

Instructions for the use of welding exercise plate of SMD components

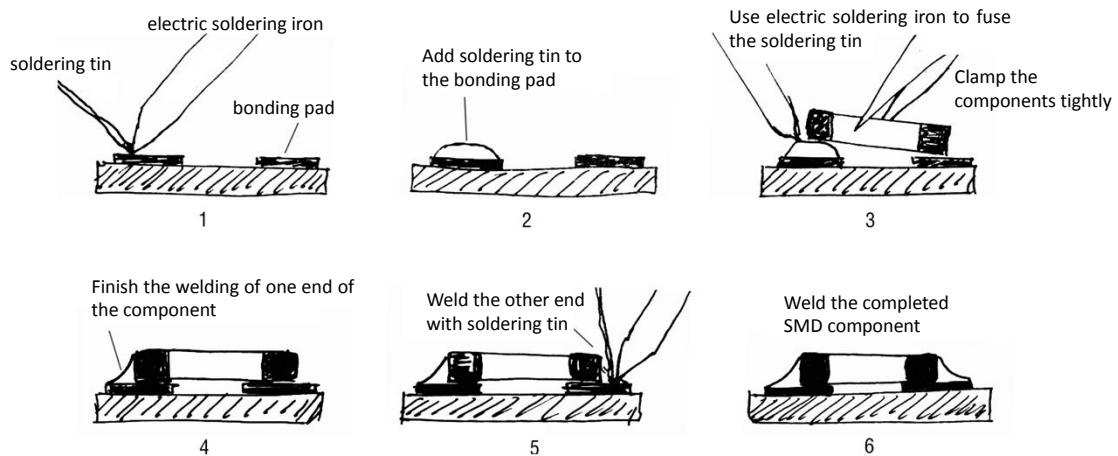
1. Try to choose soldering tin wire with the diameter of 0.6mm and 63% content of soldering tin, and select the pointed or knife edge electric soldering iron with 20W-30W for welding.

2. Welding steps:

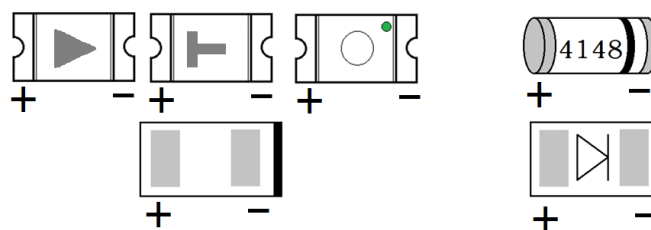
- a. weld the 1206 packaged components (R1-R12) ;
- b. weld the 0805 packaged components (C1-C12, R13-R24) ;
- c. weld the 0603 packaged components (R34-R47, C13-C26) ;
- d. weld the 0402 packaged components (the list on the rightmost) ;
- e. weld the components within the circle area in the middle .

The three lists on the left and the three lists on the rights are areas for welding practice, there is no requirement about the model, but it requires the correctness of the component size. The circle part in the middle is the area for practical operation, only the welding with specific component models can make sure the fulfillment of its functions.

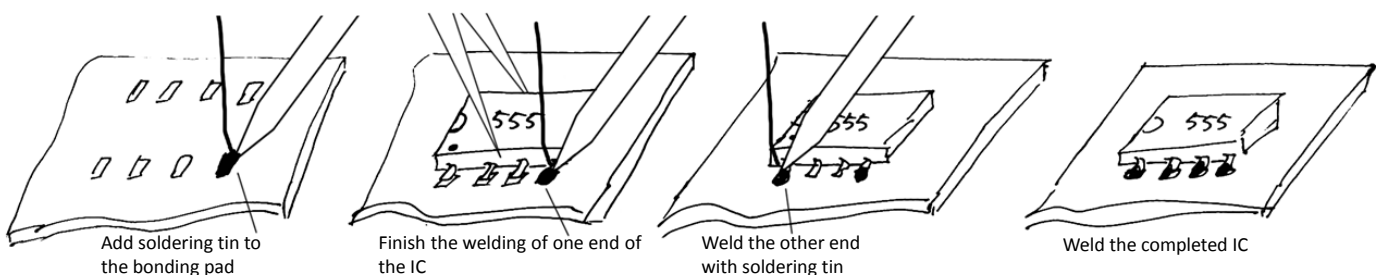
3. The methods for components welding are shown in figure. Firstly, add soldering tin to the welding spot, clamp the component with tweezers and weld one end of the component, and then weld the other end later.



