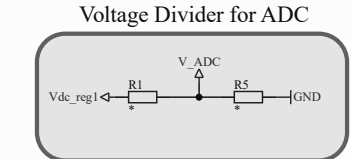
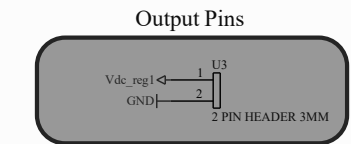
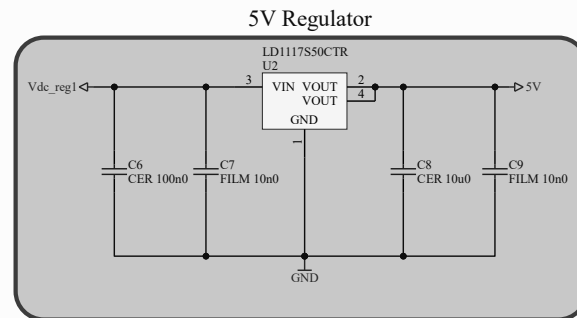
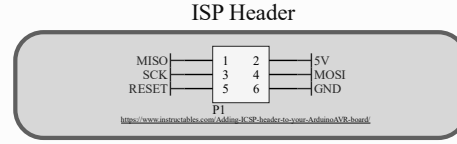
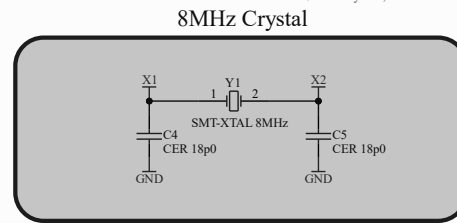
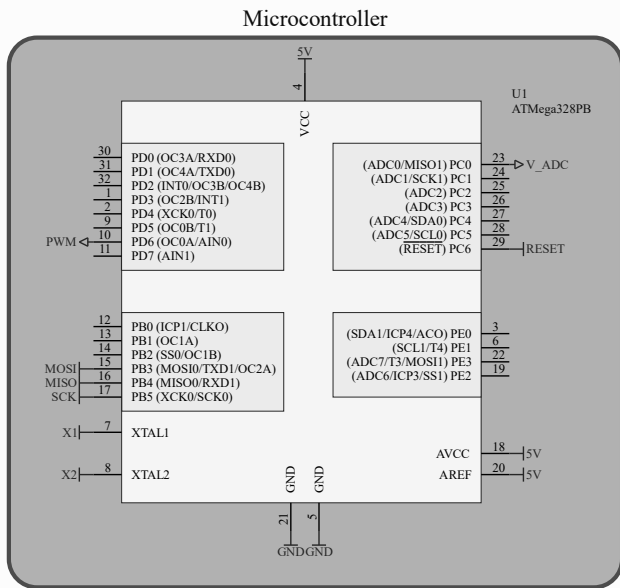
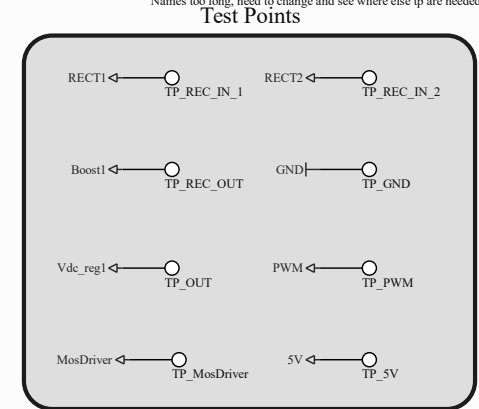
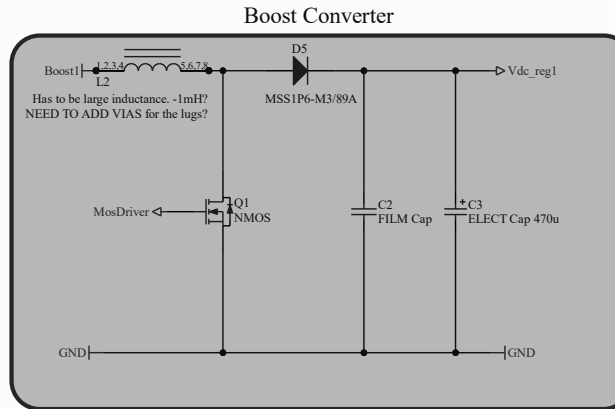
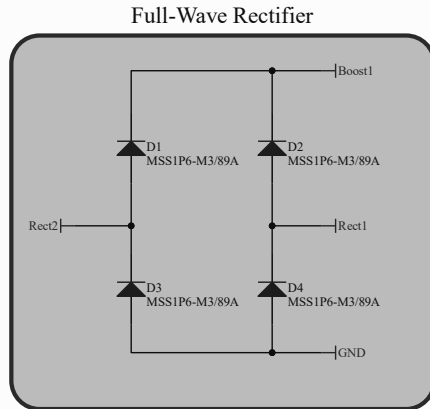
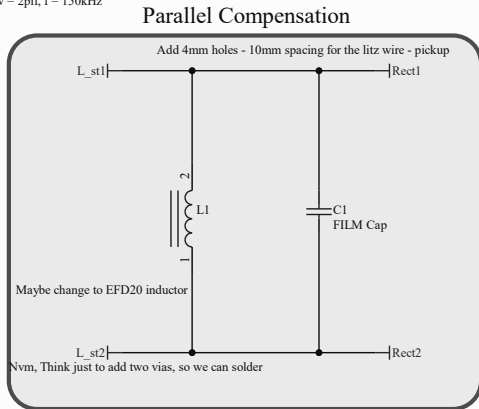


