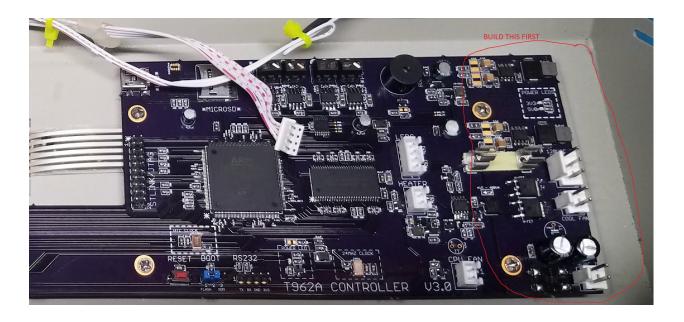
**** Assembling the T962A V3.0C Controller (STM32 with 5.0" TFT) *******

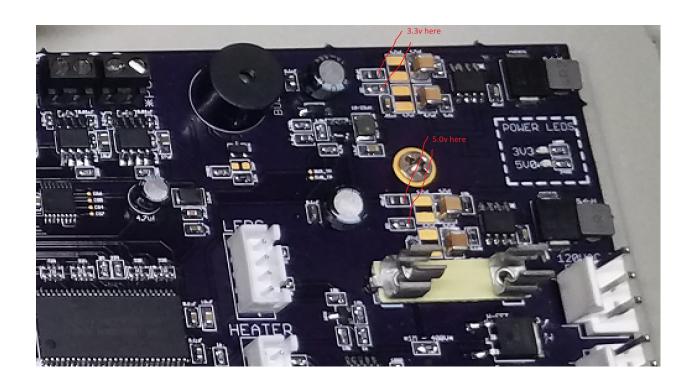
- FIRST, It is highly recommended to solder on the most difficult component, the STM32H7 processor, since it is a LQFP-176 pin chip.
 (whether using a reflow oven or hand soldering, I've found it much easier to do the processor first, by itself, when the board is nice and empty)
- 2) **SECOND** build the POWER SUPPLY section of the board, the right-most section of the board, as shown in the picture.

Since the power supply on this board (5V & 3.3V) uses switching ICs, you really want to make sure you got all the components correct or you can easily have high/incorrect voltages and blow up everything else. I destroyed an STM32 processor by doing this exact thing, put an incorrect resistor in and the supply put out 12V instead of 3.3v.

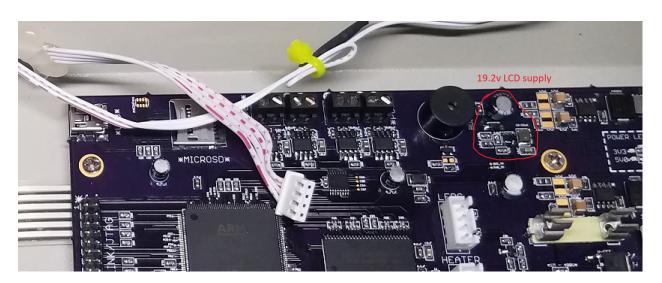


3) THIRD check the supply voltages once the power supply section is complete.

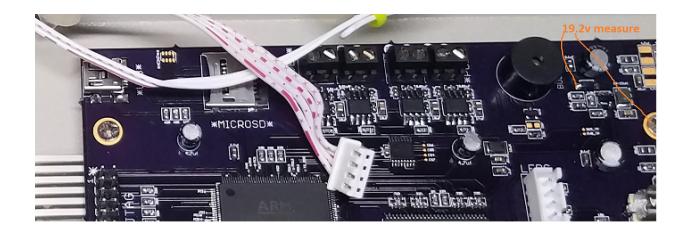
*** DO NOT MOVE ON UNTIL YOU SEE APPROX. 3.3v AND 5.0v ****

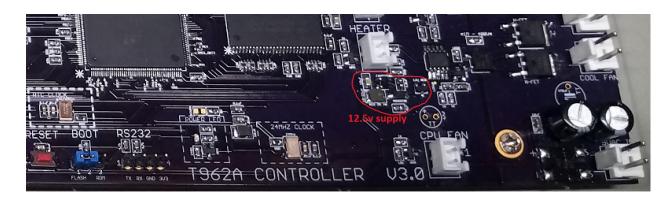


4) FOURTH build the two FAN5333B boost supply circuits as shown below. These provide the approx. 19.2v for the LCD backlight and the approx. 12.5v for the FL5160 IC.

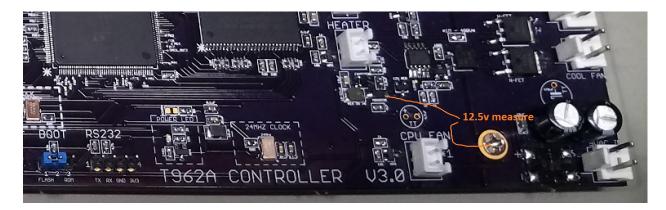


*** Measure the 19.2V (approx) supply as shown below: ***





*** Measure the 12.5V (approx) supply as shown below: ***



- **5)** At this point the rest of the board can be assembled, as all voltages required have been verified.
 - ** notice I did leave out some of the power supply capacitors, there is quite a bit of extra capacitance on this board, that you can omit to save cost if required. **

When mounting this board into your oven, **DO NOT** use the red felt insulators as the OEM board did.

This board MUST be grounded to the chassis, as it was designed to be properly grounded with the rest of the oven chassis.

See the above pictures, all of the mounting screws are directly mounted to the PLATED MOUNTING HOLES

The 2 left mounting holes (where the old LCD screen was) sit a bit higher than the other 4 holes...

you can use the old RED FELT insulators as spacers on the UNDERSIDE of the board when mounting it (or you can user metal washers as well) to make the board sit evenly across all 6 mounting holes without any flexing.