* print both layers on the same thermal sheet (manual duplex) if you can
* make one layer mirrored
* Use IC socket “machine tooled” to find metal to solder on and to solder both sides.
* Try any new IC before you start fabrication.
* Place fill shape i.e. rectangle to prevent routing underneath the IC
* Place a frame from a layer that is in the direction of the component because it may not have a part to solder in (i.e. DIP Switches).
* Write the name of the flags and the inputs
* In 7485 datasheet the truth table has don’t care bits and if you didn’t connect them to something, the output will be rubbish. There’s a testing table showing that all of them is connected to the ground when they’re not used.
* Put a reference (i.e. line) to perform the mirroring correctly
* Take care of texts regarding mirroring.
* Do not make connection under the component because you will not access it with soldering and to prevent unseen short circuit.
* Choose what to solder first because the one you choose may close the way on other components when you solder them.
* **TRY the prototype on a breadboard first connecting it from the schematic.**
* When dealing with 7485 to compare 2 by 2 bits, ground all Inputs (except for cascading A > B and A < B to make all outputs equal to LOW when all Inputs equal LOW). Don’t care bits does NOT mean that this input is floating.
* Read the datasheet correctly and perfectly specially if the IC is new to you and try it first on a breadboard.
* Do NOT touch a wire or move it when you plug in the power, because that can cause the IC to be burned.
* Focus too much when you place the GND and VCC pins to the IC in the breadboard. And also when you position it in the IC socket. It’s better to make the notch of the IC socket the same for the IC to be an indicator for you.
* You can make a via with a wire.