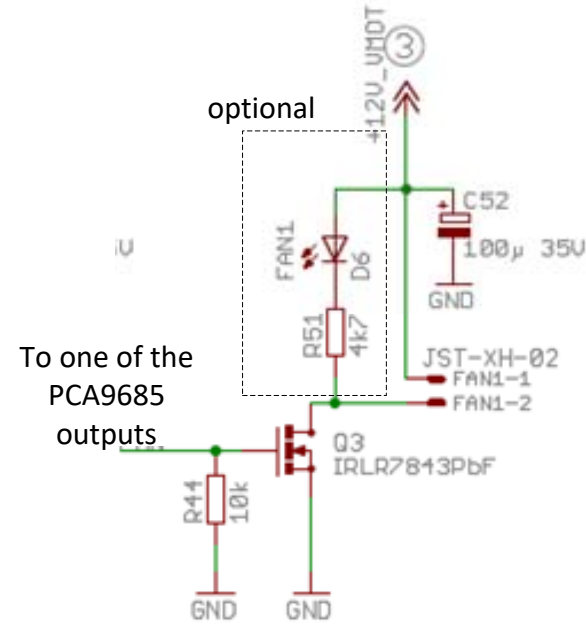
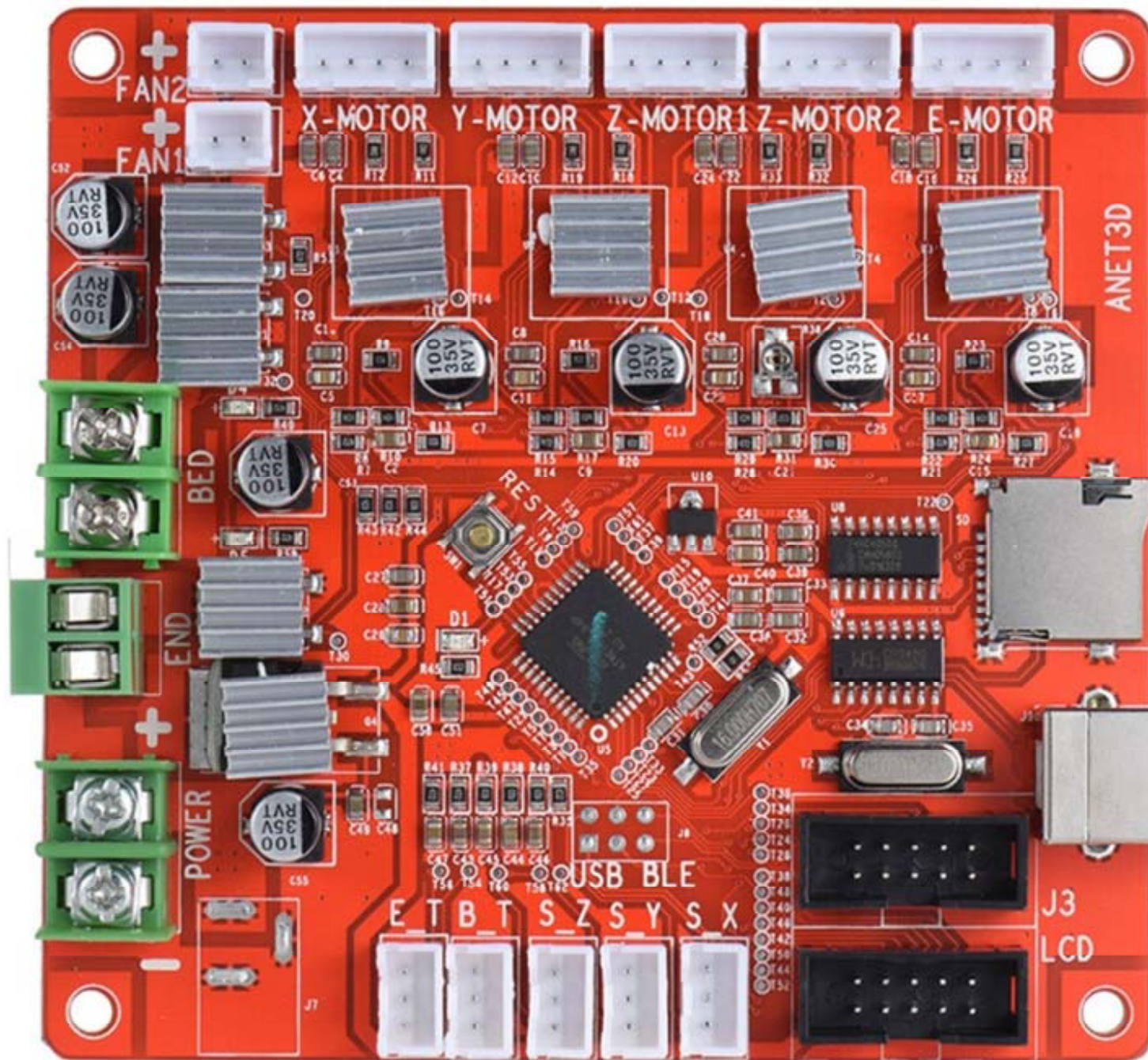


