

Assembly Instructions

Step 1: Dismantle the USB plug ,the antenna socket,the IR receiver and the shell of your TV Dongle. (Reference Figure 1 , 2, 3)

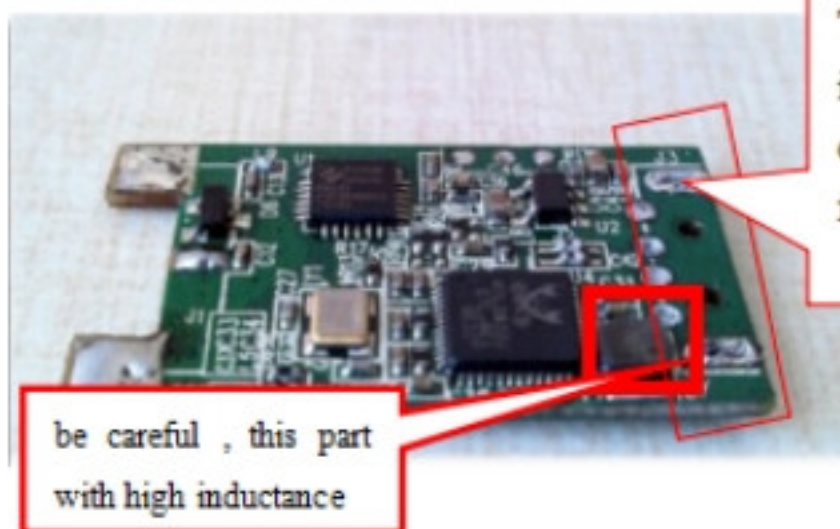


Figure 1



Figure 2

With High-power soldering iron, you will complete the dismantlement soon. We use hot air gun to do it. First , add the Liquid Flux on where you blow , then Fuse components with hot air gun. finally,use alcohol to clean up the circuit board.



This is the USB interface,so you can not be blow it for too long

be careful , this part with high inductance

Figure 3

Step 2: Install the USB sockets, patch, electrolytic capacitors and other components. (Reference Figure 4 , 5, 6)

Use the soldering iron to make a solder pad on the circuit board, then put the USB socket on it. There are two small positioning holes on the board, so you can place the USB socket on the holes and solder with rosin. After fixing the four feet with soldering, the USB socket welding is over. According to the value of the circuit board marked, you can solder the components piece by piece with soldering iron , or solder them disposable with hot air gun. The capacitor and resistance components is one more in package to prevent an accidental loss.



