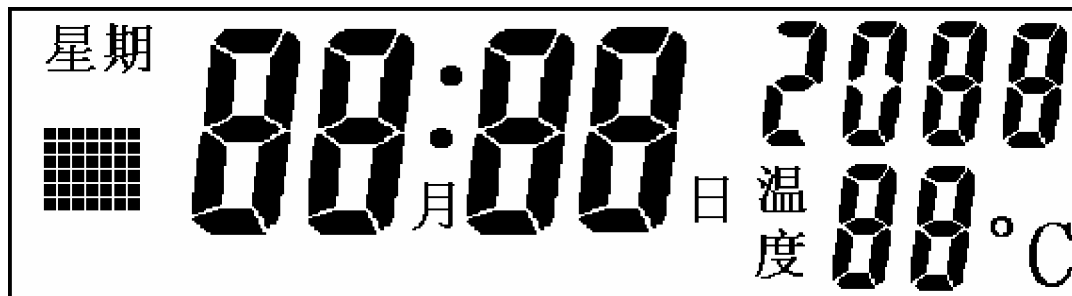


万年历 IC

产 品 说 明 书

一、 LCD 全显画面



二、 功能简介

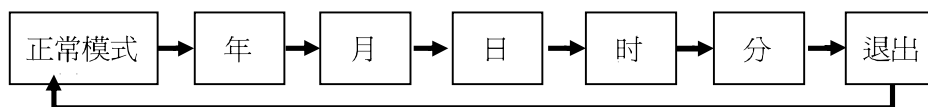
- ◆ 正常时间模式显示、时间、日期（2000年1月1日到2099年12月31日）、星期
- ◆ 温度显示，可精确到0.5°C

三、 按键简介

- ◆ RESET 键
- ◆ SET 键
- ◆ UP 键
- ◆ DOWN 键

四、 基本操作

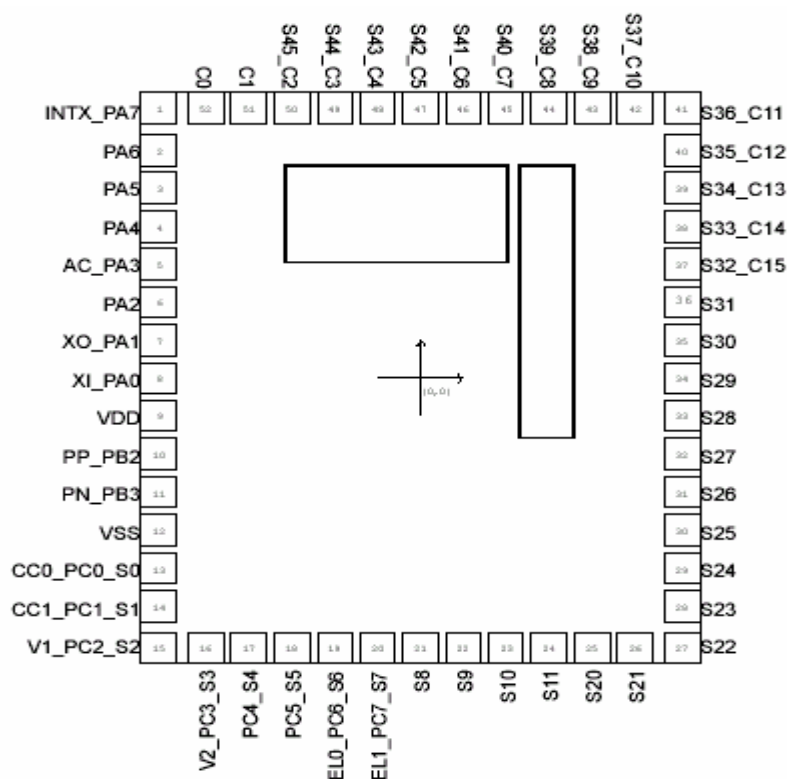
- ◆ 开机进入全显模式，若按任意键则可进入正常显示模式（RESET 键除外），或 30 秒后不按键也进入正常模式。
- ◆ 在正常状态下，按 SET 键，以下列顺序进入其相应功能模式。



