

Functions

- ◆ 5 Function: month, date, hour, minute and second
- ◆ 12-hour format
- ◆ Selectable display for hour, minute, second / month, date
- ◆ One-touch correction of time error within 30 second
- ◆ 2-switch sequential operation
- ◆ 4-year calendar
- ◆ LCD test
- ◆ 8 segment animation

功能

- ◆ 5功能：月、日、時、分、秒
- ◆ 12小時模式
- ◆ 可選時、分、秒或月、日顯示
- ◆ 按鍵一次可校正30秒時間誤差
- ◆ 2鍵操作
- ◆ 4年日曆
- ◆ LCD測試
- ◆ 8段LCD動畫

Features

- ◆ Single-chip CMOS construction
- ◆ Drive 5.5 digit duplexes LCD
- ◆ Colon and PM display
- ◆ Low power dissipation
- ◆ 32768 Hz crystal controlled operation
- ◆ Debounce circuitry on switch input
- ◆ Protection against static discharge
- ◆ Single 1.5V battery operation
- ◆ Built-in crystal oscillator input capacitor
- ◆ Trimmer capacitor included

特點

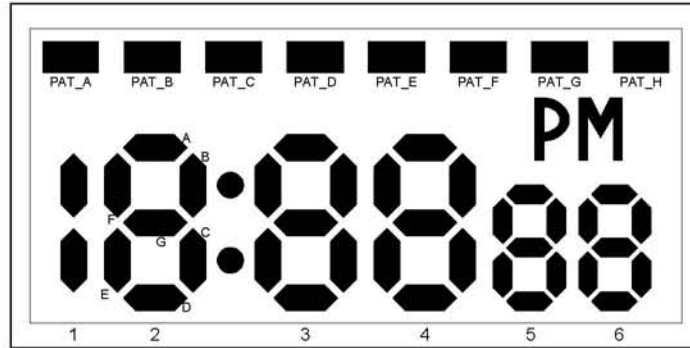
- ◆ 單芯片，CMOS 制程
- ◆ 5.5位LCD顯示
- ◆ 冒號及下午標誌
- ◆ 低功耗
- ◆ 32768 Hz 晶振
- ◆ 開關輸入防彈跳
- ◆ 帶靜電保護
- ◆ 1.5V工作電壓
- ◆ 內置晶振輸入電容
- ◆ 內置微調電容

ELECTRICAL CHARACTERISTICS 電特性

Characteristics		Sym	Min	Typ	Max	Unit	Remarks
Operating Voltage 1	工作電壓 1	V _{DD}	1.2	1.5	2.0	V	-
Operating Voltage 2	工作電壓 2	V _{SS2}	-1.2	-1.5	-2.0	V	-
Quiescent Current	靜態電流	I _{SB}	-	0.8	1.5	uA	No Load
Operating Current	工作電流	I _{OP}	-	-	9	uA	
Input High Voltage	輸入高電壓	V _{IH}	V _{DD} -0.3	-	V _{DD}	V	-
Input Low Voltage	輸入低電壓	V _{IL}	V _{SS}	-	V _{SS} +0.3	V	-
Oscillator Start Voltage	起振電壓	V _{OSC}			1.45	V	Within 5 sec
Oscillator Stop Voltage	停振電壓	V _{OSP}			1.15	V	
Oscillator input capacitor	振蕩輸入電容	CI		20		pF	
Oscillator output capacitor	振蕩輸出電容	CO		20		pF	
Oscillation Frequency	振蕩頻率	F _{OSC}	-	32768	-	Hz	-
LCD Frequency	LCD 頻率	F _{LCD}	-	32	-	Hz	-
Switch Debouncing Time	開關動作時間	T _D	-		62.5	mS	