Figure 4

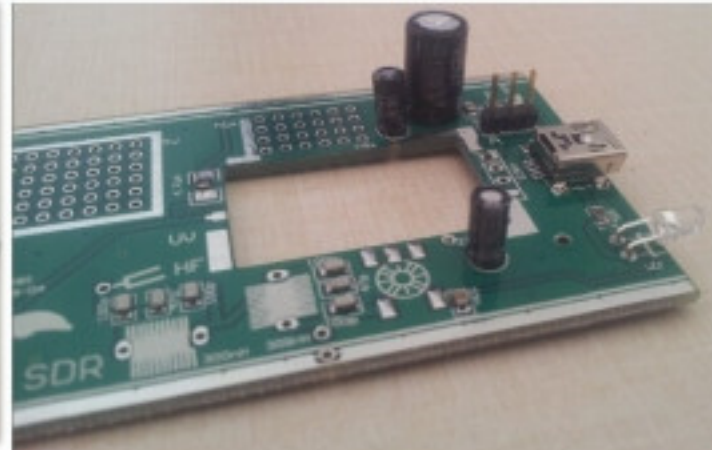


Figure 5

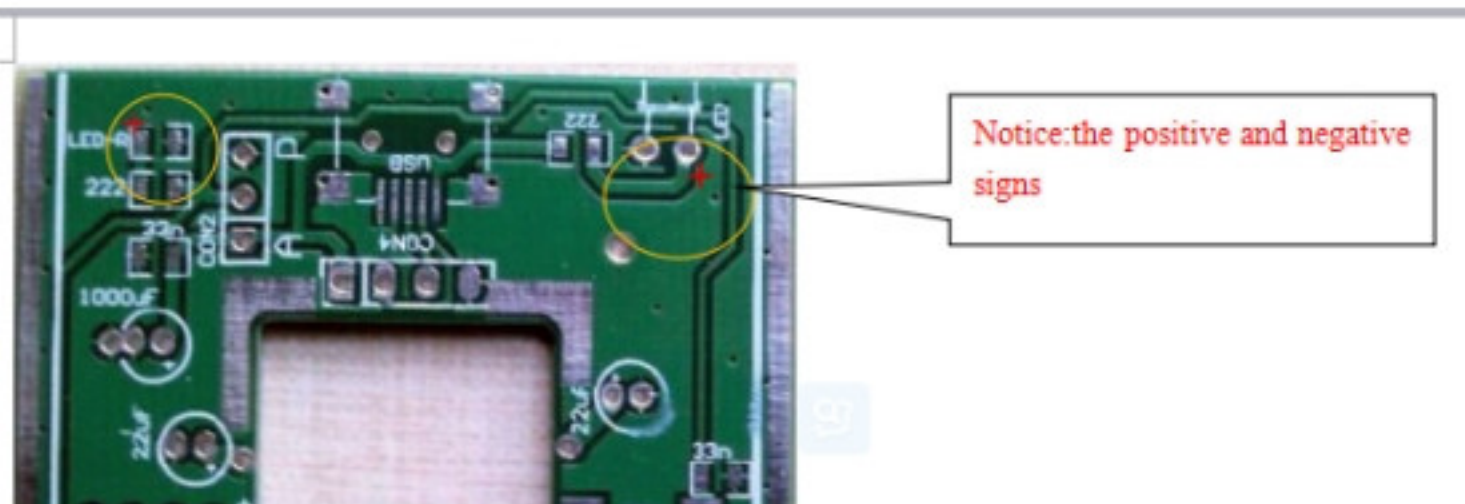


Figure 6

Step 3: Use a 5mm diameter drill to make two low-pass filter coils . 8 circles.(Reference Figure 7,8)



Figure 7



Figure 8

Step 4: Make broadband high-frequency transformers (Reference Figure 9,10)

Fold the fine enameled wire back and forth twice into three parts.

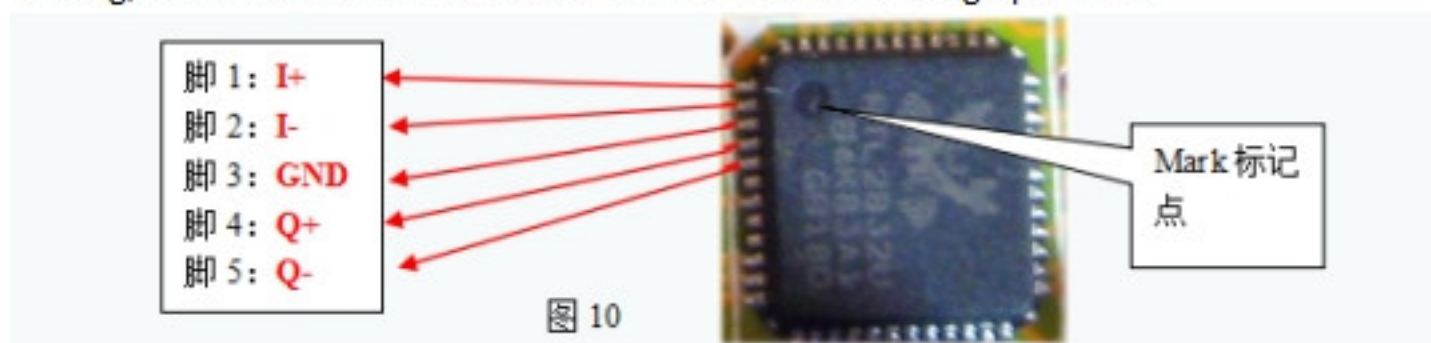
Hang one of them on a small iron hook, then put the hook on the electric drill, start the drill slowly to make three enameled wire twisted together. Next, the three-stranded enameled wire was wound around the core in eight turns.



Figure 9

Step 5: Solder the high-frequency transformer leads to pins 4 and 5 of the RTL2832. (Reference Figure 10,17)

This is a skillful work for using a very thin soldering iron head. Chip pin is only a little bit, high-frequency transformer lead on the good tin in advance, remain a little bit of solder on the wire end, align the wire lead to the pin. It is best to pre-coated in the pin some sticky rosin paste, so that the thread into the pin, the rosin paste will stick a little thin thread fixed role. At this time with a small tip of a clean tip can be welded to the point. The best is to look good with a magnifying glass to help observe and operate. The circuit board is small and light, easy to shift in welding, it is recommended to use a small vise fixed live welding operation.



