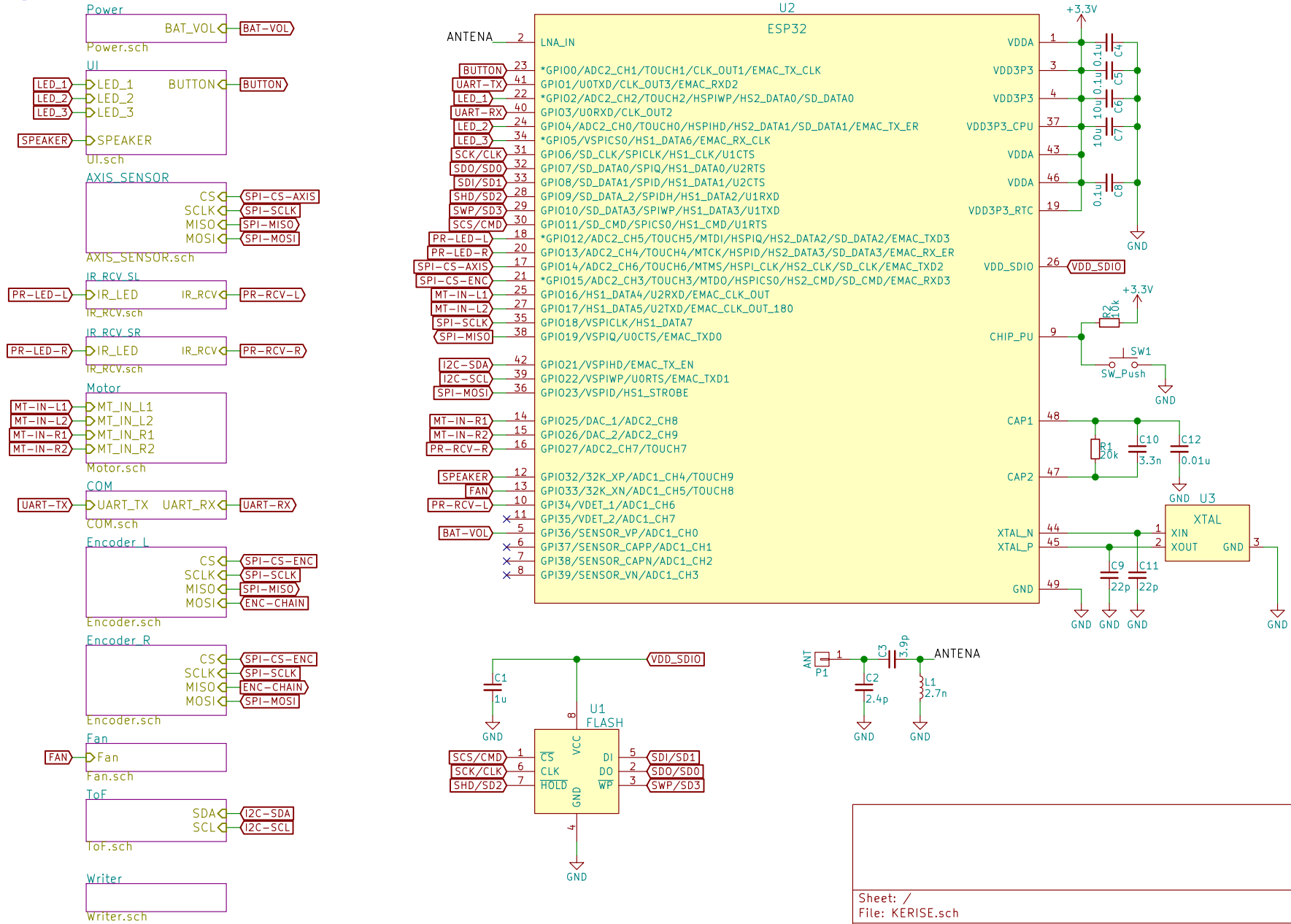


## Main



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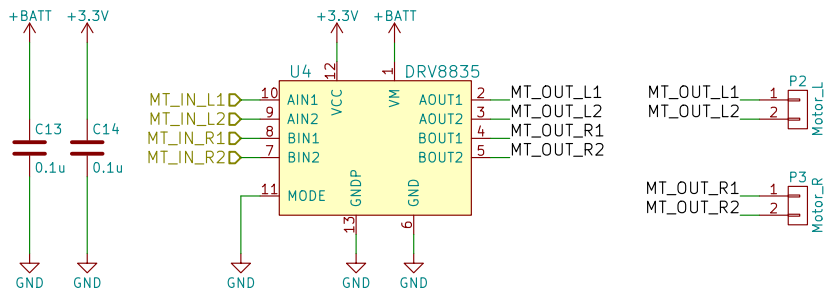
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Motor



