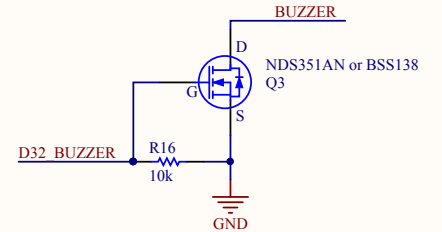
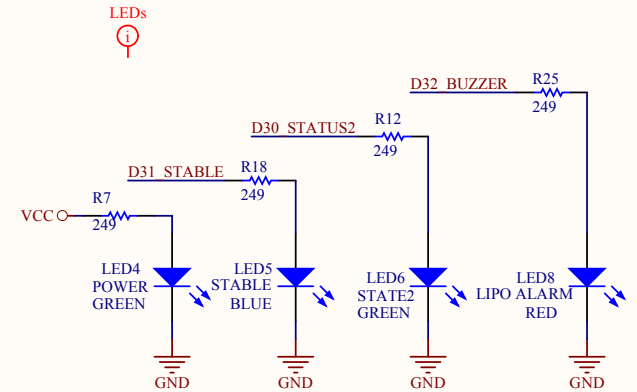
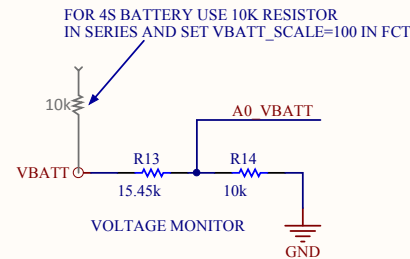
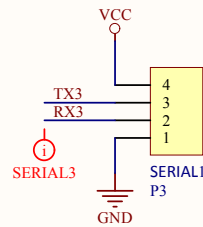
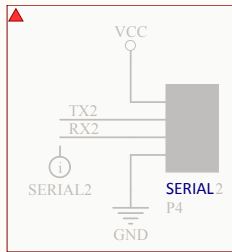
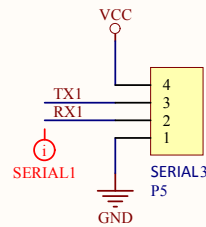
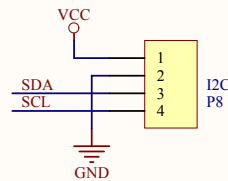
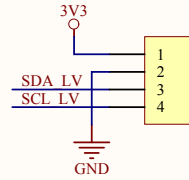
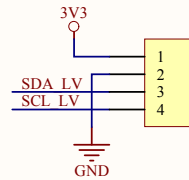
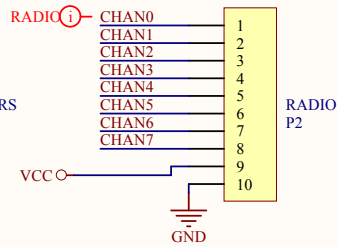
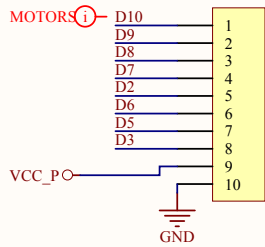
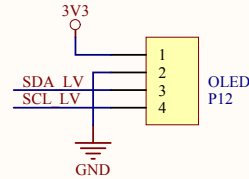
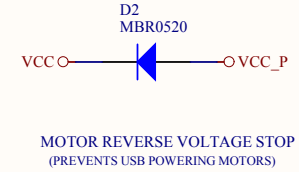
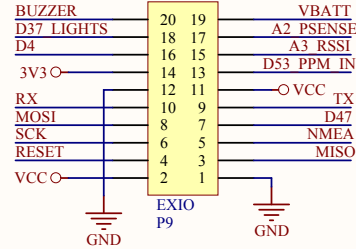
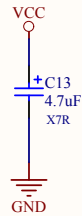
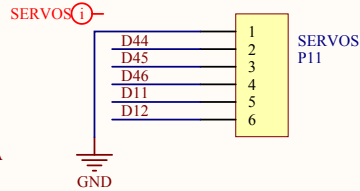
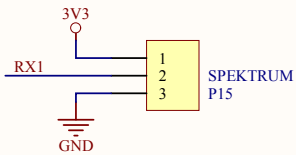
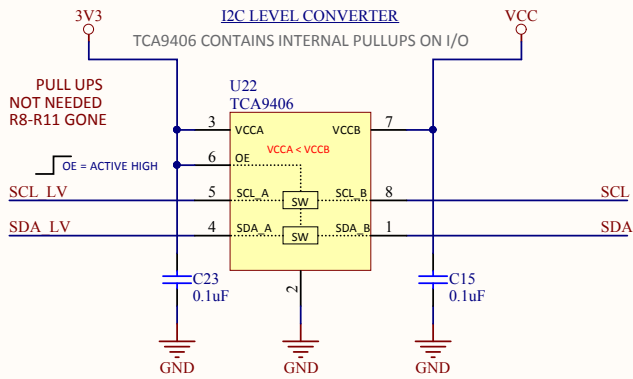


QUADRINO NANO

QUAD HELICOPTER CONTROLLER



Title QUADRINO I/O			COLINMACKENZIE.NET
Size: A4	Number: 2011-001	Revision: 1B	ST PETERSBURG FLORIDA, 33708
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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 D31
STATUS LED	D13_STATUS	PB7:26 D13
STATUS2 LED	D30_STATUS2	PC7:60 D30
BUZZER	D32_BUZZER	PC5:58 D32
VBATT MONITOR	A0_VBATT	ADC0:97 A0
PSENSE	A2_PSENSE	ADC2:95 A2
I2C CLOCK	SCL	PD0:43 D21
I2C DATA	SDA	PD1:44 D20
MPU9150 INTERRUPT	D26_MPU_INT	PA4:74 D26
RADIO CH[0:7]	CHAN[0:7]	PK0:7 A[8:15]
PPM_PIN_INTERRUPT (note1)	D53_PPM_IN	PB0:19 D53
RX RSSI-IN	A3_RSSI	ADC3:94 A3
LAND LIGHTS / DIS. PWR. PIN	D37_LIGHTS	PC0:53 D37
DIGITAL PIN 47 / TIMER 5	D47	PL2:37 D47
3.3V GPS POWER	D36_GPS_EN	PC1:54 D36

ATMEGA PWM PINS REFERENCE

THE FOLLOWING PINS ARE CAPABLE OF OUTPUTTING PWM ON ATMEGA SERIES

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

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

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

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

SERVO CONNECTOR

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

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

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

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

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

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