Step 6: Set the TV Dongle and the small board circuit on the middle of a large circuit board. (Reference Figure 11,12)

Position the circuit board in the frame, then with high-power soldering iron accumulation in the four corners of the circuit board with the big circuit board around the grounding part of the box can be fixed. In the opposite position of the circuit board is also a good grounding with a pile of tin welding box and four corners.

Step 7: Solder the leads of high-frequency transformer on the circuit board.(Reference Figure 11,12)

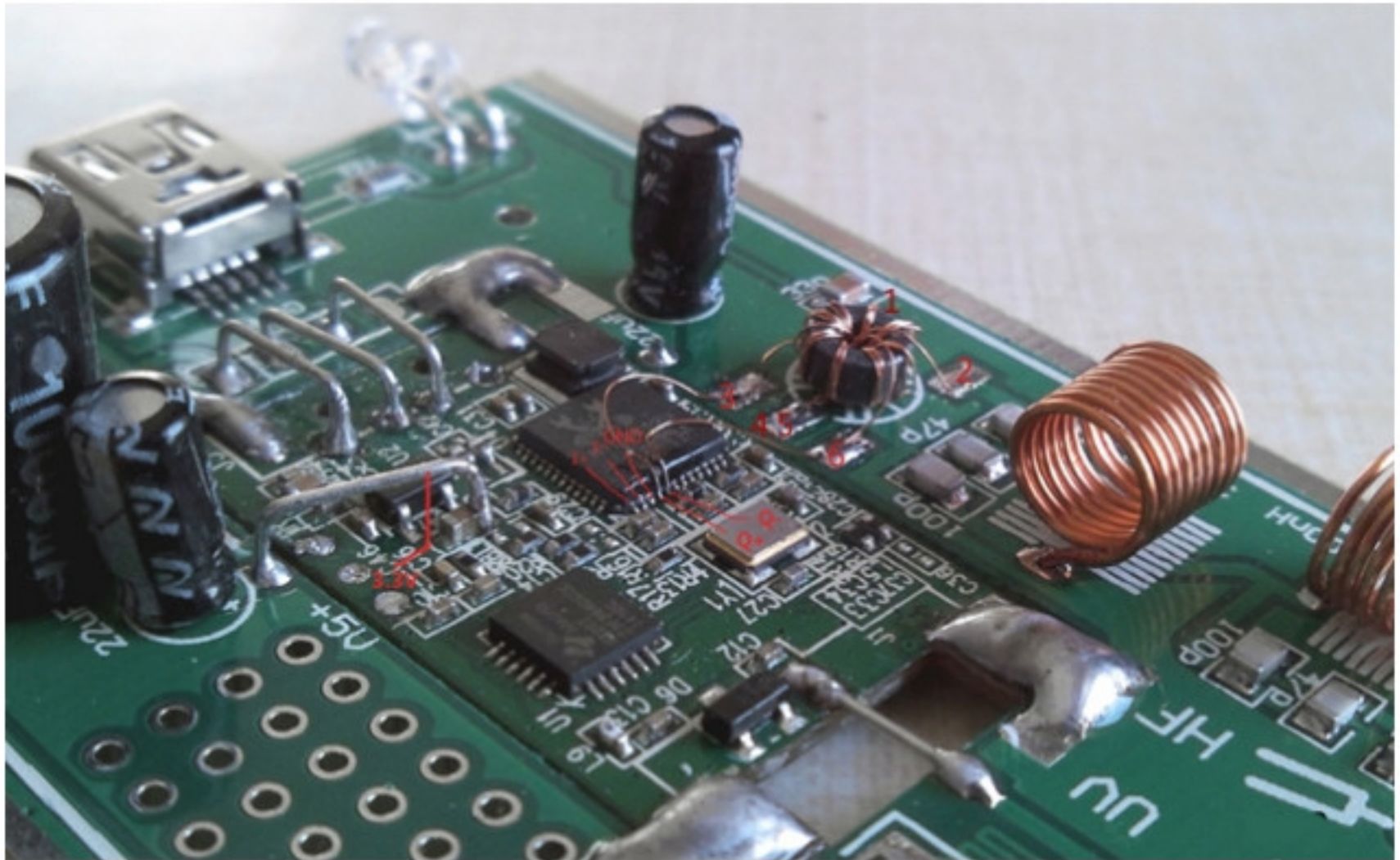