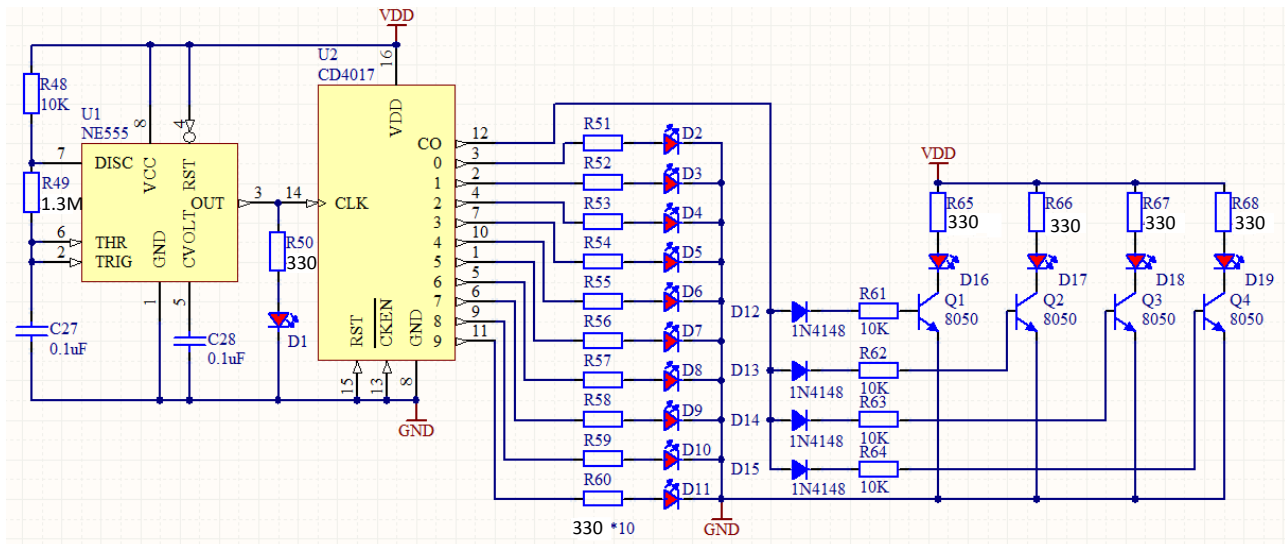
4. The differences of the positive and negative electrode of LED and 1N4148 are as shown in figure.



5. IC welding is shown as the figure: face to the IC characters, the left bottom is 1 pin, and the order of the pin starts from the 1 pin in anticlockwise. Facing the notch or dot to the notch or dot on the circuit board.



6. Schematic circuit diagram



7. Components list

Serial number	Packaging	Item Name	Model number	Quantity	Mark number
1	1206	Resistor	Random	12	R1-R12
2	0805	Capacitor	Random	12	C1-C12
3	0805	Resistor	Random	12	R13-R24
4	0603	Resistor	Random	14	R34-R47
5	0603	Capacitor	Random	14	C13-C26
6	0402	Capacitor or capacitor	Random	14	the list on the rightmost
7	0805	Resistor	330Ω	15	R51-R60、R50、R65-R68
8	0805	LED		11	D2-D11、D1
9	0805	LED		4	D16-D19
10	SOT23	Triode	J3Y	4	Q1-Q4
11	LL34	Diode	4148	4	D12-D15
12	0805	Resistor	10K	5	R48、R61-R64
13	0805	Resistor	1.3M	1	R49
14	0805	Capacitor	0.1uF	2	C27、C28
15	SO08	IC	555	1	U1
16	SO16	IC	4017	1	U2