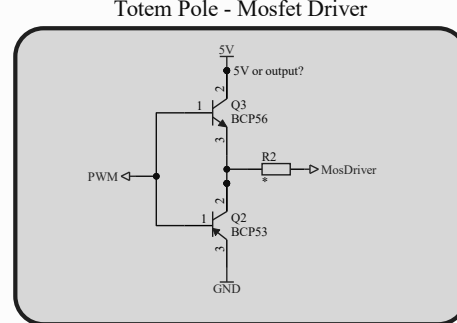
Note: Can only find the value of the capacitor after determining the value of the inductance
 As $wL = 1/wC$, $C = 1/w^2 * L$
 $w = 2\pi f$, $f = 150kHz$

Check which type of diodes to use?

Names too long, need to change and see where else tp are needed

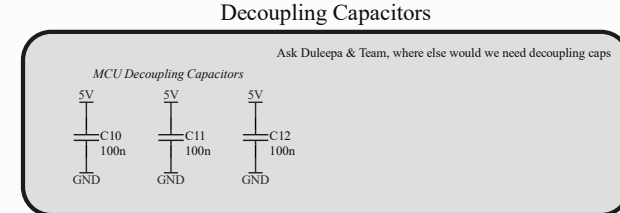
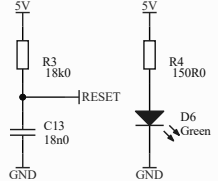


Now Callum said that we can use the 3.3V from his PCB, so do we still need to generate a 5V?



Need to find which kind of mosfet we are using, to find the gate current and voltage required, Then find the voltage and current coming from the uC, 5V or 3.3V? Then use resistors and components accordingly to keep the transistor in the active region when required.

Check specs to choose the right res values?



TO DO:
 Add regulator for 3v3/5v supply - possibly LD1117S50CTR . Add header for possible use by other teams. Add zener diode to protect regulator

Input voltage in the range of 4-7V, maybe 3V, so for safety just keep it 3-8V. - Still need to confirm with Coil group
 Main Idea: As the pickup voltage is going to be a low AC voltage, need to convert this signal into a DC voltage and also boost up the voltage to 5-12V; ideally 10V.
 A Sinusoidal coil is used as the pickup, using parallel compensation to build the voltage and to achieve resonance. Then the signal goes to the full-wave rectifier which transforms the ac voltage to dc voltage. The signal from the rectifiers goes to the boost converter.