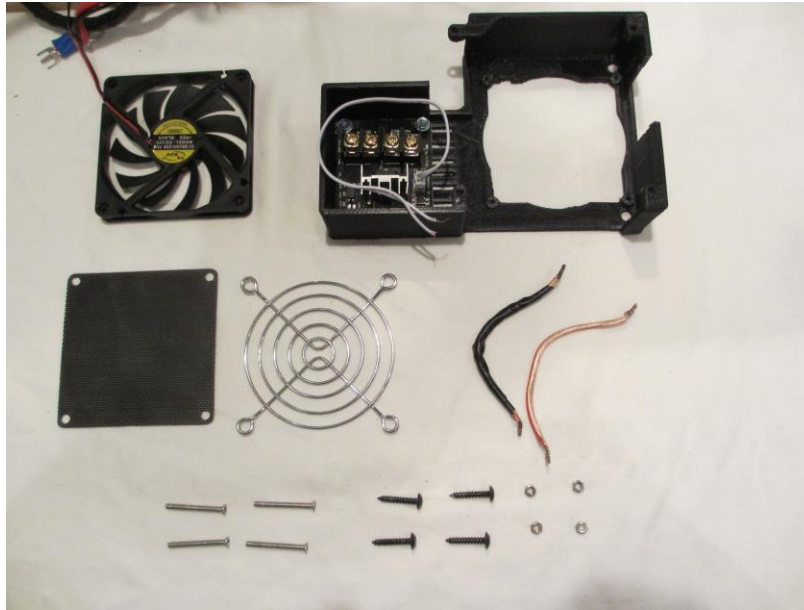


Imagin3d Main Board Cooler and Mosfet Installation Instructions

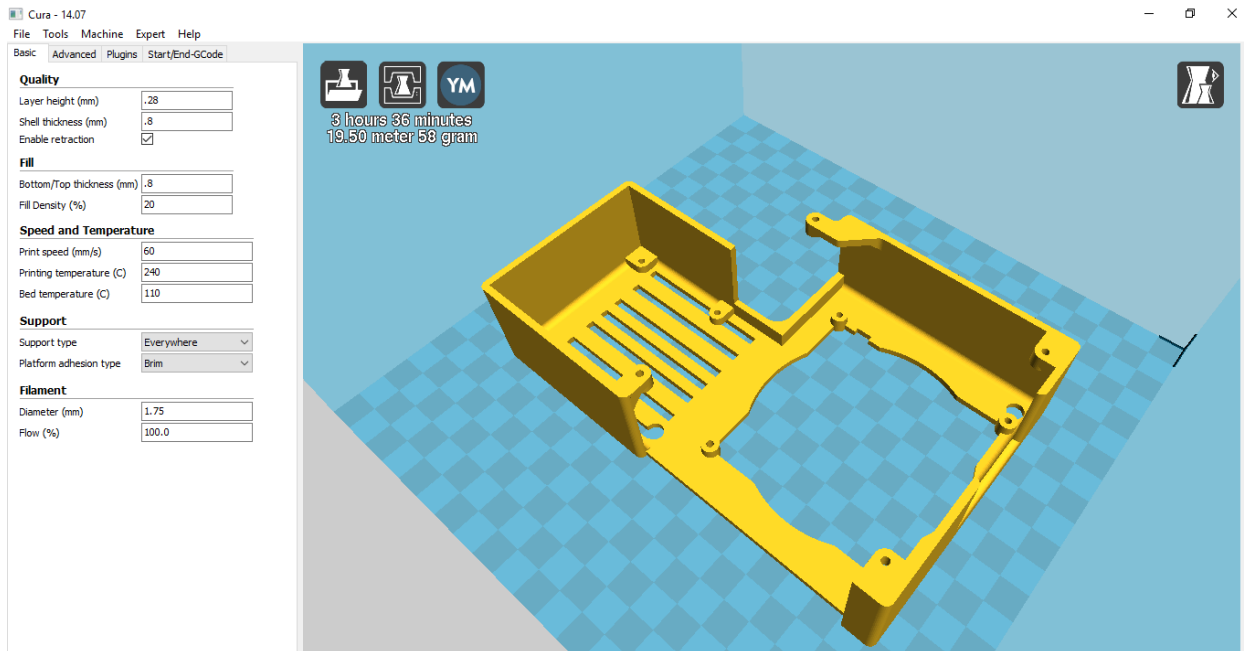
This free upgrade has been engineered courtesy of Imagin3d to work with generic parts. The M3-0.5 screw is referenced to stay congruent to much of the Anet A8. Not all pictures represent the use of this screw. Other screws may be used. Please contact Imagin3d at:

support@imagin3dprinting.com with questions.