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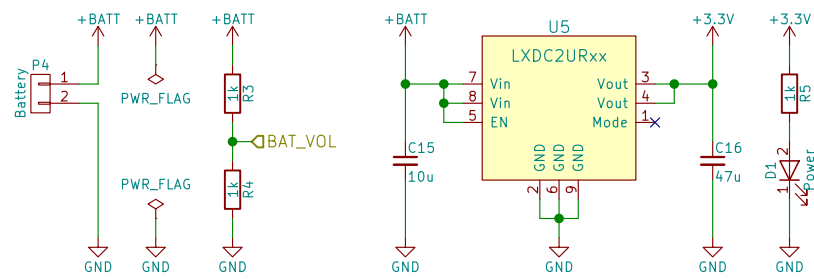
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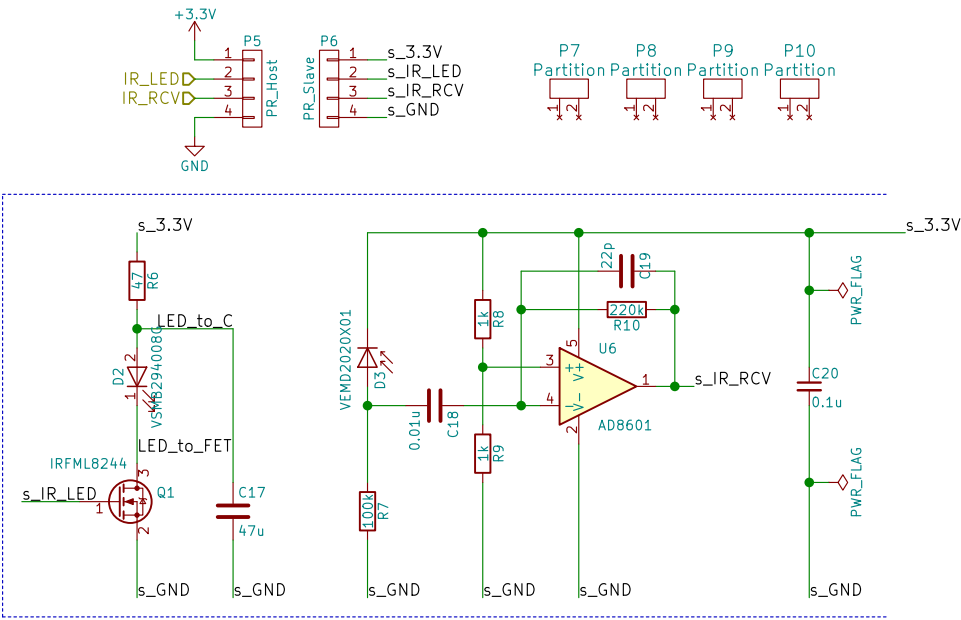
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Power