Figure 11

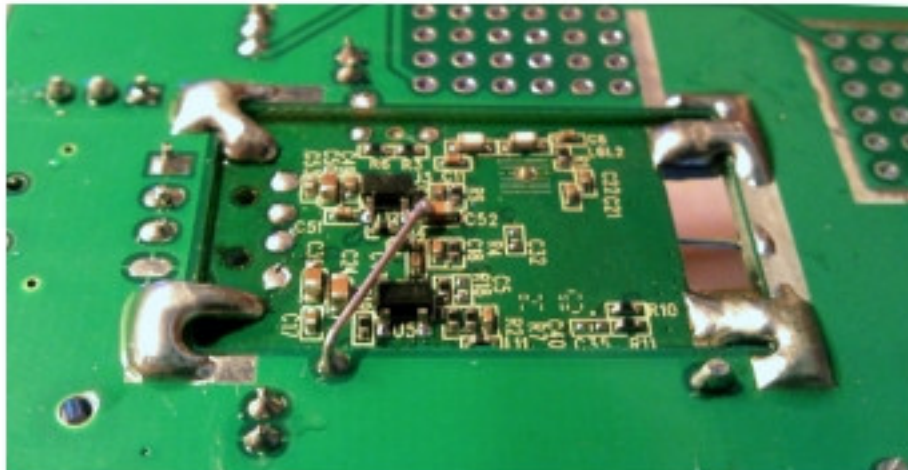


Figure 12

Step 8 : Solder the lead wires as shown in Figs. 11 and 12.

3 wires of USB connection,2 of power jumper and 1 of antenna lead,a total of six.

Step 9: Solder two low-pass filter coils on the circuit board.The coil spacing should be drawn as wide as the pins.Then low-pass filter part of the production is complete.(Reference Figure 13)

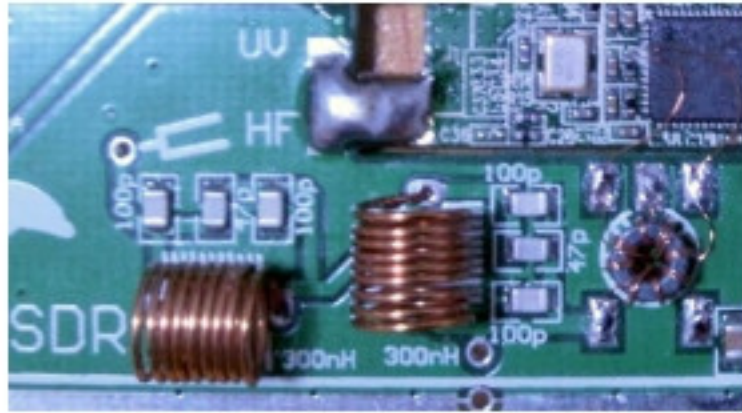


Figure 13

Step 10: Solder SMA lead.(Reference Figure 14)

Step 11: According Figure 14, check the circuit board you soldered.

