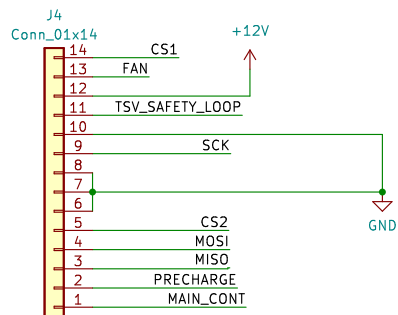
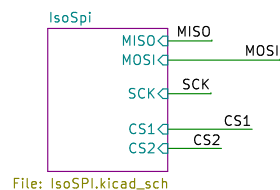
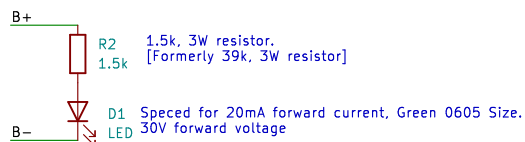


HV Connectors

HV Indicator LED

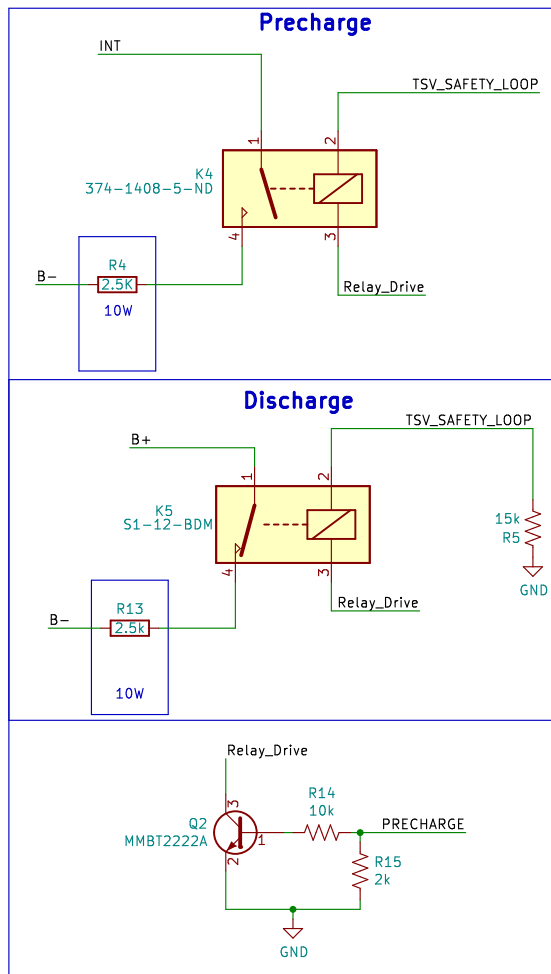


Energy dissipated by 2 resistors when charging bus capacitance (ONLY MOTOR CONTROLLER, FOR NOW): 20.7 Joules

Energy dissipated by 1 resistor: 20.7/2 Joules

Equivalent pulse length: 0.25 seconds @ 288 Volts

Datasheet specs 1000 Volt maximum for 0.25 second pulse (so this resistor will work)

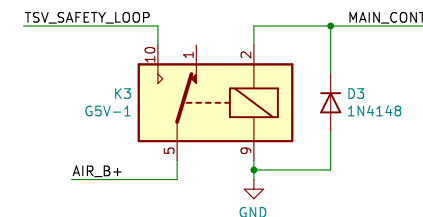


Precharge Procedure:

- 1) First AIR turned on directly by shutdown loop
- 2) Pre/discharge resistor connected between B+ and the intermediate circuit by K2 once the Rinehart PRECHARGE signal is asserted
- 3) Second AIR turned on with K1 when the Rinehart MAIN_CONT signal is asserted

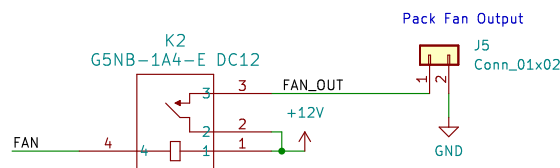
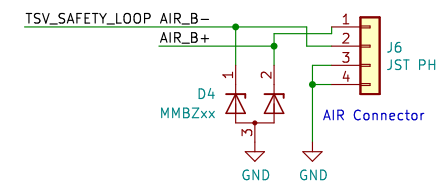
Discharge Procedure:

