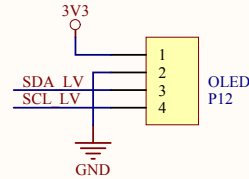
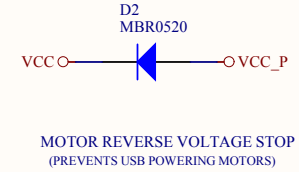
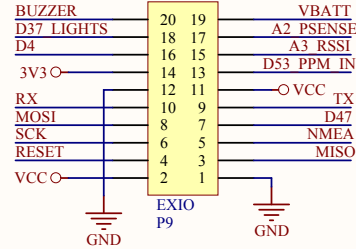
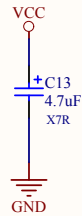
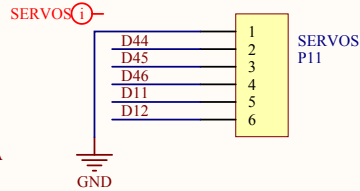
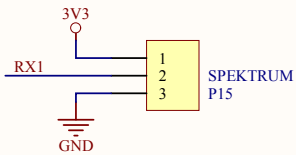
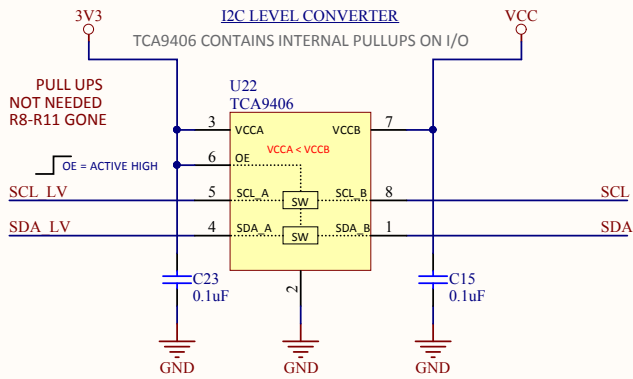
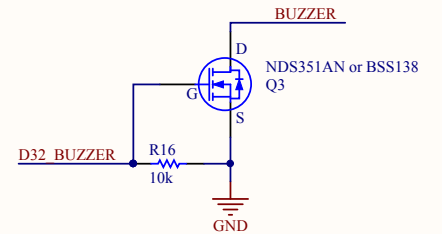
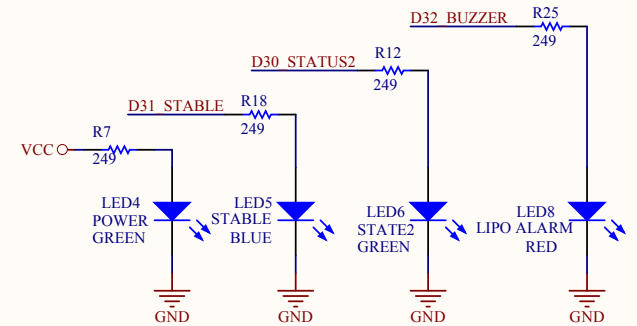
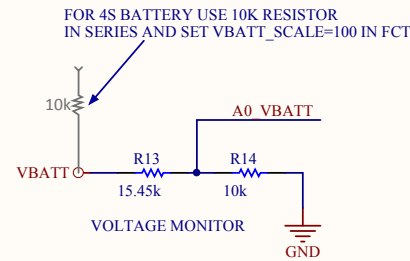
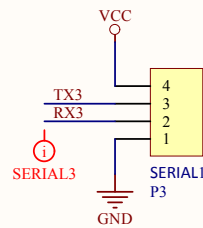
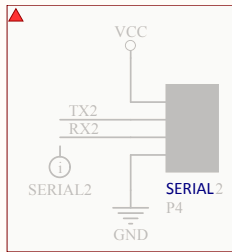
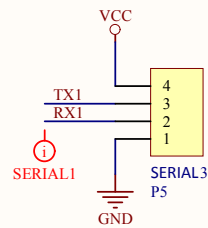
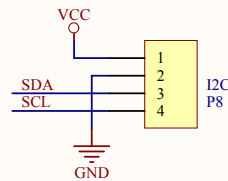
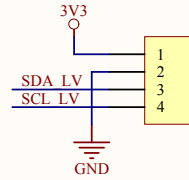
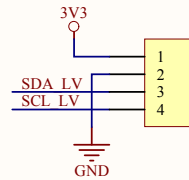
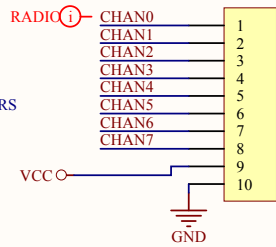
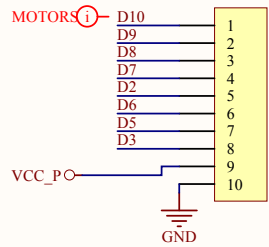