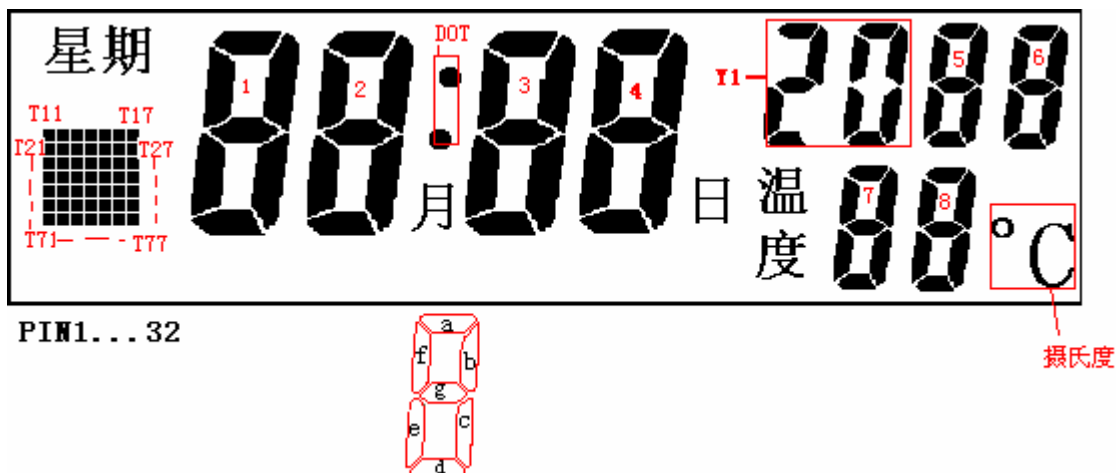
- ◆ 通过 UP/DOWN 键配合来完成以上设置。
- ◆ 设定范围：年为 2000~2099，月为 1~12，日为 1~31，时为 0~23，分为 0~59。
- ◆ 调整分时，秒自动清零。
- ◆ 在日期设置的同时，星期（一到日）相应的自动改变。
- ◆ 在设置状态，若 30 秒钟无按键则自动退出设置，并保存当前所设置的日期、时间。

#	Name	X	Y	#	Name	X	Y	#	Name	X	Y
1	INTX_PA7	-670	780	18	PC5_S5	-330	-780	35	S30	670	110
2	PA6	-670	660	19	EL0_PC6_S6	-220	-780	36	S31	670	220
3	PA5	-670	550	20	EL1_PC7_S7	-110	-780	37	S32_C15	670	330
4	PA4	-670	440	21	S8	0	-780	38	S33_C14	670	440
5	AC_PA3	-670	330	22	S9	110	-780	39	S34_C13	670	550
6	PA2	-670	220	23	S10	220	-780	40	S35_C12	670	660
7	XO_PA1	-670	110	24	S11	330	-780	41	S36_C11	670	780
8	XI_PA0	-670	0	25	S20	440	-780	42	S37_C10	550	780
9	VDD	-670	-110	26	S21	550	-780	43	S38_C9	440	780
10	PP_PB2	-670	-220	27	S22	670	-780	44	S39_C8	330	780
11	PN_PB3	-670	-330	28	S23	670	-660	45	S40_C7	220	780
12	VSS	-670	-440	29	S24	670	-550	46	S41_C6	110	780
13	CC0_PC0_S0	-670	-550	30	S25	670	-440	47	S42_C5	0	780
14	CC1_PC1_S1	-670	-660	31	S26	670	-330	48	S43_C4	-110	780
15	PC2_S2	-670	-780	32	S27	670	-220	49	S44_C3	-220	780
16	PC3_S3	-550	-780	33	S28	670	-110	50	S45_C2	-330	780
17	PC4_S4	-440	-780	34	S29	670	0	51	C1	-440	780
								52	C0	-550	780

*绑定底板连接到 Vss。



- ◆ 驱动模式：1/4 DUTY、1/3 BIAS
- ◆ 驱动电压：3V
- ◆



LCD PIN	IC PIN	COM3	COM2	COM1	COM0
1	C3	COM3			
2	C2		COM2		
3	C1			COM1	
4	C0				COM0
5	S6	T41	T51	T61	T71
6	S7	T42	T52	T62	T72
7	S8	T43	T53	T63	T73
8	S9	T44	T54	T64	T74
9	S10	T45	T55	T65	T75
10	S11	T46	T56	T66	T76
11	S22	T47	T57	T67	T77
12	S23	T37	T27	T17	1d
13	S24	T36	T26	T16	1e
14	S25	T35	T25	T15	1c
15	S26	T34	T24	T14	1g
16	S27	T33	T23	T13	1f
17	S28	T32	T22	T12	1b
18	S29	T31	T21	T11	1a
19	S30	星期	2f	2g	2e
20	S31	2a	2b	2c	2d
21	S32	月	3f	3g	3e
22	S33	3a	3b	3c	3d
23	S34	DOT	4f	4g	4e
24	S35	4a	4b	4c	4d
25	S36	Y1	5f	5g	5e
26	S37	5a	5b	5c	5d
27	S38	日	6f	6g	6e
28	S39	6a	6b	6c	6d
29	S40	温度	7f	7g	7e
30	S41	7a	7b	7c	7d
31	S42	摄氏度	8f	8g	8e
32	S43	8a	8b	8c	8d