For each extra Fan or other 12V output, you can use this schematic and connect the Gate of the mosfet to an output of the PCA9685.

Servo's or an 3D touch sensor can be connected directly to one of the PCA9685 outputs



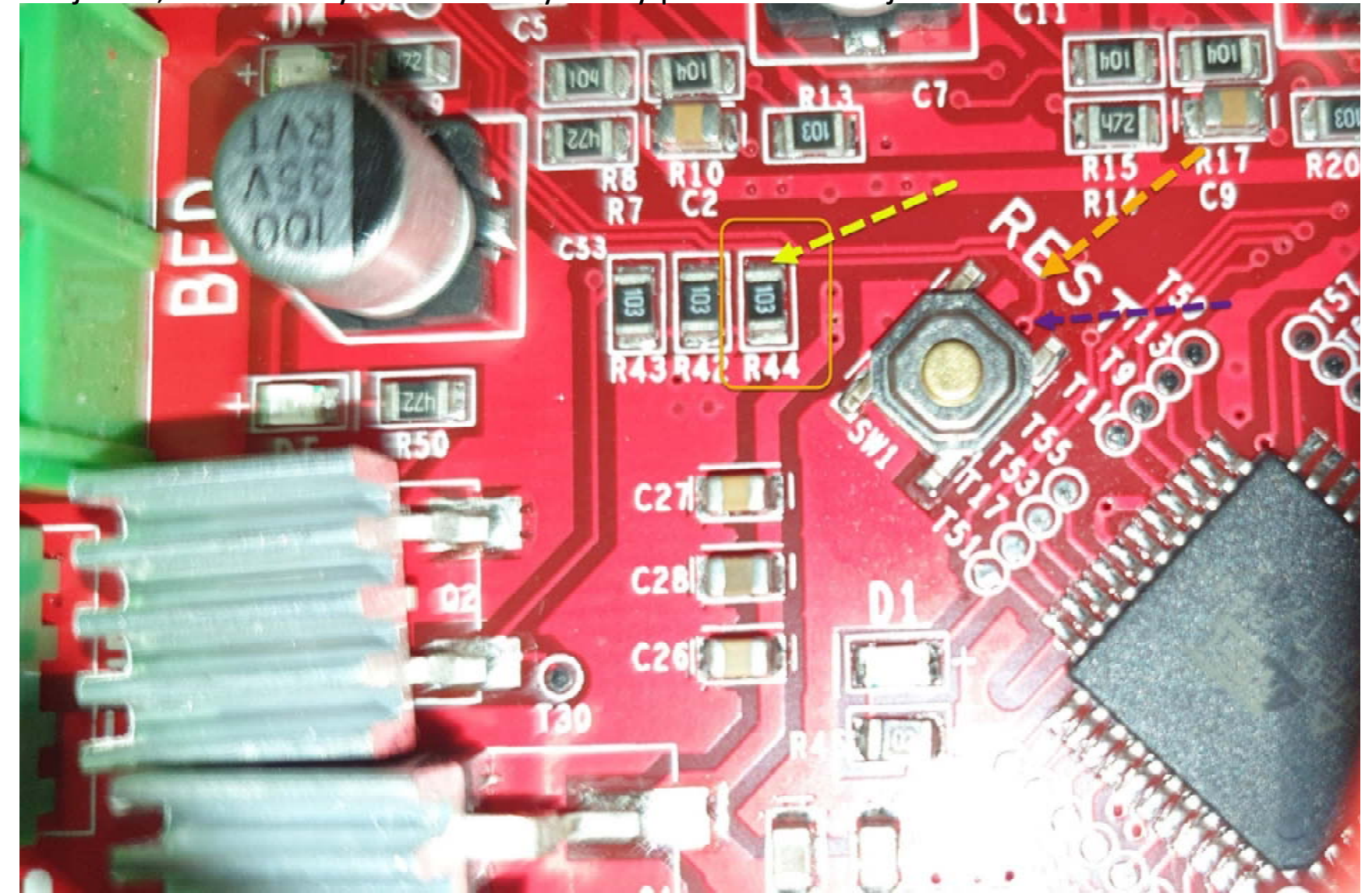
ANET Board version/revision used



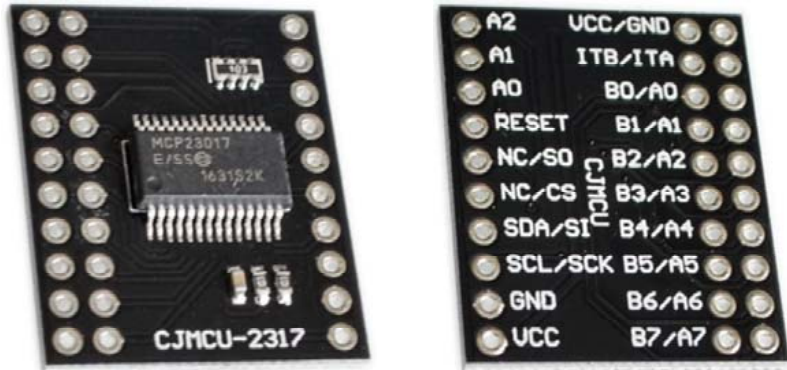
There are different board revisions of the Anet mother board. Several are all marked with v1.00 but still have slightly different components. The first version had underrated power connectors for the bed and hotend. The version showed here, and used in this 'manual', has better screw connectors and a little potentiometer for adjusting the Z drive current.