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Photo Reflector

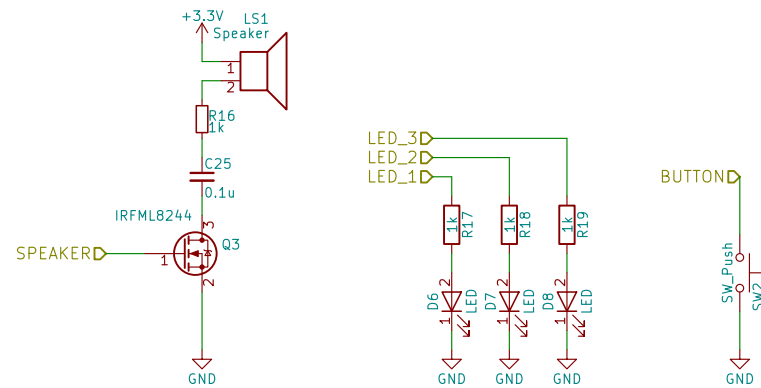


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The schematic diagram illustrates the internal circuitry of the IR receiver module. It features an IR LED (IRFML8244, Q2) driven by a 3.3V supply through a 47Ω resistor (R11) and a diode (D4, VSM294008). The LED is connected to a 47μF capacitor (C21) to ground. The receiver section includes a diode (D5, VEMD2020X01) connected to a 100kΩ resistor (R12) to ground. The signal is then amplified by an AD8601 op-amp (U7), which is configured with a 1kΩ feedback resistor (R13), a 1kΩ input resistor (R14), and a 22pF compensation capacitor (C23). The op-amp's non-inverting input (+V) is connected to the 3.3V supply, and its inverting input (-V) is connected to the diode output. The output of the op-amp (s\_IR\_RCV) is connected to a 220kΩ resistor (R15) to ground. The module also includes two PWR\_FLAG pins connected to ground and four partition pins (P13, P14, P15, P16) connected to ground.

