# Packages used questions/concerns:

# Dejun's FET:

1. FET symbol is very far off center, making it hard to select in the schematic.

### Dejun's diode:

1. The symbol is a little large, but otherwise looks good.

#### Dejun's Resistors:

- 1. Different symbols/devices for each resistor; can't switch package in schematic
- 2. SMT device is named "RESITOR"

#### Ryan's IMU:

- 1. Consider labeling IMU pins on symbol, or denote inputs/outputs somehow (such as inputs on left, outputs on right of symbol)
- 2. IMU package grey outline is misleading about the dimensions of the chip. The chip has pads on the underside, but the package looks like a smaller chip with pins off the sides.
- 3. SMT pads may be slightly too far from the center consider extending or moving them at least 0.1mm towards the center of the device.

## Ryan's devices:

1. none of the devices have their attributes set

#### Quadcopter schematic questions/concerns:

- Your motors are driven directly off the battery, so the circuit is not broken by the switch. Possibly dangerous, easily fixed by attaching the motor circuits behind the switch.
- 2. Label IMU pins? Currently have to check each pin number against the datasheet to discover its name/function.
- 3. Tie ATMega pins 7 and 10 to ground? As seen on redboard schematic.
- 4. ISP 5V line should not be connected to VCC (leave it floating see lab instructions)
- 5. IMU Pin 10 (DEN G) is an input and should not be left floating.
- 6. Do IMU pins 19 & 20 need those resistors?
- 7. IMU pins 22 & 23 set last bits of I2C address setting them high would match the breakout board we used in Lab 3.

#### Other notes:

- 1. Resistor values used can be purchased from Digikey.
- Capacitor values used can be purchased from Digikey.