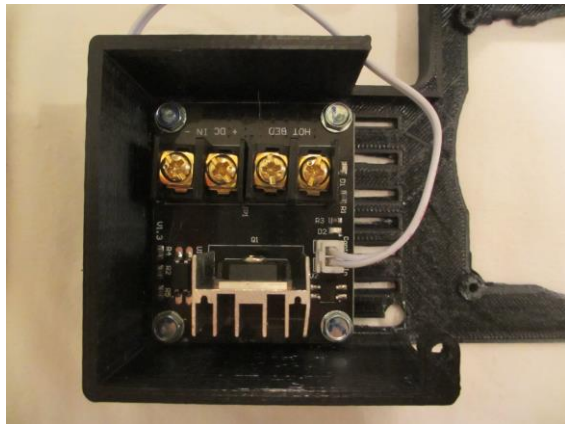


Hardware list:

- 1 Printed Main Board Enclosure
- 8 M3-0.5 x 20mm
- 4 M3-0.5 nuts
- 8 M3 x 7mm washers (optional)
- 2 16 awg wires 100mm length minimum
- 4 M3-0.5 x 5mm screws
- 1 80mm fan 12 volt DC
- 1 80mm fan cover
- 1 80mm fan filter/screen



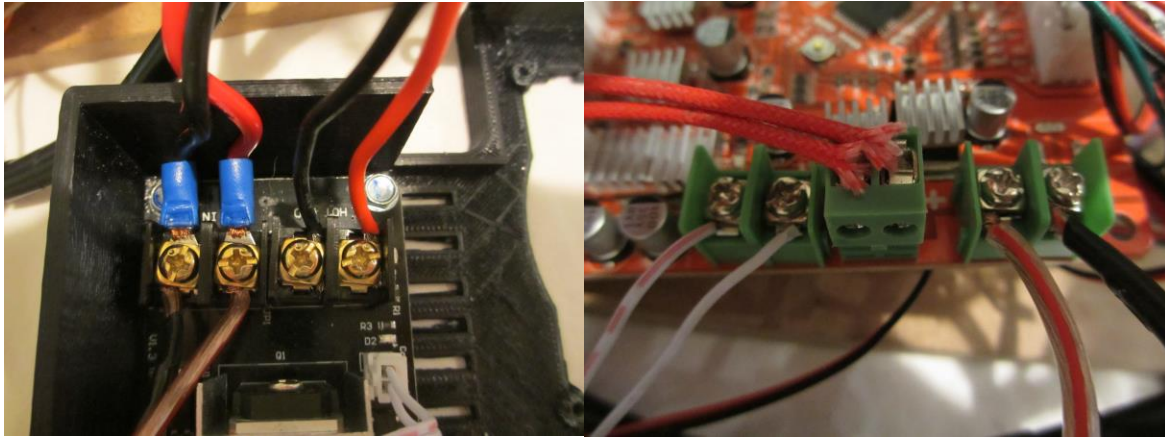
1. Print the provided .stl file and clean off supports. Use ABS or other high temp plastics. An enclosure may help if warping or cracking is experienced. Do not print in PLA as it is not a high temp plastic. Settings for ABS printing on an Anet A8 are shown above.



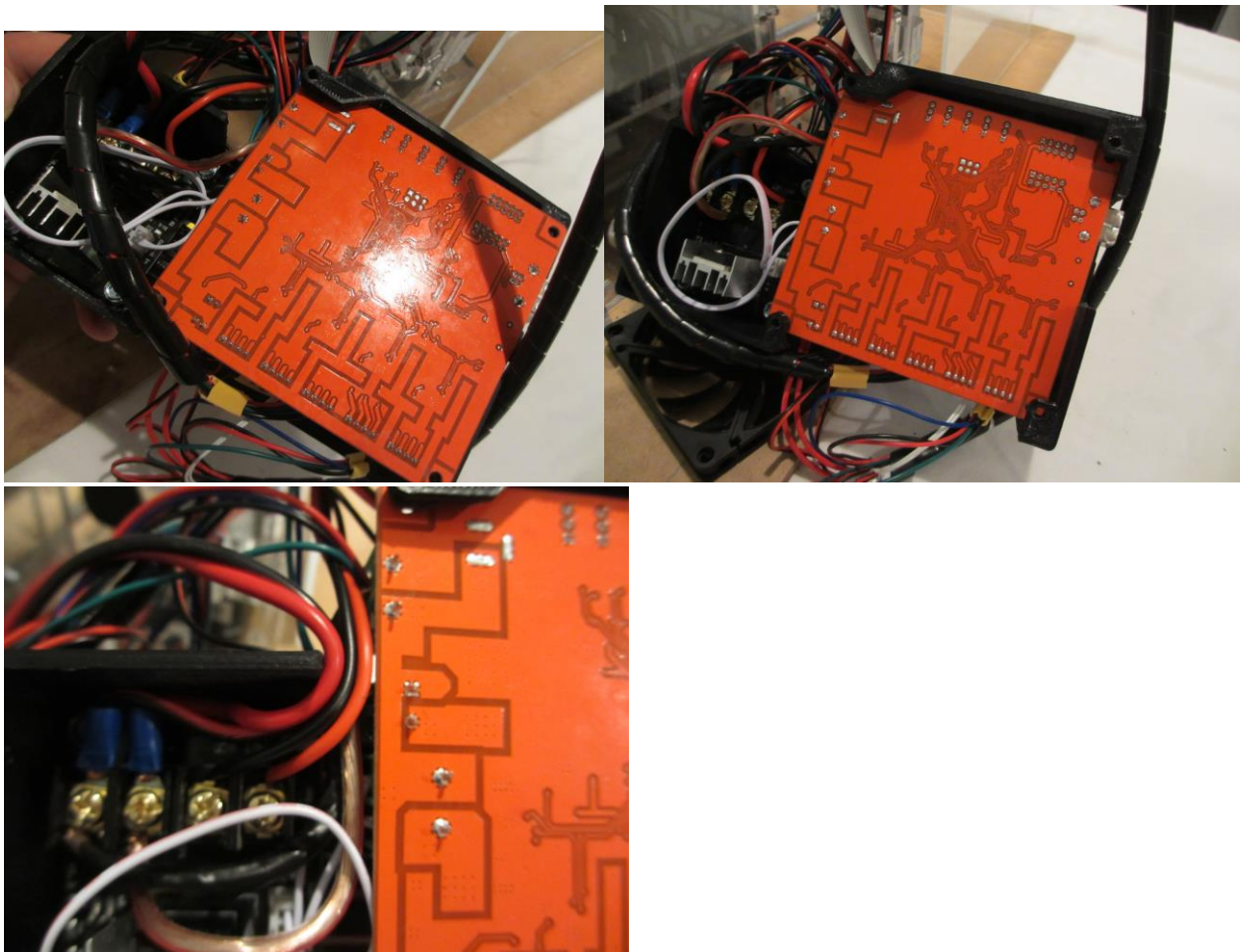
2. Tap all holes with an m3-0.5 tap that will be used for mounting (read ahead). You may use other screws if you wish. All threaded holes utilize a 0.100" inch pre-tap ID and all through holes feature a 0.125" ID. If you do not have a tap, try using self-tapping screws.

