

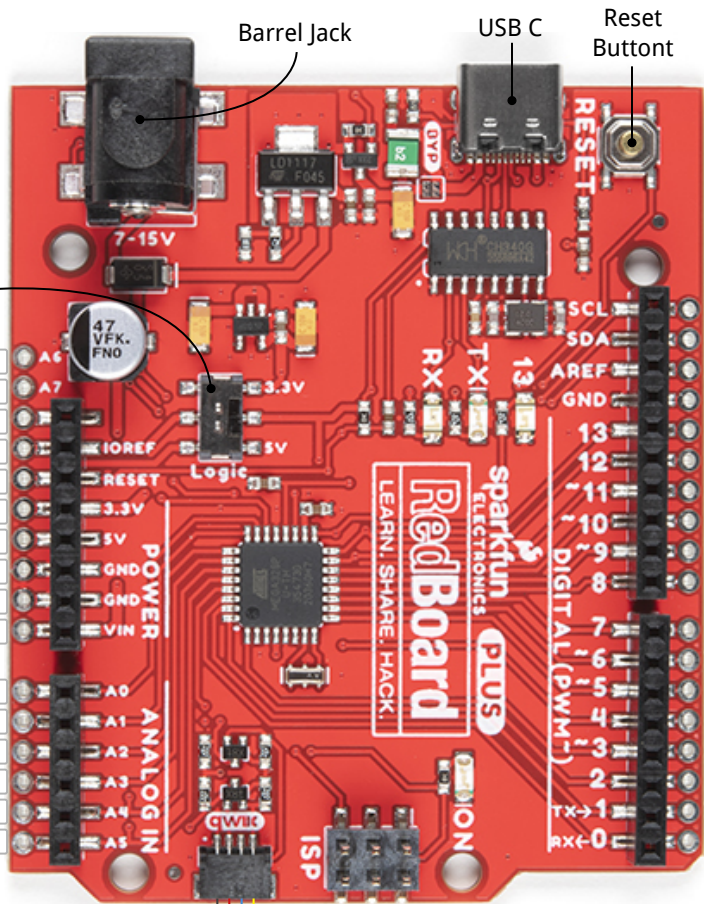
RedBoard Plus

DEV-18158

Programmed with Arduino

16 MHz

Legend		
Name	Port	PWM
Power	UART	Ext Int
GND	I2C	PC Int
Control	SPI	USB
Arduino	ADC	Misc

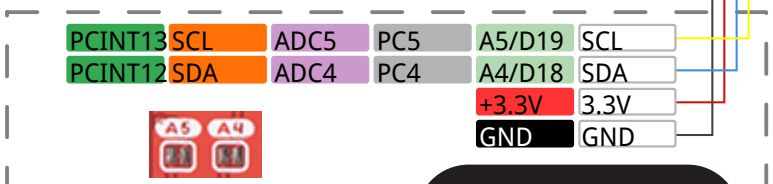


I/O Logic Level Switch

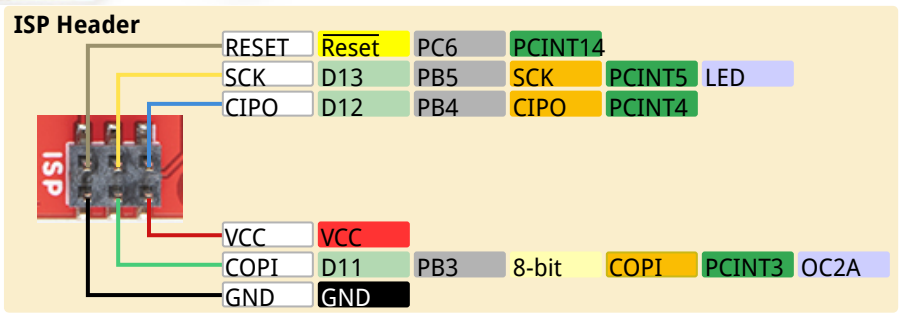
ADC6	A6	A6
ADC7	A7	A7
		NC
IOREF	IOREF	
PCINT14	PC6	Reset
		RESET
		3.3V
		5V
		GND
		GND
		Vin

PCINT8	ADC0	PC0	A0/D14	A0
PCINT9	ADC1	PC1	A1/D15	A1
PCINT10	ADC2	PC2	A2/D16	A2
PCINT11	ADC3	PC3	A3/D17	A3
PCINT12	SDA	ADC4	A4/D18	A4
PCINT13	SCL	ADC5	A5/D19	A5

SCL	A5/D19	PC5	ADC5	SCL	PCINT13
SDA	A4/D18	PC4	ADC4	SDA	PCINT12
AREF	AREF				
GND	GND				
13	D13	PB5	SCK	PCINT5	LED
12	D12	PB4	CIPO	PCINT4	
11	D11	PB3	8-bit	COPI	PCINT3
10	D10	PB2	8-bit	CS	PCINT2
9	D9	PB1	8-bit	PCINT1	OC1A
8	D8	PB0	PCINT0	ICP1	CLKO
7	D7	PD7	PCINT23	IN1	
6	D6	PD6	8-bit	PCINT22	OC0A
5	D5	PD5	8-bit	PCINT21	OC0B
4	D4	PD4	PCINT20	T0	XCK
3	D3	PD3	8-bit	INT1	PCINT19
2	D2	PD2	INT0	PCINT18	
TX→1	D1	PD1	TXD	PCINT17	
RX←0	D0	PD0	RXD	PCINT16	



- Cut jumpers A4 and A5 on back of board when using pins for analog input to disable logic level conversion used for I2C pins.



Power
VIN: 7V-15V via barrel jack
5V (VBUS): 5V via USB C
 or 5V voltage regulator (LM1117)
3.3V: Output of 3.3V voltage regulator (AP2112)
I/O logic levels (IOREF, VCC): 5V or 3.3V depending on switch

ATmega328P 8-bit Atmel AVR
Absolute maximum VCC: 6V
Maximum current for chip: 200mA
Maximum current per pin: 40mA
Recommended current per pin: 20mA
Flash Program Memory: 32kB
EEPROM: 1kB
Internal SRAM: 2kB
ADC: 10-bit
PWM: 8-bit

LEDs
Power (ON): Green
User (13): Blue
RX: Yellow
TX: Green

USB
 - USB Pins are broken out to pads on back.
 - Data Pins are connected to the CH340.
 - Add solder to BYP jumper to bypass fuse.

V	VBUS
D-	D-
D+	D+
GND	GND

