062 LCD Oscilloscope

Assembly Notes

1. **Only install parts listed in the part list attached with the kit.**
2. **Install all parts at the back first.**
3. **Please pay special attention when installing following parts.**
   1) The polarity of D1 and D7 (shown in Fig. 1 below)

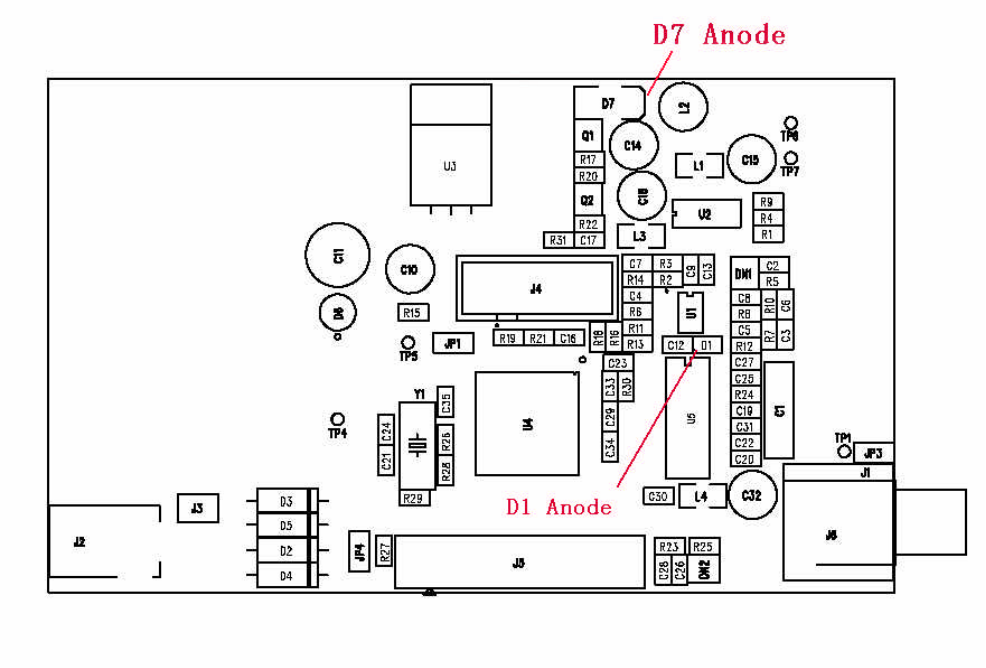


Fig. 1

   2) Reverse C14, i.e. put its negative pin into the square pad. This is because of a design error.
   3) Connect pin 16 of J5 to the end of R28 that is closer to R26 with a piece of wire. (Fig. 2) **[Note: This wire is for period measurement only. For firmware of version 113-06201-060 or later this wire is not required since the period measurement function had been removed. Same function can be achieved by setting timebase to a slow value.]**

4. **After all parts at back has been installed check to ensure no errors. Insert power supply if every thing is fine and measure voltage at TP5 to see if it is +5V.**
5. **If voltage at TP5 is ok then short JP1 and check the voltage again.**
6. **If no abnormal found, then go ahead to install the rest parts at the front.**

   You may need to cut some soldered leads on the front side flat to avoid conflict with the LCD panel, especially those of J4.

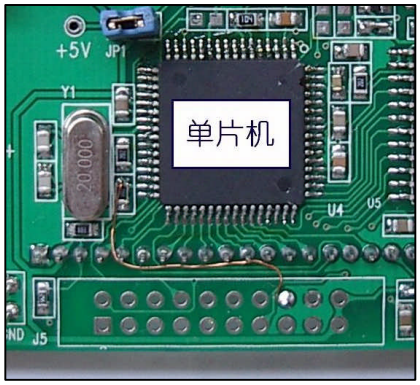


Fig. 2

7. **When install the LCD panel solder pins to LCD module first (Fig. 3 & 4). The long row of pins should be placed at the side with signal labels. Since there are same holds on both side of the module it is easy to misplace pins to the other side. AVOID THIS!!!**