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## User Interface



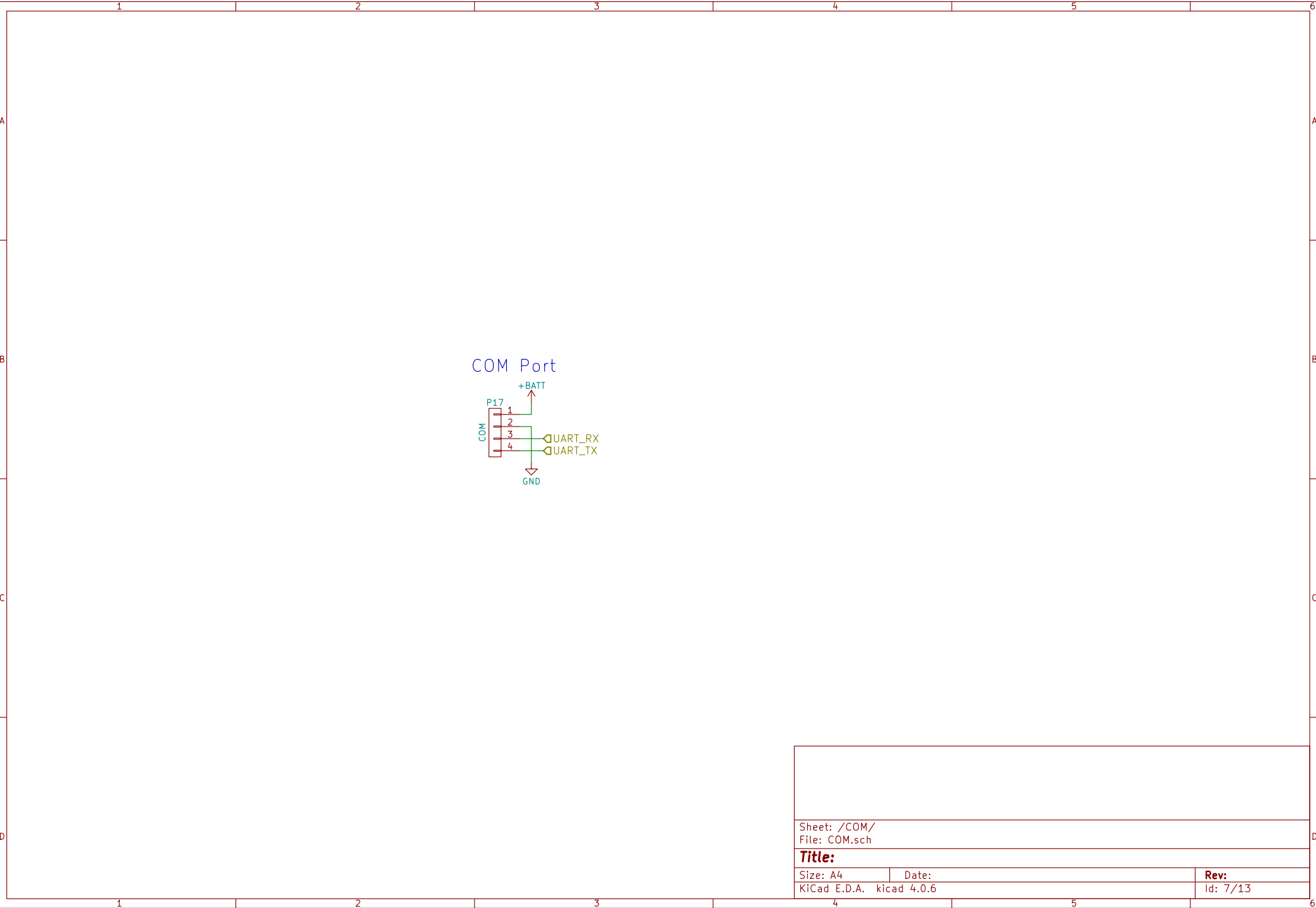
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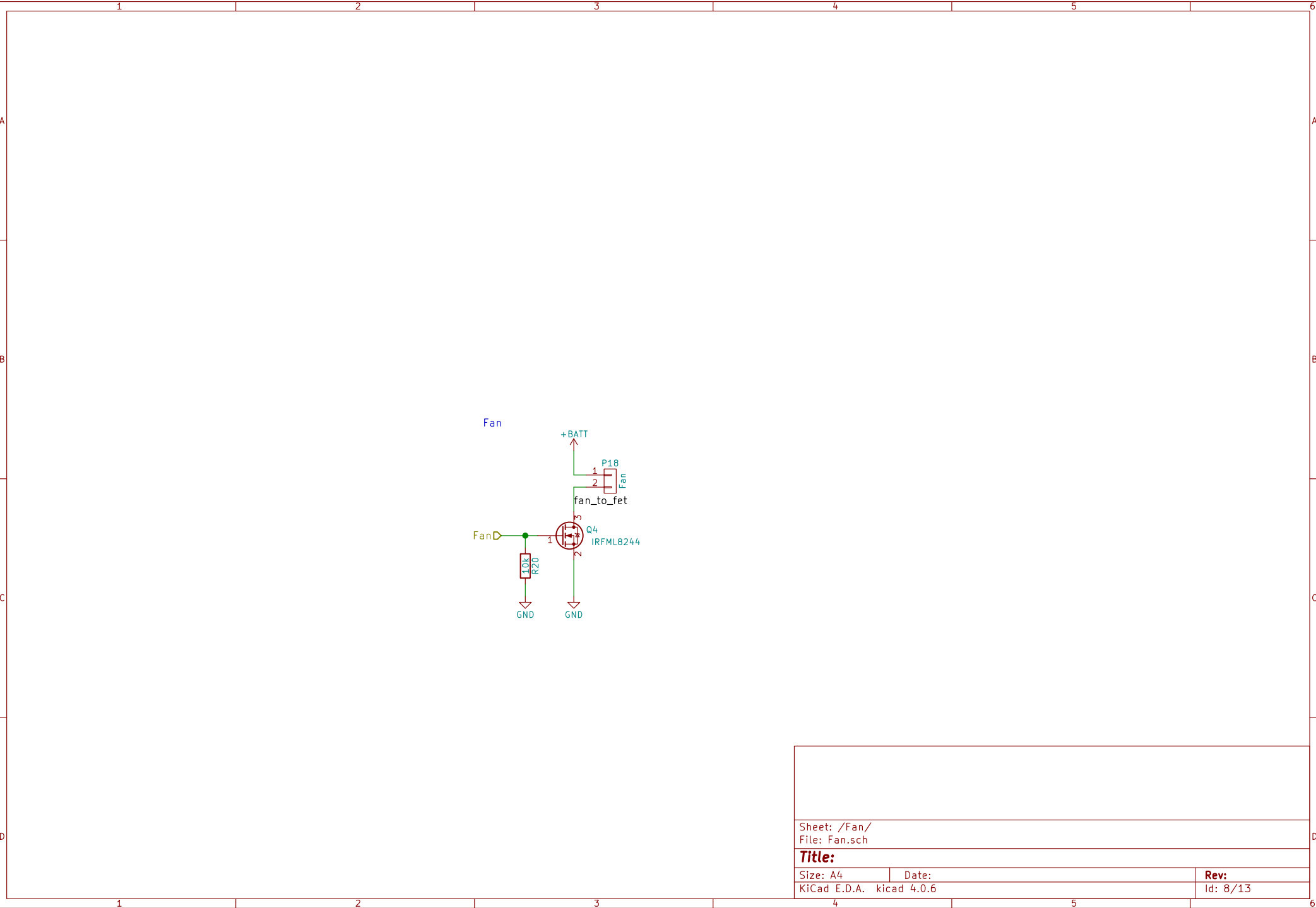
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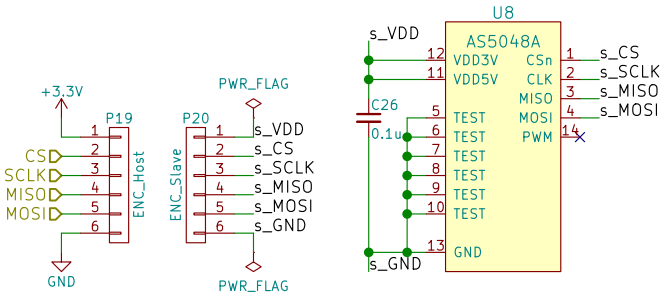
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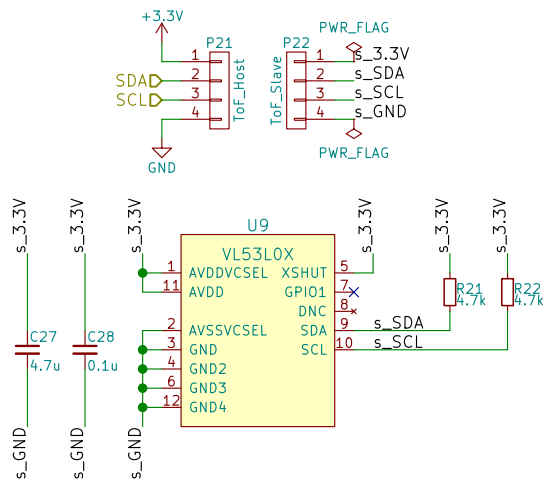








ToF



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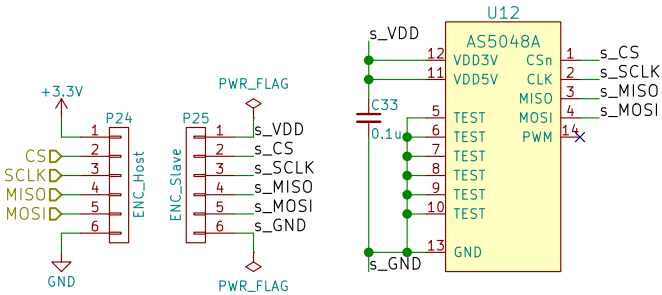
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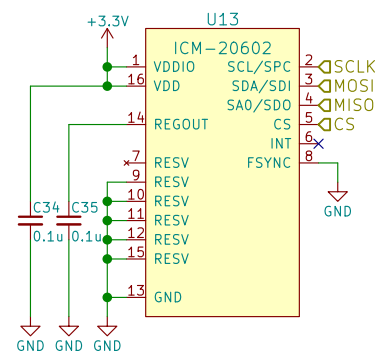
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AXIS Sensor



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