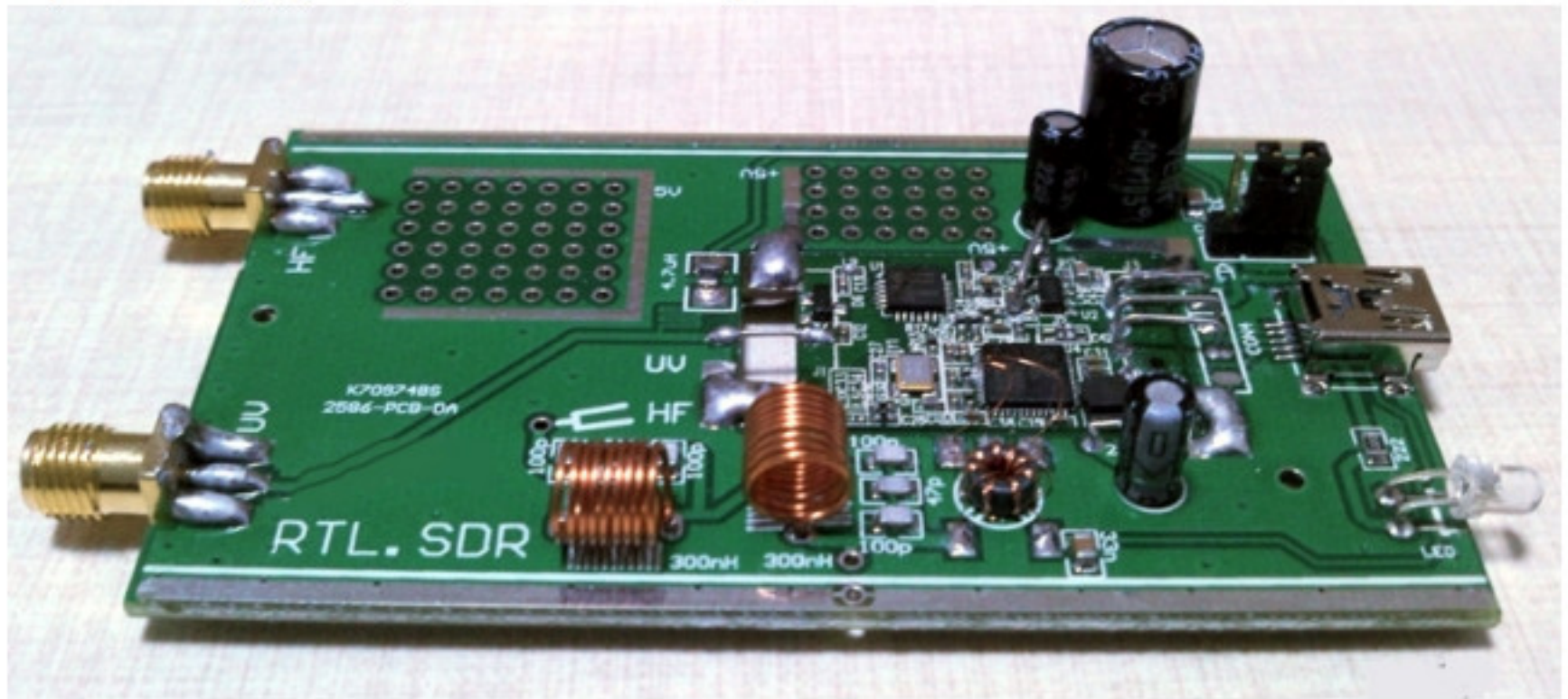


Figure 14

Step 12: Test it.

Connect the USB socket to the computer, the indicator light will light up and the computer will detect it.

Step 13: Install the shell.

After soldering and installation, put the board into the aluminum box. If the PCB is difficult to plug in, you can polish it with file.

The entire production is complete as Figure 15 shown.





Figure 15

The schematic is as follows (Figure 16):

