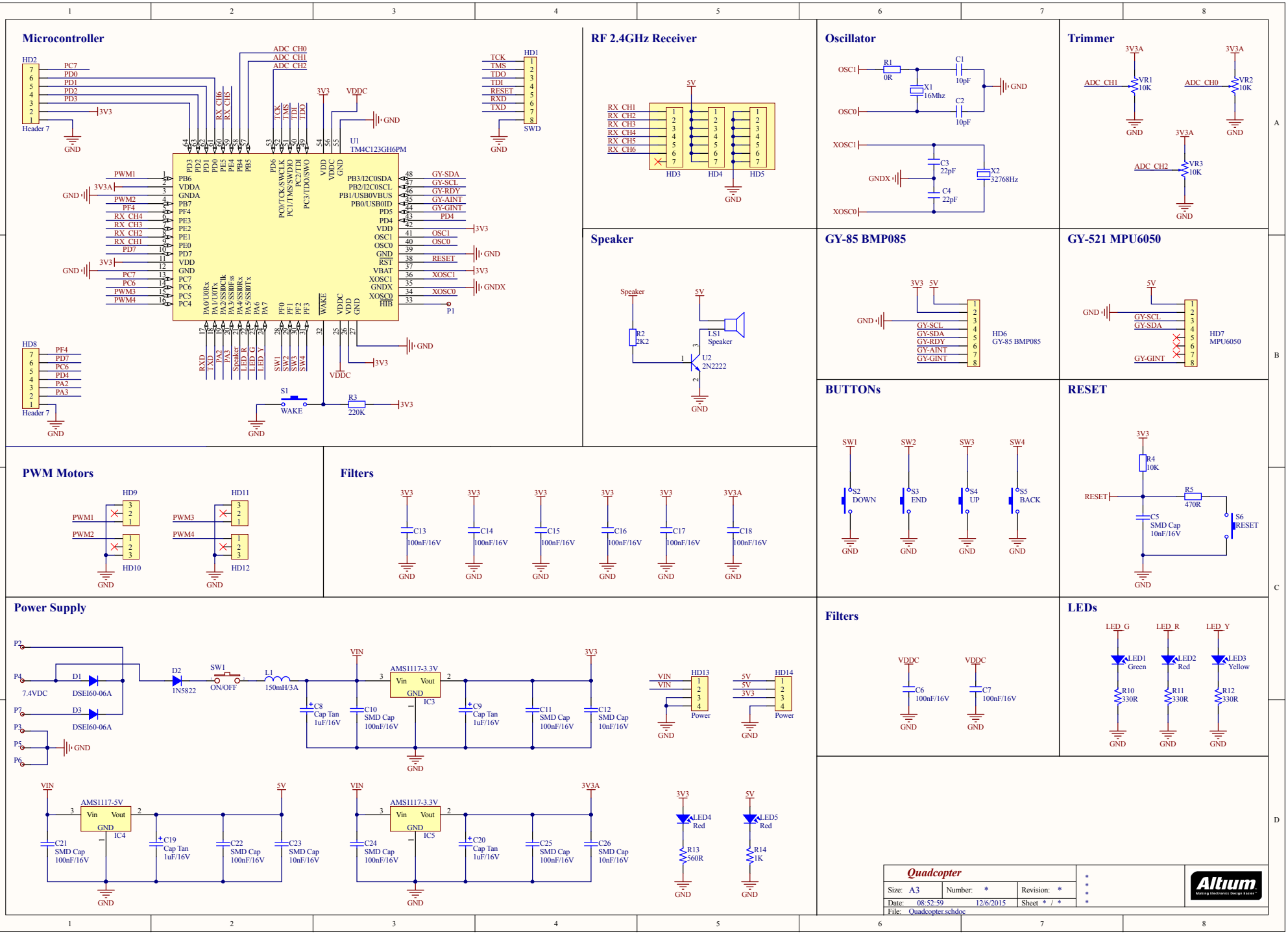
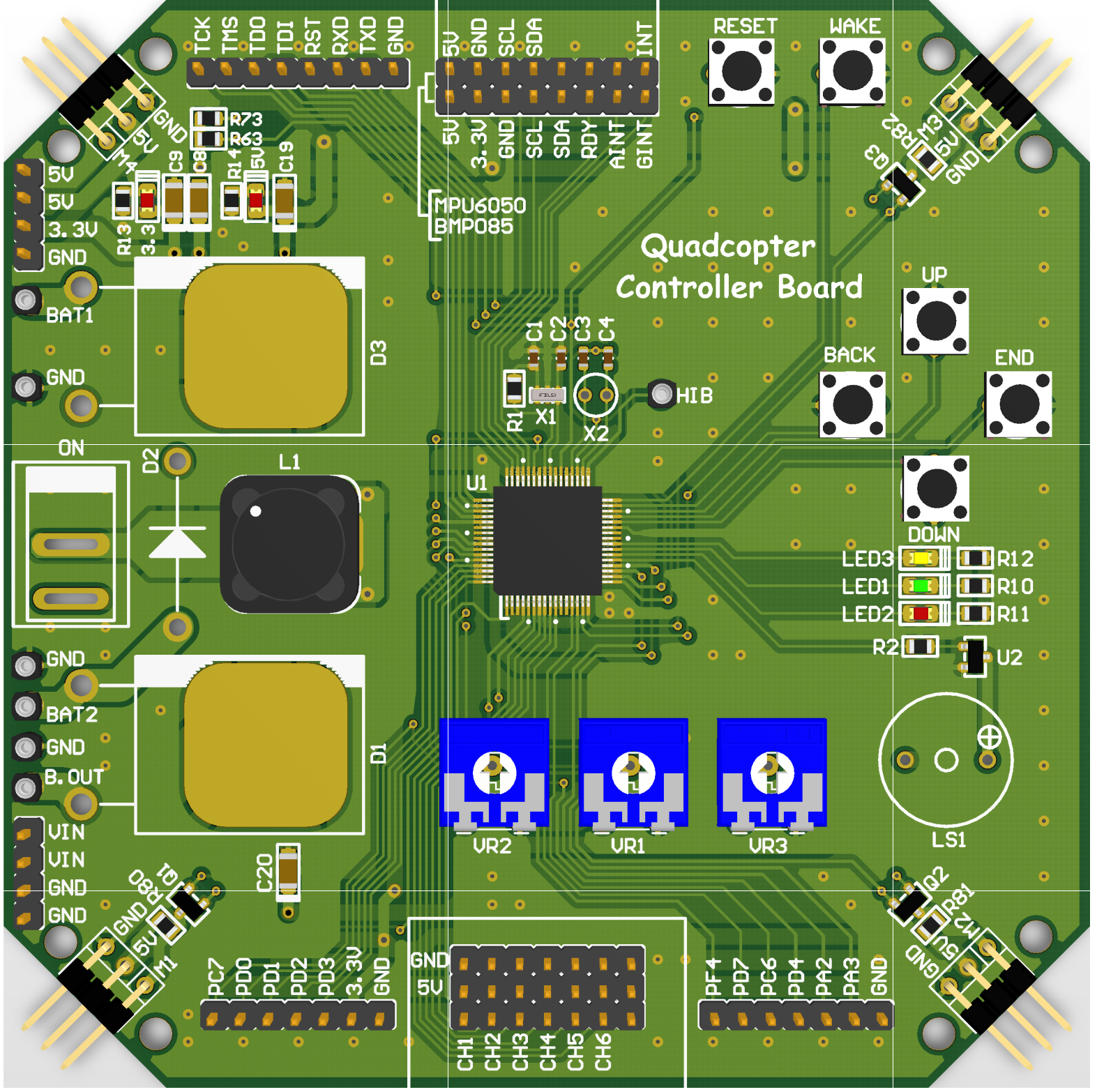
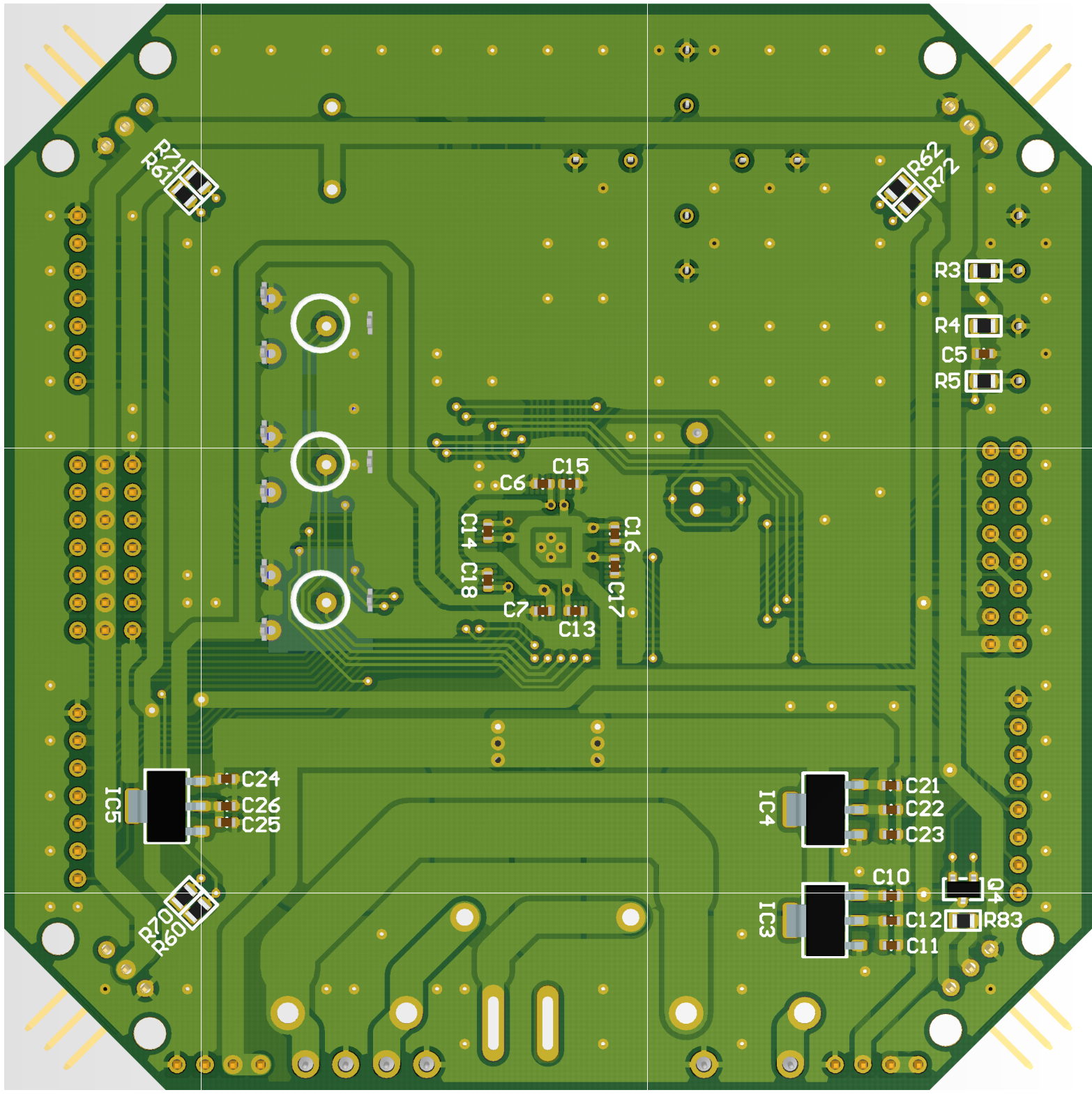
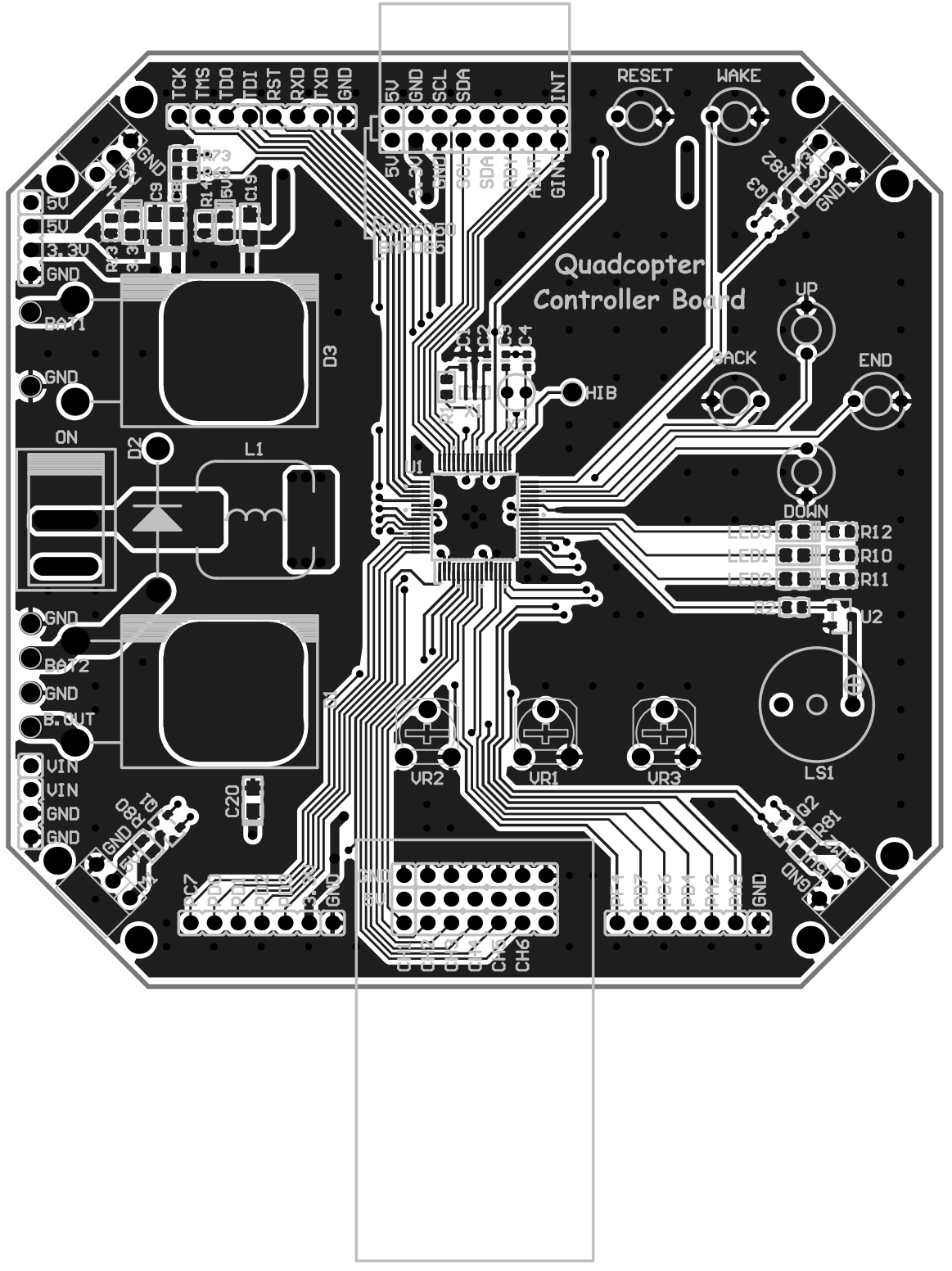
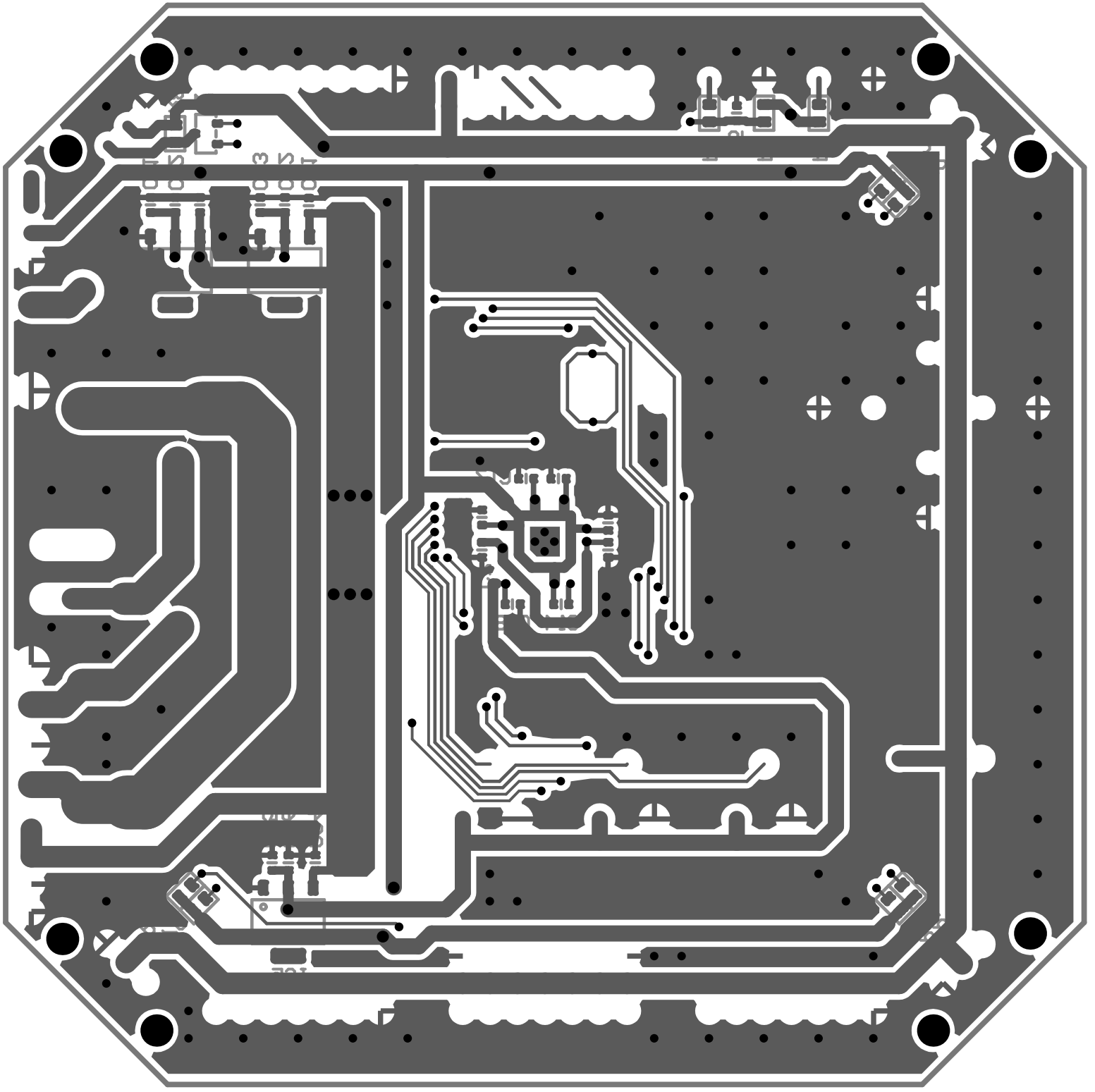

Microcontroller
U1
TM4C123GH6PM
HD2
Header 7
HD8
Header 7
HD1
SWD
RF 2.4GHz Receiver
HD3
HD4
HD5
Oscillator
R1
0R
C1
10pF
X1
16Mhz
C2
10pF
C3