- 1) When power is lost, K2 switches to NC position, connecting pre/discharge resistor across the intermediate circuit



Off: Discharge intermediate circuit through resistor

On: Precharge intermediate circuit through resistor



Pack Board

- Pre/Discharge resistor circuitry
- HV Indicator LED when high voltage is going out
- Pass through to BMS can module

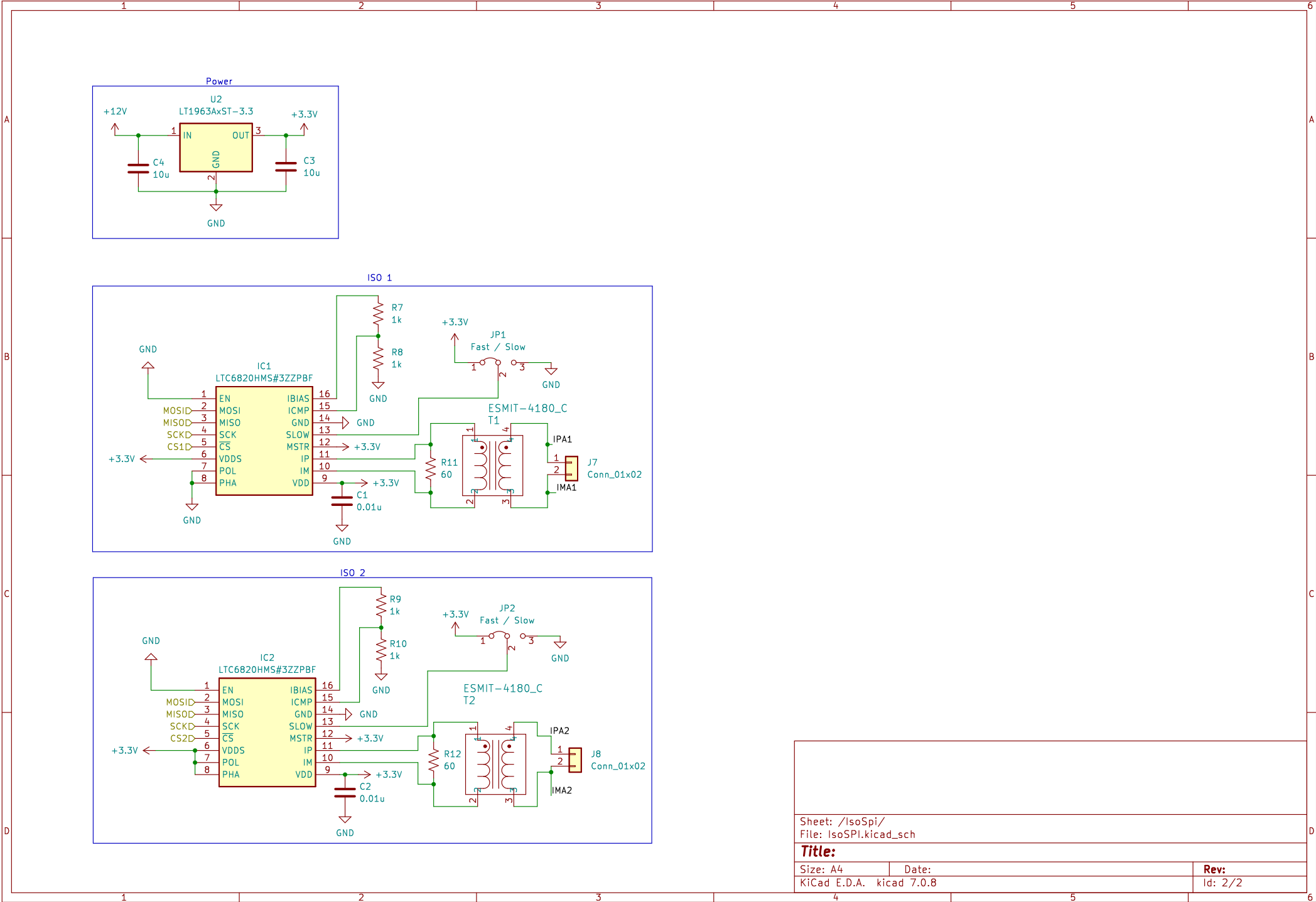
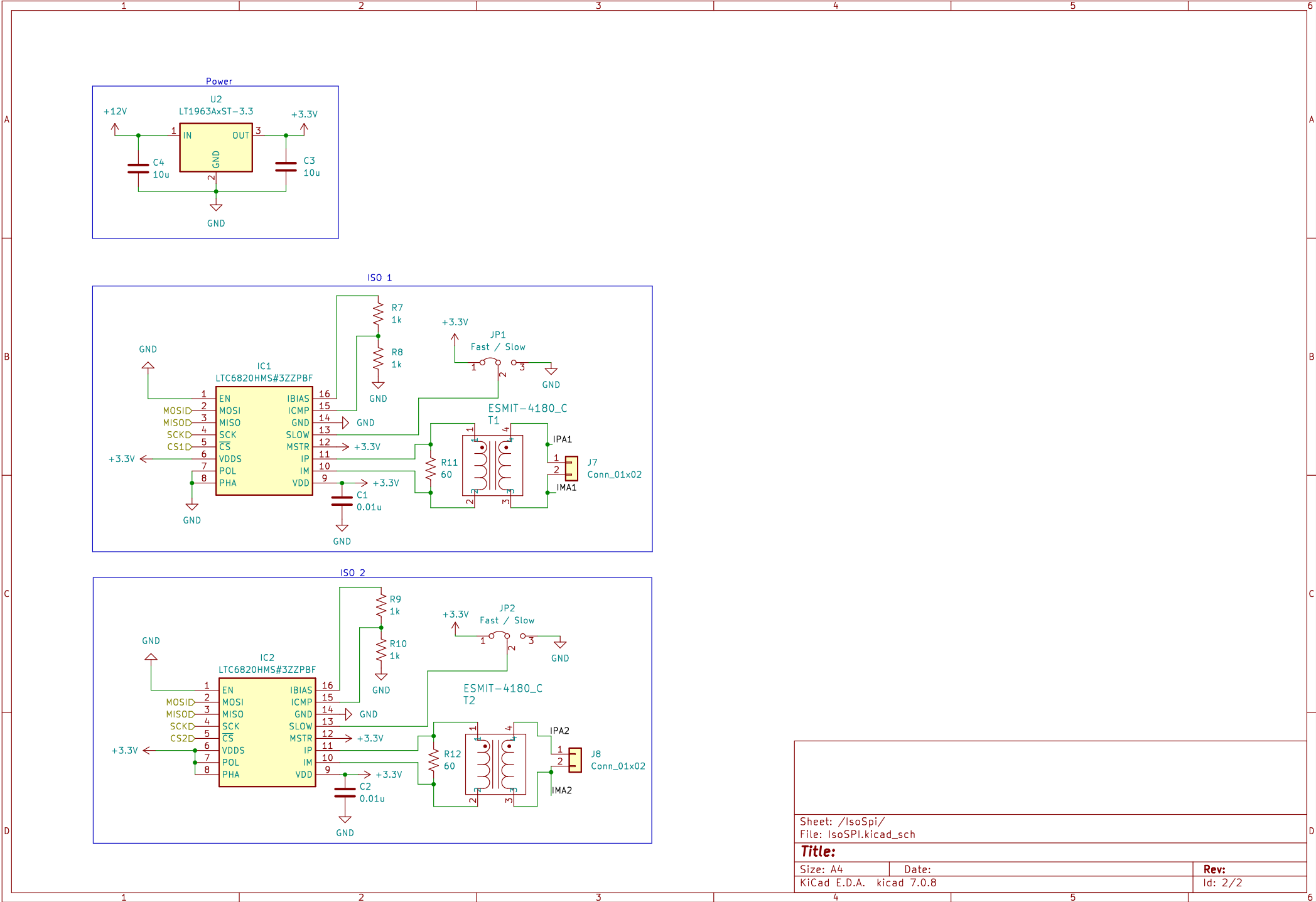
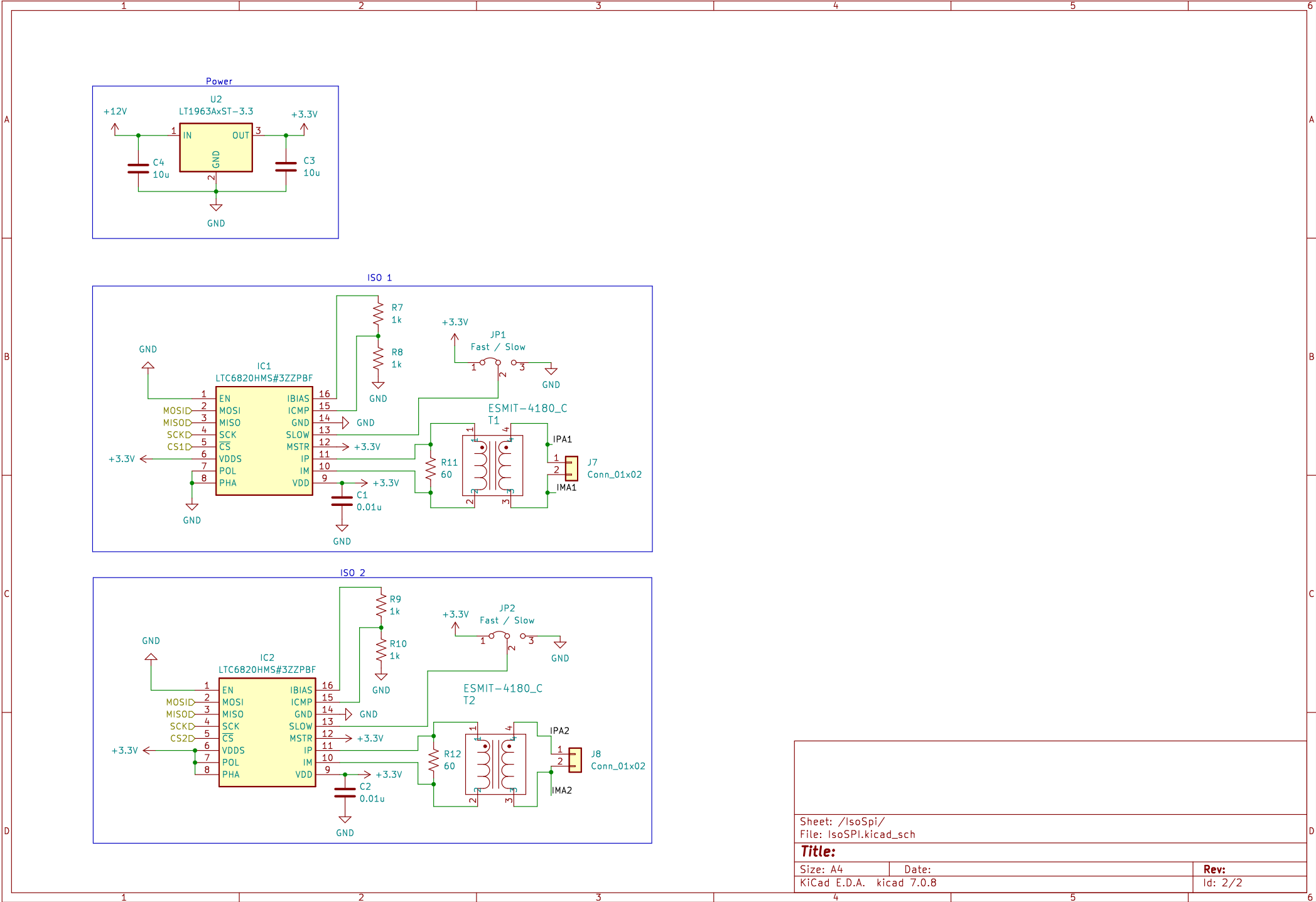
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