熱敏電阻溫度特性表(103H3435)

SUNSTAR 单片机专用电路 <http://www.icasic.com/> TEL: 0755-83387030 FAX:0755-83376182 E-MAIL:szss20@163.com

Name : NTC		Specification : 103H3435					
Type : MF58		Resistance : R(25) = 10 kΩ [-3%,3%]					
Date : 02.10.21		B Constant : B(25/50) = 3,435K [-1%,1%]					
Temp	阻值 Resistance (kΩ)			阻值偏差 %(Resis.tol)		溫度偏差 %(Temp.tol)	
°C	R-min	R(t)-normal	R-max	Min	Max	Min	Max
-30	108.20	114.30	120.60	-5.3%	5.5%	-0.98	1.02
-29	103.00	108.70	114.70	-5.3%	5.5%	-0.98	1.02
-28	97.98	103.40	109.00	-5.2%	5.4%	-0.98	1.01
-27	93.28	98.39	103.70	-5.2%	5.4%	-0.98	1.01
-26	88.80	93.62	98.61	-5.1%	5.3%	-0.97	1.01
-25	84.55	89.09	93.79	-5.1%	5.3%	-0.97	1.00
-24	80.51	84.79	89.22	-5.1%	5.2%	-0.97	1.00
-23	76.67	80.71	84.89	-5.0%	5.2%	-0.97	1.00
-22	73.03	76.84	80.78	-5.0%	5.1%	-0.96	0.99
-21	69.57	73.16	76.87	-4.9%	5.1%	-0.96	0.99
-20	66.27	69.66	73.16	-4.9%	5.0%	-0.96	0.99
-19	63.13	66.33	69.62	-4.8%	5.0%	-0.96	0.98
-18	60.16	63.17	66.28	-4.8%	4.9%	-0.95	0.98
-17	57.34	60.18	63.11	-4.7%	4.9%	-0.95	0.98
-16	54.65	57.33	60.09	-4.7%	4.8%	-0.95	0.97
-15	52.10	54.63	57.23	-4.6%	4.8%	-0.94	0.97
-14	49.68	52.07	54.52	-4.6%	4.7%	-0.94	0.97
-13	47.38	49.63	51.94	-4.5%	4.7%	-0.94	0.97
-12	45.19	47.32	49.50	-4.5%	4.6%	-0.93	0.96
-11	43.11	45.12	47.18	-4.5%	4.6%	-0.93	0.96
-10	41.14	43.04	44.98	-4.4%	4.5%	-0.93	0.96
-9	39.26	41.05	42.88	-4.4%	4.5%	-0.93	0.95
-8	37.47	39.16	40.89	-4.3%	4.4%	-0.93	0.95
-7	35.78	37.38	39.01	-4.3%	4.4%	-0.92	0.95
-6	34.17	35.68	37.22	-4.2%	4.3%	-0.92	0.94
-5	32.65	34.08	35.54	-4.2%	4.3%	-0.92	0.94
-4	31.20	32.55	33.92	-4.1%	4.2%	-0.92	0.94
-3	29.83	31.10	32.40	-4.1%	4.2%	-0.91	0.93
-2	28.53	29.73	30.96	-4.1%	4.1%	-0.91	0.93
-1	27.28	28.42	29.58	-4.0%	4.1%	-0.91	0.93
0	26.10	27.18	28.28	-4.0%	4.0%	-0.90	0.92
1	25.02	26.04	27.08	-3.9%	4.0%	-0.90	0.92
2	23.97	24.94	25.92	-3.9%	3.9%	-0.90	0.92
3	22.99	23.97	24.84	-3.8%	3.9%	-0.89	0.91
4	22.05	22.92	23.80	-3.8%	3.9%	-0.89	0.91
5	21.14	21.97	22.81	-3.8%	3.8%	-0.89	0.90
6	20.29	21.07	21.86	-3.7%	3.8%	-0.88	0.90
7	19.48	20.22	20.97	-3.7%	3.7%	-0.88	0.90
8	18.69	19.40	20.11	-3.6%	3.7%	-0.88	0.89
9	17.95	18.62	19.30	-3.6%	3.6%	-0.87	0.89
10	17.24	17.88	18.52	-3.6%	3.6%	-0.87	0.88
11	16.57	17.17	17.78	-3.5%	3.6%	-0.87	0.88
12	15.93	16.50	17.08	-3.5%	3.5%	-0.87	0.87
13	15.30	15.85	16.40	-3.4%	3.5%	-0.86	0.87

