OPEN-SMART UNO R3 DIY Parts Soldering Guide

Note:

(1) Recommend using a constant temperature soldering station and set soldering temperature of 350 degrees Celsius.

(2) Please pay attention to ventilation when soldering.

(3) Soldering iron should not stay on the pad over 3 seconds.

(4) Please turn off the soldering station in the end and wash your hands.

Soldering in the order shown in the following table:

STEP	Value	Quantity	Part Number	NOTE
STEP1	1kOhm Resistor	4	R2, R3,R4,R5	Pins does not distinguish between positive and negative.
STEP2	10kOhm Resistor	1	R1	
STEP3	USB to UART module	1	MOD1	Pay attention to the direction of the module.
STEP4	2PIN white Button	1	RESET	
STEP5	22pF Ceramic Capacitors	2	C1, C2	Pins does not distinguish between positive and negative.
STEP6	100nF Ceramic Capacitors (104)	3	C3, C4, C5	
STEP7	3pin Round hole pin header	1	J2	
STEP8	28PIN-DIP socket	1	U1	Pay attention to the direction
STEP9	Buzzer	1	BUZ1	Longer leg of the LED is the positive electrode, and insert it into the pad near "+".
STEP10	47uF Aluminum electrolytic capacitor	1	C6	
STEP11	Red LED	1	LED1	
	Green LED	1	LED2	
	Yellow LED	2	LED3, POWER	
STEP12	10pin yellow pin header	1	J3	
STEP13	8pin yellow pin header	1	J4	
STEP14	2X3P Pin Header	1	J5	
STEP15	6pin blue pin header	1	J7	
STEP16	8pin red pin header	1	J6	
STEP17	USB socket	1	J1	You can upload code to the board via it.
STEP18	4pin button	1	K1, K2, K3	

Then, you can plug the HC-49S **16MHz crystal oscillator** onto the 3pin Round hole pin header.

And then, you can plug **ATmega328P-PU** onto the 28PIN-DIP socket, please pay attention to the **direction** and be careful not to bend the pins.

After you have done all of the previous steps, you can use it as UNO R3 board because the ATmega328P-PU has been burned UNO R3 bootloader.