There is also a newer v1.7 version out there, and that has a different layout of the uController and several other components. For that one, you will have to figure out where exactly to make the wire cut and solder the 2 wires.

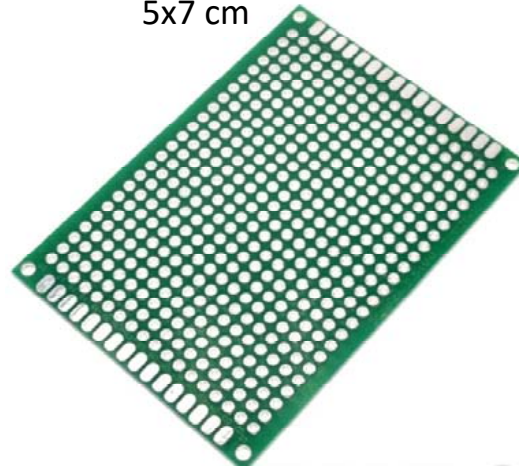
- Cut the trace at the orange arrow
- Carefully clear the lacquer of the trace/'via' at the purple arrow so the copper is exposed.
- Solder one wire to the trace/'via' at the purple arrow.
- Solder one wire to the R44 resistor at the yellow arrow.
- Glue (hot glue or '10 second glue') both wires to the board, so there is no tension on the solder joints, otherwise you could very easily pull the solder joints off the board.



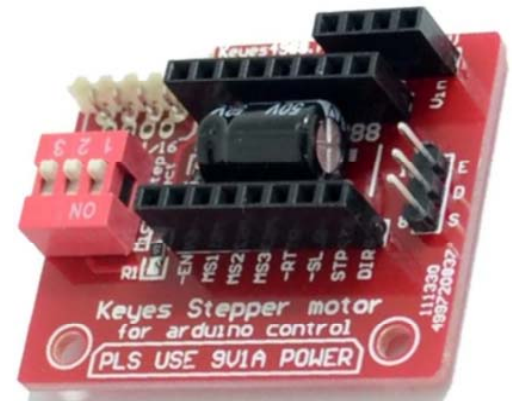
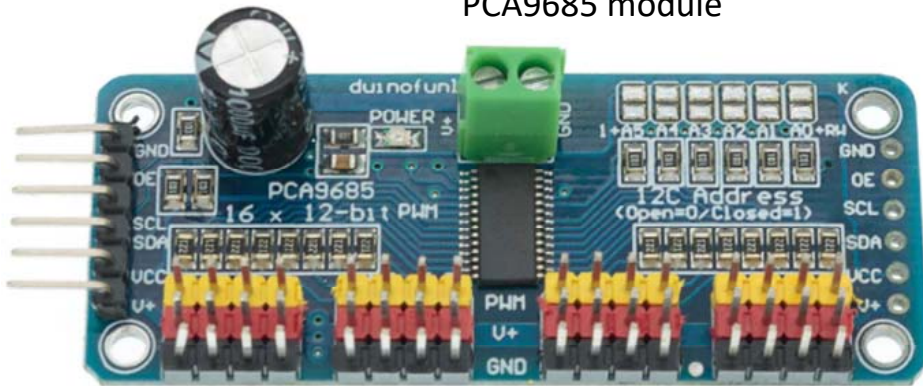
MCP23017 module



