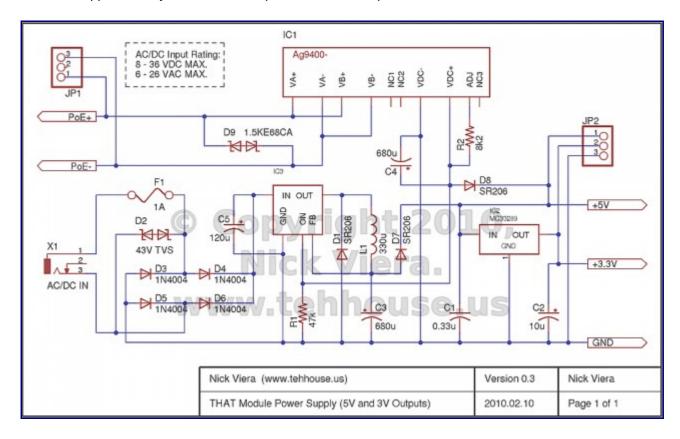
Power Supply 0.3

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I made a few minor changes to the design of my power supply sub-module. The updated power supply schematic is shown below. Mainly, I added R2 to increase the output voltage of the PoE module slightly. This is necessary since the diode D8 will drop about 0.3 Volts. The addition of R2 boosts the output of the PoE module to approximately 5.3 Volts to compensate for the drop.



Additionally, I had a prototype Printed Circuit Board (PCB) manufactured for the power supply. The PCB is a standard 2-layer board with silkscreen and solder mask. It measures 83.5 x 52.5 mm. The PCB arrived recently and I had a chance to populate the board. I am still waiting on the PoE modules to arrive, so as of now the power supply only operates from the secondary AC/DC input jack.

Pictures of the populated PCB are shown below. Using two Fluke 87 multimeters, I verified that the power supply is outputting both 5V and 3.3V signals, and that the actual voltage at the outputs is within the working tolerances of my IC components. The power input is from a generic unregulated 12 Volt AC "wall wart" transformer. I will verify operation of the PoE power supply once the PoE modules arrive.