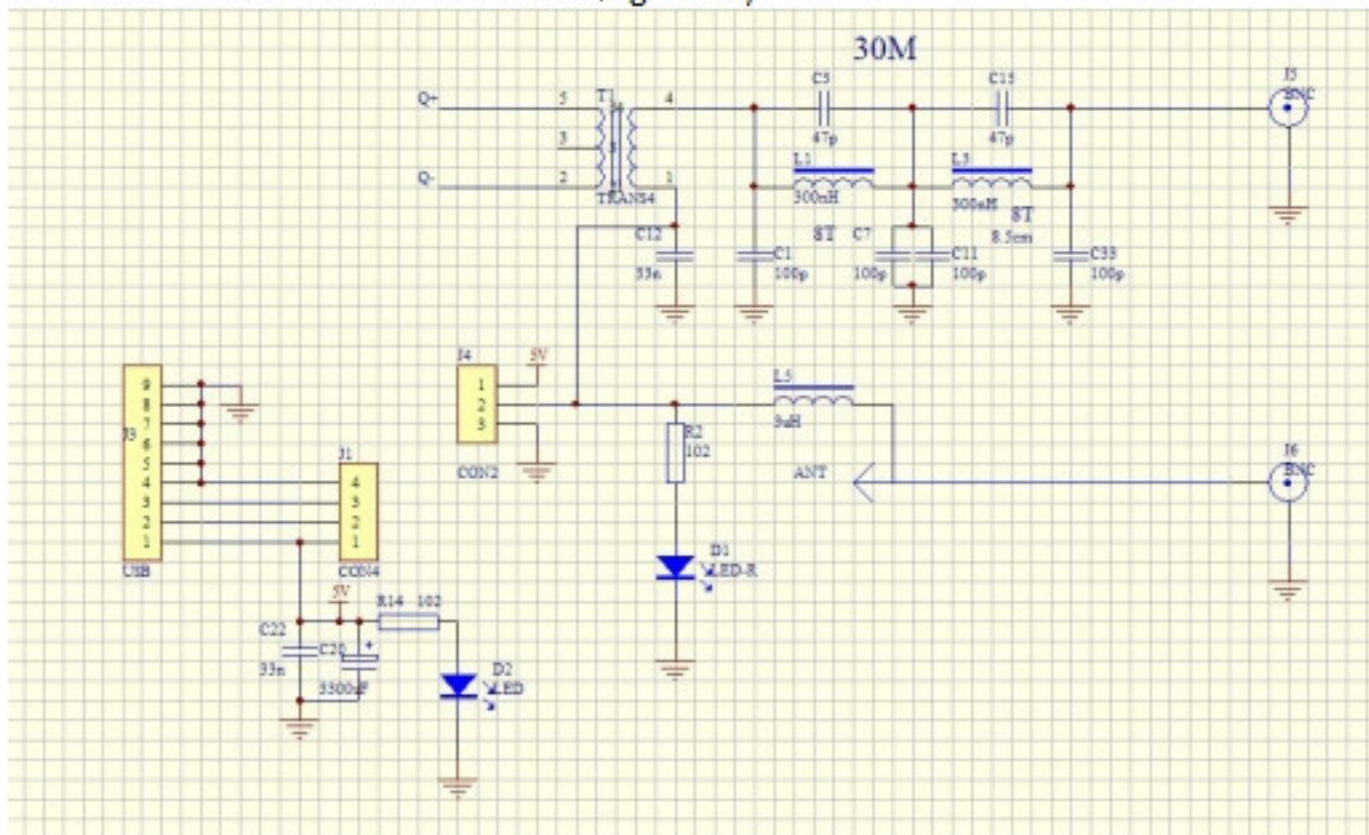
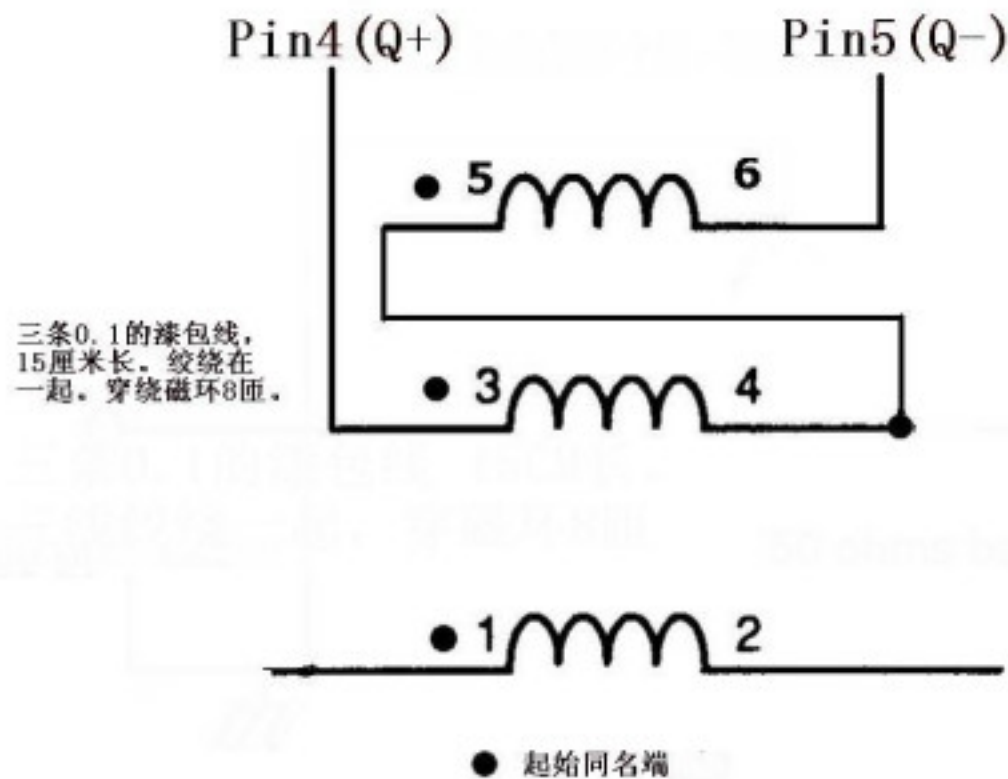


Figure 16



三条0.1的漆包线，
15厘米长。绞绕在
一起。穿绕磁环8匝。