# QUADRINO NANO

QUAD HELICOPTER CONTROLLER



LEDs



Title <b>QUADRINO I/O</b>			COLINMACKENZIE.NET
Size: A4	Number: 2011-001	Revision: 1B	ST PETERSBURG FLORIDA, 33708
Date: 7/22/2015	Time: 6:22:11 PM	Sheet 2 of 2	
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GOOD THREAD ON HMC5883L ISSUES:  
<http://www.dsscircuits.com/articles/the-mysterious-hmc5883l.html>

## LEGEND

Heading	Identifier	Description
ARDUINO	Dx or Ax Pax - PLx	Arduino Pin Designation in Code Atmel Physical Chip Pin Name

INTERNAL PIN ASSIGNMENTS	NET NAME	ATMEGA PHY   ARDUINO
STABLE LED	D31_STABLE	PC6:59 <b>D31</b>
STATUS LED	D13_STATUS	PB7:26 <b>D13</b>
STATUS2 LED	D30_STATUS2	PC7:60 <b>D30</b>
BUZZER	D32_BUZZER	PC5:58 <b>D32</b>
VBATT MONITOR	A0_VBATT	ADC0:97 <b>A0</b>
PSENSE	A2_PSENSE	ADC2:95 <b>A2</b>
I2C CLOCK	SCL	PD0:43 <b>D21</b>
I2C DATA	SDA	PD1:44 <b>D20</b>
MPU9150 INTERRUPT	D26_MPU_INT	PA4:74 <b>D26</b>
RADIO CH[0:7]	CHAN[0:7]	PK0:7 <b>A[8:15]</b>
PPM_PIN_INTERRUPT (note1)	D53_PPM_IN	PB0:19 <b>D53</b>
RX RSSI-IN	A3_RSSI	ADC3:94 <b>A3</b>
LAND LIGHTS / DIS. PWR. PIN	D37_LIGHTS	PC0:53 <b>D37</b>
DIGITAL PIN 47 / TIMER 5	D47	PL2:37 <b>D47</b>
3.3V GPS POWER	D36_GPS_EN	PC1:54 <b>D36</b>

### ATMEGA PWM PINS REFERENCE

THE FOLLOWING PINS ARE CAPABLE OF OUTPUTTING PWM ON ATMEGA SERIES

<b>D2</b> PE4:6	<b>D3</b> PE5:7	<b>D4</b> PG5:1	<b>D5</b> PE3:5	<b>D6</b> PH3:15
<b>D7</b> PH4:16	<b>D8</b> PH5:17	<b>D9</b> PH6:18	<b>D10</b> PB4:23	<b>D11</b> PB5:24
<b>D12</b> PB6:25	<b>D13</b> PB7:26	<b>D44</b> PL5:40	<b>D45</b> PL4:39	<b>D46</b> PL3:38

(1) PPM PIN CAN BE THROTTLE CHANNEL OR SEPERATE PIN

MOTOR ASSIGNMENTS	COLOR	ATMEGA PHY   ARDUINO
MOTOR1	ORANGE	PE5 <b>D3</b>
MOTOR2	YELLOW	PE3 <b>D5</b>
MOTOR3	GREEN	PH3 <b>D6</b>
MOTOR4	BROWN	PE4 <b>D2</b>
MOTOR5	PURPLE	PH4 <b>D7</b>
MOTOR6	BLUE	PH5 <b>D8</b>
MOTOR7	WHITE	PH6 <b>D9</b>
MOTOR8	GRAY	PB4 <b>D10</b>

