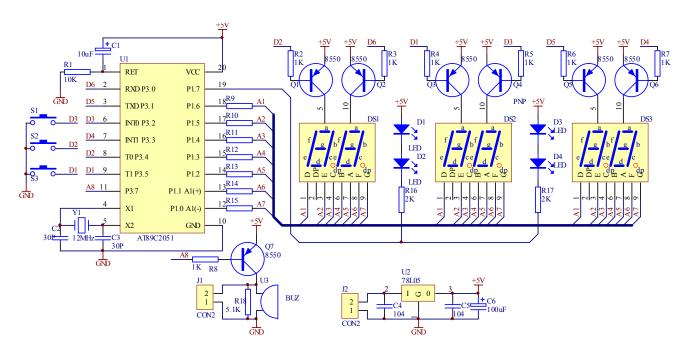
Specification:

If you weld the components correctly, generally you can use it normally, the operating voltage is DC 7V - 12V (Typical applications is 9V), pay attention to the polarity when connecting to the power supply. During operation, continuous short time (less than one second) press S3, you can make a continuous cycle option in the following six functions. Meanwhile for the long press (more than 2 seconds) S3, then return to the clock function model immediately.

- 1. Clock function: display 10:10:00 after connect to power
- 2. Correcting function: short press S3 once, namely with the flashing current time and the colon status, after that press S2 means hour plus one, press S1 means minutes plus 1, seconds are not adjustable.
- 3. Alarm function: Press short twice S3, namely display status is 22:10:00, colon is long-bright. Then press S2 means plus 1 hour, then press S1 means minutes plus 1, seconds are not adjustable. When hours are more than 23 the screen will be displayed -:-:-, this means closing the alarm function.
- 4. Countdown function: Press three times S3, show a status of 0, colon as long off. Press the S2 then from low so high to display, press S1 means plus 1, when press S2 to the six times it will begin to countdown based on the time you set up, press S2 again will re-enter the adjustment function, and stop the countdown.
- 5. Stopwatch function: Press the S3 four times, with display status of 00:00:00, colon as long bright. Stopwatch is started by pressing S2, S2 is pressed again to end the stopwatch, after you finish the stopwatch, after S1 is pressed the stopwatch is cleared.
- 6. Counter function: short press S3 five times, with the displays status of 00:00:00, the colon is long off, the counter is incremented 1 by pressing S2, press S1 again the counter is cleared.

schematic diagram:



BOM:

No	name	Type/value	grade	No	Name	Type	grade
01		1K	R9~R15	20		S8550	Q1
02	resistance	1K	R2~R8	21	audion	S8550	Q2
03		2K	R16~R17	22		S8550	Q3
04		5.1K	R18	23		S8550	Q4
05		10K	R1	24		S8550	Q5
06		30P	C2	25		S8550	Q6
07		30P	C3	26		S8550	Q7
08	ceramic	104	C4	27	MCU	AT89C2051	U1
09	capacitor	104	C5	28	voltage regulator	78L05	U2
10		10uF/25V	C1	29	Quartz crystal	12MHz	Y1
11	electrolytic capacitor	100uF/16V	C6	30	connector	5.XH2.54	J2
					socket	horizontal type 2P	
12	LED	Φ3 红发红	D1	31		6.XH2.54	J1
						vertical type 2P	
13]	Φ3 red	D2	32		6*6*4.3	S1
14	1	Φ3 red	D3	33	tuch-button	6*6*4.3	S2
15		Φ3 red	D4	34		6*6*4.3	S3

16		4 inch two anode in	DS1	35	IC socket	20P	U1
	Nixie tube	red					
17		4 inch two anode in red	DS2	36	PCB	49*97.5mm	1
18		4 inch two anode in red	DS3	37	wire	7.2P single-head 150mm	1
19	buzzer	5V active	U3	38	specification	A4	1