

Quadcopter build

Specifications:

1. Frame

- Centre Plate – Carbon fiber re-enforced with balsa
- Arms – Aluminum 'U' Channel
- Landing Gear – High density insulation foam and cable ties
- Fasteners – M2 Stainless steel nuts and bolts

2. Power system

- Motors – Brushless DC Motors
- Electronic Speed Controller – 6 Amp
- Propellers – 5"x3"
- Battery – Lithium Polymer 2s 30c 7.4v 1080mAh

3. Controller and sensors

- Arduino Mega v2.5 with ATMEGA2560
- MPU6050 6 axis gyro (IMU)
- HMC5883L 3-axis digital magnetometer (Compass)
- MS5611-01BA01 Barometric pressure sensor (Alt measurement)
- Mediatek GPS external unit
- 915 MHz telemetry unit
- Power monitor module (Voltage Sensor)

4. 2.4 GHz Radio System (Used for arming and switching modes)