SERIAL & DEFAULT USAGE	ATMEGA PHY
<b>UART0</b> MW-GUI	RX <b>D0</b> TX <b>D1</b>
<b>UART1</b> SPEKTRUM / S-BUS	RX1 <b>PD2:45</b> TX1 <b>PD3:46</b>
<b>UART2</b> GPS	RX2 <b>PH0:12</b> TX2 <b>PH1:13</b>
<b>UART3</b>	RX3 <b>PJ0:63</b> TX3 <b>PJ1:64</b>

### SERVO CONNECTOR

SQ.PIN1	SERVO1	SERVO2	SERVO3	SERVO4	SERVOS
ATMEL	<b>GND</b>	<b>D44</b>	<b>D45</b>	<b>D46</b>	<b>D11</b> <b>D12</b>
COLOR	BLACK	PURPLE	YELLOW	GREEN	BROWN BLUE

SERVO ASSIGNMENTS	SHARED PIN SOFT-PWM   HARD-PWM	ATMEGA SOFT-PWM   HARD-PWM
SERVO1		PC3 <b>D34</b>   PL5 <b>D44</b>
SERVO2		PC2 <b>D35</b>   PL4 <b>D45</b>
SERVO3		PC4 <b>D33</b>   PL3 <b>D46</b>
SERVO4		PC0 <b>D37</b>   PB5 <b>D11</b>
SERVO5	M3 MOTOR	PH3 <b>D6</b>   PB6 <b>D12</b>
SERVO6	M4 MOTOR M3	PE4 <b>D2</b>   PH3 <b>D6</b>
SERVO7	M2 MOTOR M5	PE3 <b>D5</b>   PH4 <b>D7</b>
SERVO8	M1 MOTOR M6	PE5 <b>D3</b>   PH5 <b>D8</b>

SENSORS	I2C BUS ADDRESSING	HEX ADDRESS
<b>GYRO</b> MPU9150	8Bit	0xD0
	7Bit	0x68
<b>ACC</b> MPU9150	8Bit	0xD0
	7Bit	0x68
<b>MAG</b> MPU9150	8Bit	0x18
	7Bit	0x0C
<b>BARO</b> MS5611	8Bit	0xEC
	7Bit	0x76

RADIO ASSIGNMENTS	CHANNEL	COLOR	ARDUINO PIN
CH1	THROTTLE	GRAY	<b>A8</b>
CH2	ROLL	WHITE	<b>A9</b>
CH3	PITCH	BLUE	<b>A10</b>
CH4	YAW	PURPLE	<b>A11</b>
CH5	AUX1	BROWN	<b>A12</b>
CH6	AUX2	GREEN	<b>A13</b>
CH7	AUX3	YELLOW	<b>A14</b>
CH8	AUX4	ORANGE	<b>A15</b>

ARDUINO PIN	EXPANSION PORT LOOKING AT PCB BOTTOM SIDE WITH THE HEADER ON THE RIGHT SIDE	ARDUINO PIN
	P1 <b>GND</b>	P2 <b>5.0V (VCC)</b>
	P3 <b>MISO</b>	P4 <b>RESET</b>
	P5 <b>RESERVED</b>	P6 <b>SCK</b>
<b>D47</b>	P7 <b>DIGITAL PIN</b>	P8 <b>MOSI</b>
	P9 <b>(USB) TX</b>	P10 <b>RX (USB)</b>
	P11 <b>5.0V (VCC)</b>	P12 <b>GND</b>
<b>D53</b>	P13 <b>PPM-IN (ALT)</b>	P14 <b>3.3V</b>
<b>A3</b>	P15 <b>RX RSSI-IN</b>	P16 <b>PWM</b>
<b>A2</b>	P17 <b>PSENSE</b>	P18 <b>LANDLIGHTS</b>
<b>A0</b>	P19 <b>VBATT</b>	P20 <b>BUZZER</b>
		<b>D4</b>
		<b>D37</b>
		<b>D32</b>

Title		
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