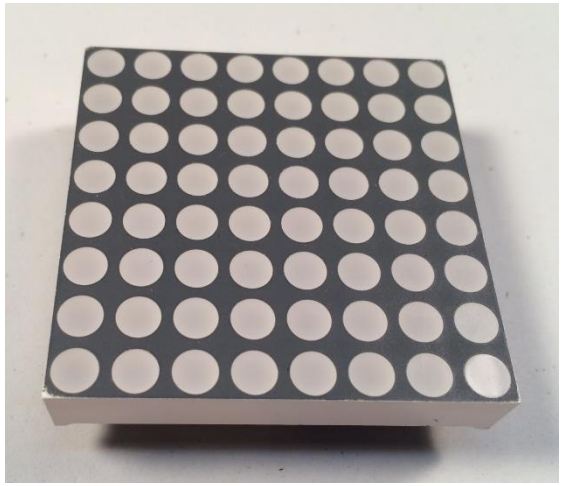
Step 14. Once the pin 1 dot is aligned with the “B” of the matrix serial number then solder all the matrix pins to the PCB.





Step 15. Trim all the matrix pins with the flush cutters





E-19 is now complete!