LCD 字形顯示

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



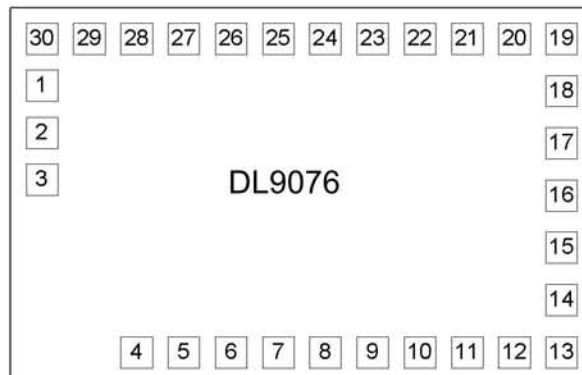
	COM1	COM2	COM3
SEG1	BC1	B2	COL
SEG2	F2	E2	D2
SEG3	A2	G2	C2
SEG4	AD3	F3	E3
SEG5	F4	B3	G3
SEG6	A4	G4	D4
SEG7	B4	C4	E5
SEG8	AD5	F5	G5

	COM1	COM2	COM3
SEG9	PM	B5	C5
SEG10	A6	F6	E6
SEG11	B6	G6	D6
SEG12	C6	E4	C4
SEG13	PAT_C	PAT_B	PAT_A
SEG14	PAT_D	PAT_E	PAT_F
SEG15	---	PAT_H	PAT_G

8 段動畫變化

	PAT A	PAT V	PAT C	PAT D	PAT E	PAT F	PAT G	PAT H
1	█							
2		█						
3			█					
4				█				
5					█			
6						█		
7							█	
8								█
9	(BLANK)							

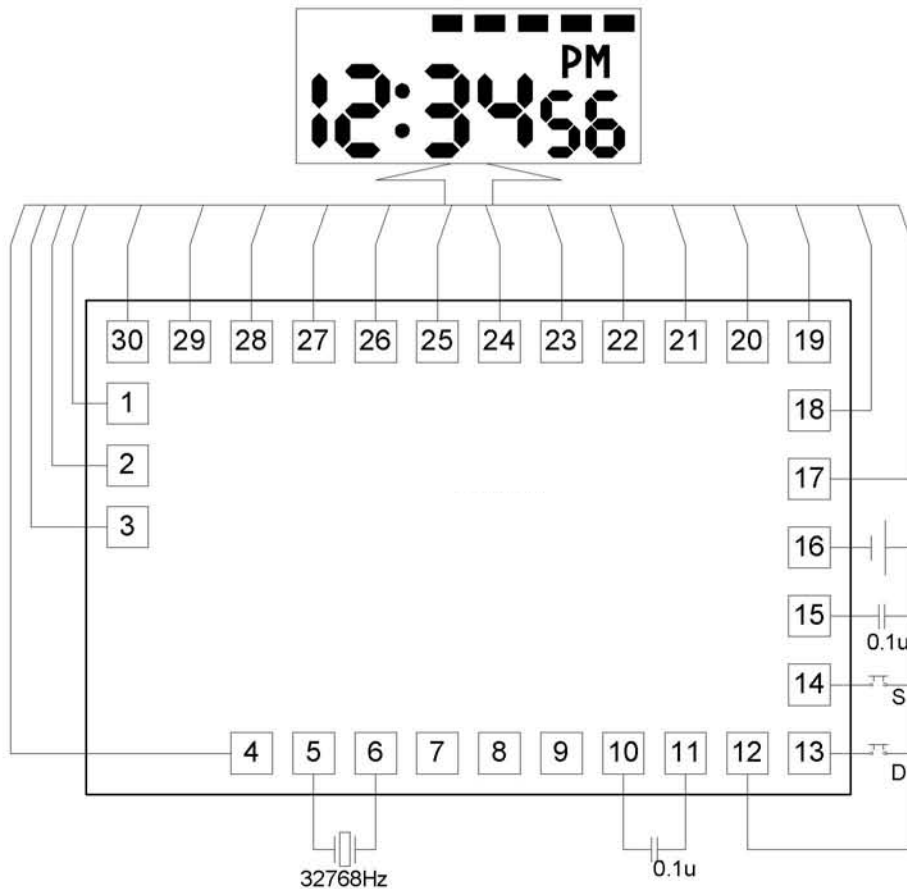
Pad Diagram



Pad No	Name	X	Y
1	SEG15	75	798
2	SEG14	75	666
3	SEG13	75	534
4	COM1	324	75
5	OSCO	465	75
6	OSCI	605	75
7	T1	745	73
8	T2	886	73
9	T3	1026	73
10	CAP2	1165	75
11	CAP1	1305	75
12	VDD	1445	75
13	D	1585	75
14	S	1585	215
15	VSS2	1585	355