22pF
X2
32768Hz
C4
22pF
Trimmer
VR1
10K
VR2
10K
VR3
10K
Speaker
R2
2K2
LS1
Speaker
U2
2N2222
GY-85 BMP085
HD6
GY-85 BMP085
GY-521 MPU6050
HD7
MPU6050
BUTTONs
S2
DOWN
S3
END
S4
UP
S5
BACK
RESET
R4
10K
R5
470R
C5
SMD Cap
10nF/16V
S6
RESET
PWM Motors
HD9
HD10
HD11
HD12
Filters
C13
100nF/16V
C14
100nF/16V
C15
100nF/16V
C16
100nF/16V
C17
100nF/16V
C18
100nF/16V
Power Supply
7.4VDC
D1
DSEI60-06A
D3
DSEI60-06A
D2
1N5822
SW1
ON/OFF
L1
150mH/3A
AMS1117-3.3V
IC3
C8
Cap Tan
1uF/16V
C10
SMD Cap
100nF/16V
C9
Cap Tan
1uF/16V
C11
SMD Cap
100nF/16V
C12
SMD Cap
10nF/16V
HD13
Power
HD14
Power
AMS1117-5V
IC4
C21
SMD Cap
100nF/16V
C19
Cap Tan
1uF/16V
C22
SMD Cap
100nF/16V
C23
SMD Cap
10nF/16V
AMS1117-3.3V
IC5
C24