Temp °C	阻值 R-min	阻值 R(t)-normal	阻值 R-max	阻值偏差% Min	阻值偏差% Max	溫度偏差% Min	溫度偏差% Max
14	14.71	15.23	15.75	-3.4%	3.4%	-0.86	0.86
15	14.15	14.64	15.14	-3.4%	3.4%	-0.85	0.86
16	13.61	14.08	14.55	-3.3%	3.3%	-0.85	0.86
17	13.09	13.54	13.99	-3.3%	3.3%	-0.85	0.85
18	12.61	13.03	13.46	-3.3%	3.0%	-0.84	0.85
19	12.14	12.54	12.95	-3.2%	0.2%	-0.84	0.84
20	11.69	12.07	12.46	-3.2%	3.2%	-0.83	0.83
21	11.25	11.62	11.99	-3.1%	3.2%	-0.83	0.83
22	10.84	11.19	11.54	-3.1%	3.1%	-0.82	0.82
23	10.44	10.77	11.10	-3.1%	3.1%	-0.82	0.82
24	10.06	10.38	10.70	-3.0%	3.0%	-0.81	0.81
25	9.700	10.00	10.300	-3.0%	3.0%	-0.79	0.79
26	9.337	9.629	9.922	-3.0%	3.0%	-0.81	0.81
27	8.989	9.274	9.559	-3.1%	3.1%	-0.82	0.82
28	8.656	8.934	9.212	-3.1%	3.1%	-0.84	0.84
29	8.336	8.607	8.879	-3.1%	3.2%	-0.85	0.85
30	8.030	8.294	8.559	-3.2%	3.2%	-0.86	0.87
31	7.737	7.994	8.252	-3.2%	3.2%	-0.88	0.88
32	7.455	7.706	7.958	-3.3%	3.3%	-0.89	0.90
33	7.186	7.430	7.676	-3.3%	3.3%	-0.91	0.91
34	6.927	7.165	7.405	-3.3%	3.3%	-0.92	0.93
35	6.679	6.911	7.145	-3.4%	3.4%	-0.94	0.95
36	6.441	6.667	6.895	-3.4%	3.4%	-0.95	0.96
37	6.213	6.433	6.655	-3.4%	3.5%	-0.97	0.98
38	6.993	6.208	6.425	-3.5%	3.5%	-0.98	0.99
39	5.783	5.992	6.203	-3.5%	3.5%	-1.00	1.01
40	5.580	5.784	5.990	-3.5%	3.6%	-1.02	1.03
41	5.386	5.585	5.786	-3.6%	3.6%	-1.03	1.04
42	5.199	5.393	5.589	-3.6%	3.6%	-1.05	1.06
43	5.020	5.209	5.400	-3.6%	3.7%	-1.06	1.08
44	4.848	5.032	5.219	-3.7%	3.7%	-1.08	1.09
45	4.682	4.862	5.044	-3.7%	3.7%	-1.09	1.11
46	4.523	4.698	4.876	-3.7%	3.8%	-1.11	1.13
47	4.370	4.541	4.714	-3.8%	3.8%	-1.13	1.14
48	4.222	4.389	4.558	-3.8%	3.9%	-1.14	1.16
49	4.082	4.244	4.409	-3.8%	3.9%	-1.16	1.18
50	3.946	4.104	4.265	-3.9%	3.9%	-1.17	1.19
51	3.815	3.970	4.127	-3.9%	4.0%	-1.19	1.21
52	3.691	3.842	3.995	-3.9%	4.0%	-1.21	1.23
53	3.571	3.718	3.868	-4.0%	4.0%	-1.22	1.25
54	3.456	3.599	3.745	-4.0%	4.1%	-1.24	1.26
55	3.344	3.484	3.627	-4.0%	4.1%	-1.26	1.28
56	3.236	3.373	3.512	-4.0%	4.1%	-1.27	1.30
57	3.133	3.266	3.402	-4.1%	4.2%	-1.29	1.32
58	3.033	3.163	3.296	-4.1%	4.3%	-1.31	1.33
59	2.937	3.064	3.193	-4.1%	4.3%	-1.33	1.35
60	2.844	2.968	3.094	-4.2%	4.3%	-1.34	1.37
61	2.755	2.876	2.999	-4.2%	4.3%	-1.36	1.39