Pad No	Name	X	Y
16	VSS1	1585	495
17	COM3	1585	635
18	COM2	1585	775
19	SEG12	1585	925
20	SEG11	1447	925
21	SEG10	1315	925
22	SEG9	1183	925
23	SEG8	1050	925
24	SEG7	917	925
25	SEG6	785	925
26	SEG5	648	925
27	SEG4	510	925
28	SEG3	375	925
29	SEG2	237	925
30	SEG1	75	925

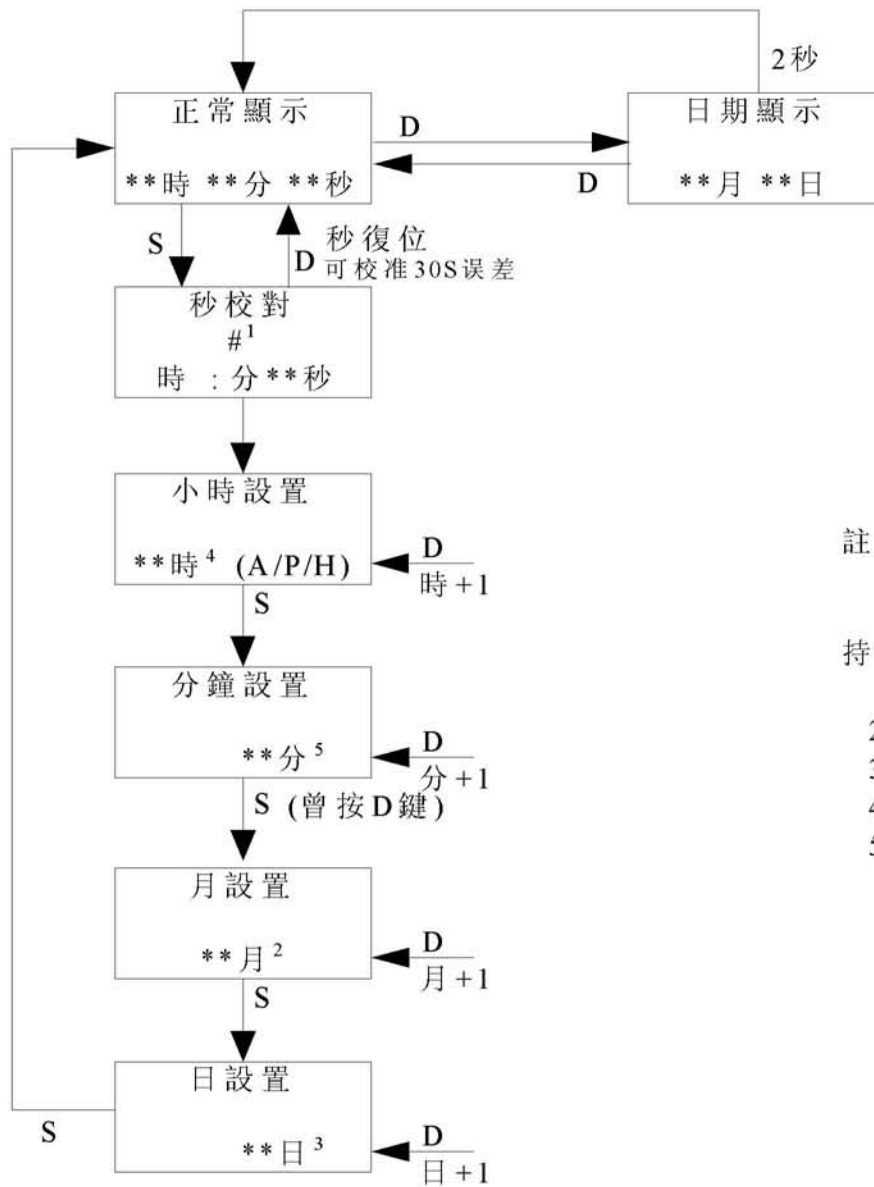
Application Diagram



註： 1. 芯片底部接 VDD

操作流程

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註：

1. # 表示冒號不閃，保持原狀態

** 閃爍頻率：2 Hz

2. "月"閃爍

3. "日"閃爍

4. "時"閃爍

5. "分"閃爍