SMD Cap
100nF/16V
C20
Cap Tan
1uF/16V
C25
SMD Cap
100nF/16V
C26
SMD Cap
10nF/16V
LED4
Red
R13
560R
LED5
Red
R14
1K
Filters
C6
100nF/16V
C7
100nF/16V
LEDs
LED1
Green
R10
330R
LED2
Red
R11
330R
LED3
Yellow
R12
330R
Quadcopter
Size: A3
Number: *
Revision: *
Date: 08:52:59
12/6/2015
Sheet * / *
File: Quadcopter.schdoc
Altium


Quadcopter
Controller Board
TCK TMS TDO TDI RST RXD TXD GND
5V GND SCL SDA INT
5V 3.3V GND SCL SDA RDY AINT GINT
MPU6050
BMP085
RESET
WAKE
UP
BACK
END
DOWN
HIB
ON
BAT1
BAT2
B.OUT
VIN
5V
3.3V
GND
D1
D2
D3
L1
U1
X1
X2
R1
R2
R10
R11
R12
R13
R14
R63
R73
R80
R81
R82
C1
C2
C3
C4
C8
C9
C19
C20
LED1
LED2
LED3
VR1
VR2
VR3
LS1
Q1
Q2
Q3
M1
M2
M3
M4
PC7 PD0 PD1 PD2 PD3 3.3V GND
PF4 PD7 PC6 PD4 PA2 PA3 GND
CH1 CH2 CH3 CH4 CH5 CH6


R71
R61
R62
R72
R3
R4
C5
R5
C15
C6
C14
C16
C18
C17
C7
C13
IC5
C24
C26
C25
IC4
C21
C22
C23
C10
Q4
IC3
C12
R83
C11
R70
R60


Quadcopter
Controller Board
TCK
TMS
TDO
TDI
RST
RXD
TXD
GND
5V
GND
SCL
SDA
INT
RESET
WAKE
UP
BACK
END
DOWN
HIB
ON
D2
L1
D3
U1
U2
LS1
VR1
VR2
VR3
C20
VIN
B.OUT
BAT2
BAT1
3.3V
CH6