Temp C	阻值 Resistance (kΩ)			阻值偏差%(Resis.tol)		溫度偏差 %(Temp.tol)	
	R-min	R(t)-normal	R-max	Min	Max	Min	Max
62	2.669	2.787	2.908	-4.2%	4.3%	-1.38	1.41
63	2.586	2.701	2.819	-4.3%	4.4%	-1.39	1.43
64	2.506	2.618	2.733	-4.3%	4.4%	-1.41	1.44
65	2.428	2.538	2.571	-4.3%	4.4%	-1.43	1.46
66	2.354	2.461	2.571	-4.4%	4.5%	-1.45	1.48
67	2.282	2.387	2.494	-4.4%	4.5%	-1.46	1.50
68	2.213	2.315	2.420	-4.4%	4.5%	-1.48	1.52
69	2.146	2.245	2.347	-4.4%	4.6%	-1.50	1.54
70	2.081	2.178	2.278	-4.5%	4.6%	-1.52	1.56
71	2.019	2.114	2.212	-4.5%	4.6%	-1.54	1.58
72	1.958	2.051	2.146	-4.5%	4.6%	-1.55	1.60
73	1.900	1.991	2.084	-4.6%	4.7%	-1.57	1.61
74	1.843	1.932	2.023	-4.6%	4.7%	-1.59	1.63
75	1.790	1.876	1.965	-4.6%	4.7%	-1.61	1.65
76	1.737	1.821	1.908	-4.7%	4.8%	-1.63	1.67
77	1.686	1.768	1.853	-4.7%	4.8%	-1.64	1.69
78	1.636	1.717	1.800	-4.7%	4.8%	-1.66	1.71
79	1.589	1.668	1.749	-4.7%	4.9%	-1.68	1.73
80	1.543	1.620	1.699	-4.8%	4.9%	-1.70	1.75
81	1.499	1.574	1.651	-4.8%	4.9%	-1.72	1.77
82	1.456	1.530	1.606	-4.8%	5.0%	-1.74	1.79
83	1.414	1.486	1.560	-4.9%	5.0%	-1.76	1.81
84	1.375	1.445	1.517	-4.9%	5.0%	-1.78	1.83
85	1.335	1.404	1.475	-4.9%	5.0%	-1.79	1.85
86	1.297	1.364	1.433	-4.9%	5.1%	-1.81	1.87
87	1.260	1.326	1.394	-4.9%	5.1%	-1.83	1.89
88	1.225	1.289	1.355	-5.0%	5.1%	-1.85	1.91
89	1.190	1.253	1.318	-5.0%	5.2%	-1.87	1.93
90	1.157	1.218	1.281	-5.0%	5.2%	-1.89	1.95
91	1.124	1.184	1.246	-5.0%	5.2%	-1.91	1.97
92	1.094	1.152	1.212	-5.1%	5.3%	-1.93	1.99
93	1.063	1.120	1.179	-5.1%	5.3%	-1.95	2.01
94	1.034	1.090	1.148	-5.1%	5.3%	-1.97	2.04
95	1.006	1.061	1.118	-5.2%	5.3%	-1.98	2.06
96	0.9786	1.032	1.087	-5.2%	5.4%	-2.00	2.08
97	0.9527	1.005	1.059	-5.2%	5.4%	-2.02	2.10
98	0.9268	0.978	1.031	-5.2%	5.4%	-2.04	2.12
99	0.9020	0.952	1.004	-5.2%	5.5%	-2.06	2.14
100	0.8781	0.927	0.978	-5.3%	5.5%	-2.08	2.16
101	0.8553	0.903	0.953	-5.3%	5.5%	-2.10	2.18
102	0.8333	0.880	0.929	-5.3%	5.5%	-2.12	2.21
103	0.8121	0.858	0.906	-5.3%	5.6%	-2.15	2.23
104	0.7914	0.836	0.883	-5.4%	5.6%	-2.17	2.26
105	0.7715	0.816	0.861	-5.4%	5.6%	-2.19	2.27
106	0.7522	0.795	0.840	-5.4%	5.6%	-2.21	2.30
107	0.7334	0.776	0.820	-5.4%	5.7%	-2.23	2.32
108	0.7153	0.757	0.800	-5.5%	5.7%	-2.25	2.34
109	0.6977	0.738	0.781	-5.5%	5.7%	-2.27	2.36