3. Screw in mosfet as shown using the M3-0.5x3 mm screws or similar.

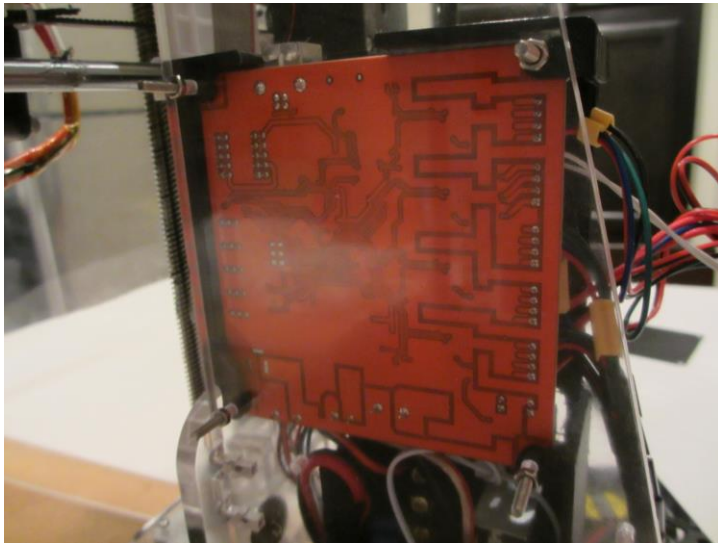
4. Remove the screws holding on the main board. You may re-use these screws if you wish. Due to their angled heads torque must be kept low or washers must be utilized to avoid cracking the main board.



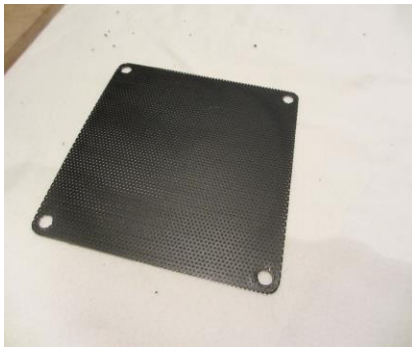
5. Wire the mosfet. Reference the pictures above to wire it to the heated bed. Use a pair of 16 awg or similar wires as shown in addition to the provided wiring with the printer.



6. Carefully install the control board into the printed enclosure. Group cables roughly as shown. Start by placing the board in towards the mosfet first and moving any cables in the way. Next slide the board beneath the upper two screw holes. Tuck wires in to prepare for mounting. It is designed to be a tight fit.



7. Install board using M3-0.5x 20mm screws and M3 nuts. See step four for instructions on reusing screws.



These washers required only if fan will contact screen without them.



7. Screw in the fan cover, fan, washers and screen using m3-0.5 x 20mm screws or similar. Washers may be required between the fan screen and fan if your fan makes contact with the screen. If you use M3-0.5 x 20mm screws, washers may also be needed between screws and fan gaurd.



8. Solder the 22 awg wire to extend the fan's wire and route to PSU side. Connect this wire to the existing PSU or to the auxiliary PSU used in the PSU cooling system upgrade. This dual PSU setup is targeted towards those with the stock 20 amp PSU who do not want to upgrade to the 30 amp model but do not wish to draw power from the stock PSU for fans or other small upgrades (\$2.89 vs. \$20+). With an enclosure from [Imagin3d](#), the stock 20 amp PSU has adequate power for printing ABS, Petg, PLA and more at recommended temperatures.