Double sided
experimental board
5x7 cm

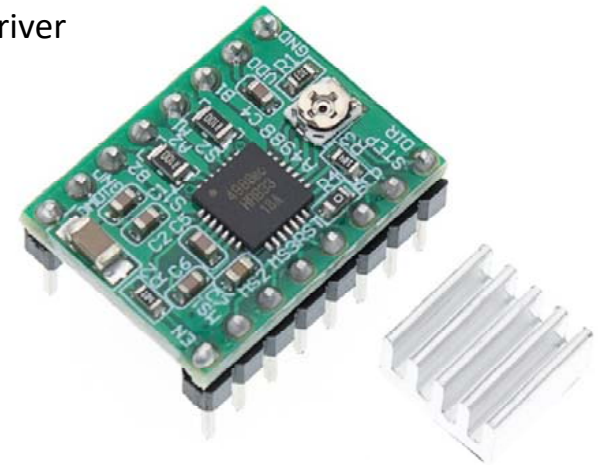
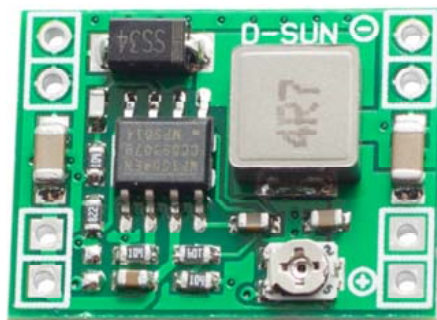


PCA9685 module



Z2 expansion board +
4988 driver

12V to 5V/3A module



- Qty:1 - MCP23017 module – Aliexpress - €1.00
 - <https://www.aliexpress.com/item/32883934443.html?spm=a2g0s.9042311.0.0.27424c4dYKrYVP>
- Qty:1 - Stepper motor expansion board – Aliexpress - €1.50
 - <https://www.aliexpress.com/item/32907966559.html?spm=a2g0s.9042311.0.0.27424c4ddk61kR>
- Qty:1 - A4988 stepper driver – Aliexpress - €1.80
 - <https://www.aliexpress.com/item/32340799738.html?spm=a2g0s.9042311.0.0.27424c4ddk61kR>
- Qty:1 - N-Mosfet IRLR7843PBF 30V/130A (is the same as used on the Anet board) – Aliexpress - €1.20 for 10
 - <https://www.aliexpress.com/item/4000830140809.html?spm=a2g0s.9042311.0.0.27424c4dacYQkF>
 - ‘Through hole’ version of this mosfet is the IRLU7843
- Qty:1 - PCA9685 PWM output module -AliExpress - ~€2.50
 - <https://www.aliexpress.com/item/1005001693946056.html?spm=2114.12010615.8148356.8.21814b75Z8jpMC>
- Qty:2 - 2x5 pin male header
- Qty:1 – 2x5 10p ribbon cable to connect from Anet board to Z2-IO board.
 - <https://www.aliexpress.com/item/1005001517513098.html?spm=2114.12010615.8148356.4.62936a9dXcMdfC>
- Qty:1 – 1x2 pin male header
- Qty:1 - Powermodule/step-down/buck regulator 12V in - 5V/3A out – Aliexpress - €2.20 for 5
 - <https://www.aliexpress.com/item/32706909050.html?spm=a2g0s.9042311.0.0.27424c4drXaqVh>
- Qty:1 - Double Screw terminal
- Qty:1 – Prototype board 5x7 double sided -Aliexpress – €6.00 for 10
 - <https://www.aliexpress.com/item/33053932232.html?spm=a2g0s.9042311.0.0.27424c4d3PRbQV>
- Hot glue or ‘10 second’ glue
- Qty:3 – 10uF / 35V electrolytic capacitor, 1 for each input on the MCP23017
- Qty:1 – 100uF / 35V electrolytic capacitor, 1 for each output
- Qty1: - 100uF /16V electrolytic capacitor for on the 5V