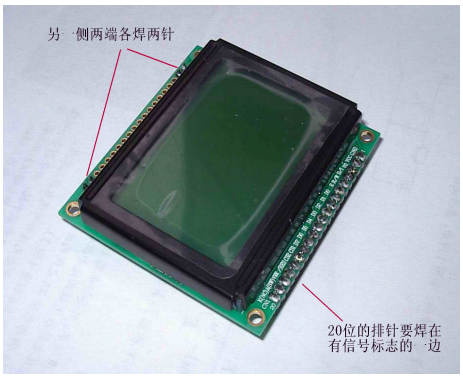


Fig. 3

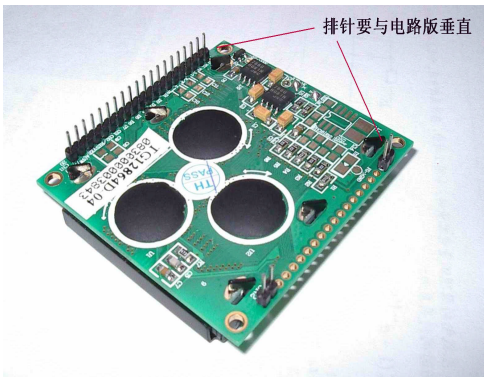
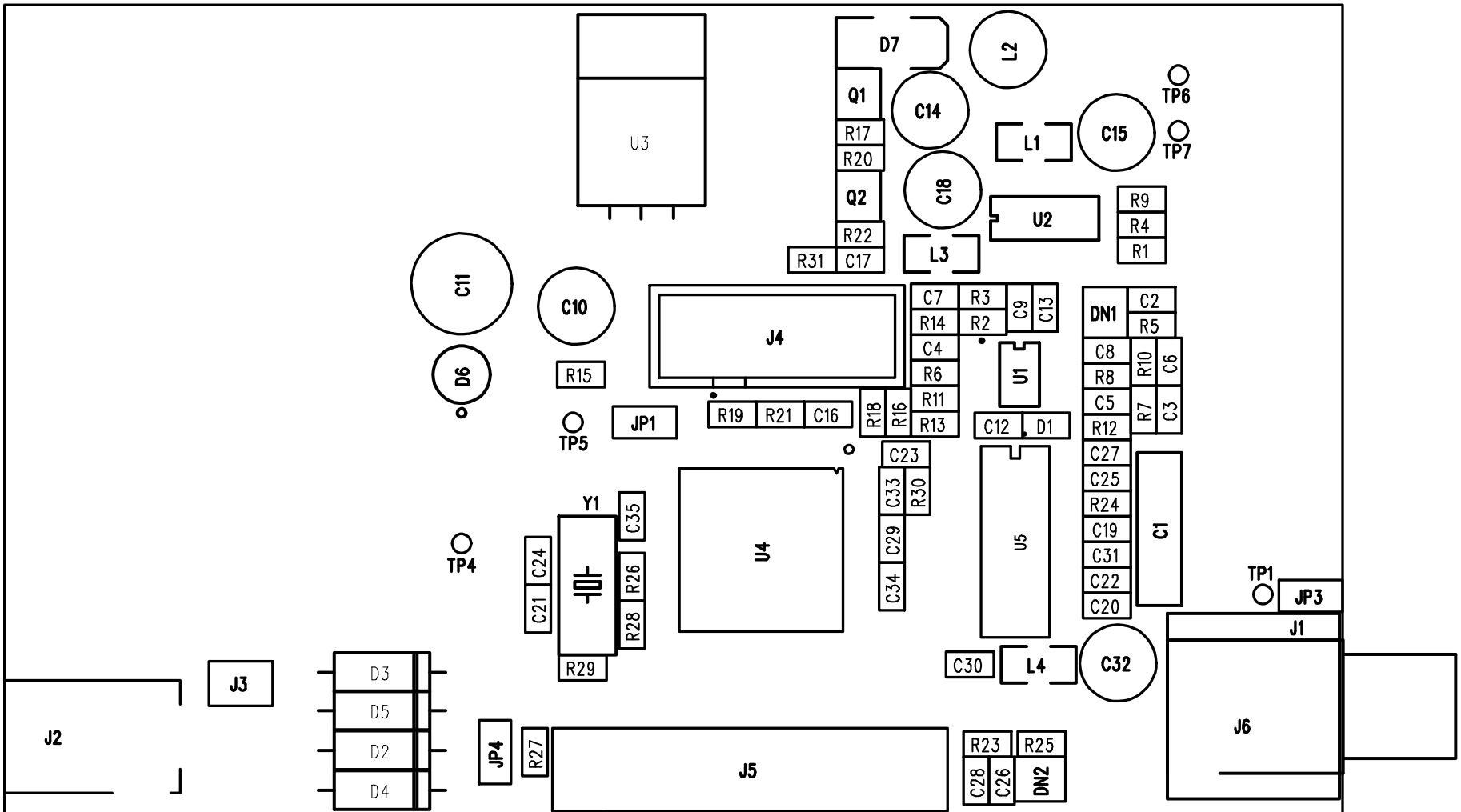


Fig. 4

8. **After all parts have been installed power the scope up. If everything is OK you should see the scope displays firmware version information briefly and enters normal working state.**

9. **You need to make a simple probe yourself. This can easily be made with a segment of regular video cable. Cut a cable. Keep one end with RCA plug. Attach two clips to the other end. A simple probe is done.**

10. **It is recommended that only +9V power supply be used. Higher power supply voltage will make U3 (LM7805) hotter. In that case attaching a small heatsink to the IC is recommended.**


U3
D7
L2
TP6
Q1
C14
C15
TP7
R17
R20
L1
Q2
C18
U2
R9
R4
R1
R22
R31
C17
L3
C11
C10
J4
C7
R3
C9
C13
DN1
C2
R14
R2
R5
C4
C8
R10
C6
D6
R15
R6
U1
R8
R11
C5
R7
C3
R19
R21
C16
R18
R16
R13
C12
D1
R12
TP5
JP1
C23
C27
C33
R30
C25
Y1
C35
U4
U5
C1
TP4
C24
C29
R24
C21
R26
C34
C19
C31
TP1
JP3
C22
C20
J1
R28
C30
L4
C32
J3
R29
J6
J2
D3
D5
D2
D4
JP4
R27
J5
R23
R25
C28
C26
DN2