



## TC8492A THERMOMETER SPECIFICATION

### GENERAL DESCRIPTION

<—>. WHEN FSEL=NC: (FOR TC2156)

<1> POWER SW: PUSH SWITCH TO POWER ON OR POWER OFF.

<2> WHEN POWER ON:

A. THE LCD DISPLAY  $188.8^{\circ}\text{E}$  (WHEN SEL=NC) OR  $188.8^{\circ}\text{M}$  (WHEN SEL=0) ABOUT 2 SEC.

B. AFTER A, SHOW THE TEMPERATURE OF LAST MEASURE (AND "M" WHEN SEL=0) ABOUT 2 SEC.

C. AFTER B, SHOW L (OR ) ABOUT 0.6 SEC (DON'T SHOW "M" WHEN SEL=0).

D. AFTER C, WHEN IT IS MEASURING. THE (OR ) WILL FLASH AT THE SPEED OF 1HZ.

E. IF THE TEMPERATURE  $< 32.0$  ( $89.6$  ), THEN DISPLAY L ( ).

F. IF THE TEMPERATURE  $> 42.0$  ( $107.6$  ), THEN DISPLAY H ( ).

G. WHEN MEASURING, THE LCD WILL ALWAYS DISPLAY THE HIGHEST TEMPERATURE.

H. IF THE MEASURE TEMPERATURE IS NOT CHANGED MORE THAN 16 SECOND, THE MEASUREMENT IS OVER AND MARK ( ) FLASH STOP.

I. WHEN MEASUREMENT IS OVER, IF THE TEMPERATURE  $> 37.5$  ( $99.5$  ), THE BUZZER ALARMS "Bi-Bi-Bi Bi-Bi-Bi " FOR 4 SEC, AS FOLLOWS:

Bi Bi Bi

0.125S 0.125S 0.125S 0.125S 0.125S 0.375S

IF THE TEMPERATURE  $> 37.5$  ( $99.5$  ), THE BUZZER ALARMS

"Bi-Bi-Bi-Bi-" FOR 4 SEC, AS FOLLOWS:

Bi

0.5S 0.5S

J. IT WILL AUTO POWER OFF WHEN MEASUREMENT IS OVER THAN 10 MINUTES.

K. WHEN MEASUREMENT IS OVER, IF THE TEMPERATURE RISES WITHIN 10 MIN, THE ( ) MARK WILL FLASH AGAIN (REPEAT FROM THE STEP OF 2-D).



# Preliminary

## TC8492A Consumer

- <3> WHEN PUSH SWITCH, BUZZER WILL ALARM "Bi" ABOUT 0.125 SEC.
- <4> WHEN POWER OFF: THE STAND-BY CURRENT 0.5 uA.
- <5> THE FREQUENCY OF BUZZER IS 5.3KHZ.
- <6> AFTER <2>-A, IF DETECT LOW VOLTAGE( $1.35 \pm 0.05$  V):
- A: WHEN SEL=1 OR NC:  
THE BATTERY MARK " ■ " FLASHES AT THE SPEED OF 1HZ AND THE MEASUREMENT MAYBE NOT ACCURATE, MEANS THERMOMETER MUST BE CHANGED BATTERY.
- B: WHEN SEL=0:  
THE LCD DISPLAY FLASHES AT THE SPEED OF 1HZ AND THE MEASUREMENT MAYBE NOT ACCURATE, MEANS THERMOMETER MUST BE CHANGED BATTERY.
- <7> WHEN TEST2 PIN IS CONNECTED TO VDD, THE LCD DISPLAY THE REALTIME VALUE NOT THE HIGHEST VALUE, IN ORDER TO ADJUST THE REFERENCE RESISTANCE RF DURING THE PROCESS OF PRODUCING.
- <8> / (SFC Pad) FUNCTION IS USED PAD OPTION.

	PAD CONNECT TO VSS	PAD NO CONNECT
SFC Pad		

SM Pad: NO CONNECT.

- <9> THERMOMETER OTHERS CHARTER IS BELOW:

TEMPERATURE RANGE	32.0 ~42.0	89.6 ~ 107.6
ACCURANCY	$\pm 0.1$	$\pm 0.2$
RESOLUTION	0.1	0.1



## &lt;二&gt;. WHEN FSEL=1: (FOR TC4367)

&lt;1&gt; POWER SW: PUSH SWITCH TO POWER ON OR POWER OFF.

&lt;2&gt; WHEN POWER ON:

- A. THE LCD DISPLAY  $188.8^{\circ}\text{F}_M$  (OR  $188.8^{\circ}\text{F}_M$ ) ABOUT 2 SEC. IF NON-MEMORY FUNCTION THE "M" WILL NOT DISPLAY.
- B. AFTER A, WITH MEMORY FUNCTION PUSH SWITCH MORE THAN 2 SEC, LCD WILL DISPLAY THE STABLE-TEMPERATURE OF LAST MEASURE, AND "M" WILL DISPLAY.
- C. AFTER B, LCD DISPLAY 36.5 (97.7 ) ABOUT 1 SECOND.
- D. AFTER C, WHEN IT IS MEASURING. THE (OR ) WILL FLASH AT THE SPEED OF 1HZ.
- E. WITH MEMORY FUNCTION, THE STABLE-TEMPERATURE TIME WILL BE COUNTED AFTER RELEASEING SWITCH FOR 8 SECOND.  
WITHOUT MEMORY FUNCTION, THE STABLE-TEMPERATURE TIME WILL BE COUNTED AFTER TURN ON 8 SECOND.
- F. IF THE TEMPERATURE  $< 32.0$  (89.6 ), THEN DISPLAY L ( ).
- G. IF THE TEMPERATURE  $> 44.0$  (111.2 ), THEN DISPLAY H ( ).
- H. WHEN MEASURING, THE LCD WILL ALWAYS DISPLAY THE HIGHEST TEMPERATURE.
- I. IF THE MEASURE TEMPERATURE IS NOT CHANGED MORE THAN 16 SECOND, THE MEASURMENT IS OVER AND MARK ( ) FLASH STOP.
- J. WHEN MEASUREMENT IS OVER, IF THE TEMPERATURE  $> 37.5$  (99.5 ), THE BUZZER ALARMS "Bi-Bi-Bi Bi-Bi-Bi " FOR 4 SEC, AS FOLLOWS:  

Bi	Bi	Bi			
0.125S	0.125S	0.125S	0.125S	0.125S	0.375S

IF THE TEMPERATURE  $< 37.5$  (99.5 ), THE BUZZER ALARMS "Bi-Bi-Bi-Bi-" FOR 4 SEC, AS FOLLOWS:  

Bi			
0.5S	0.5S		
- K. IT WILL AUTO POWER OFF WHEN MEASURMENT IS OVER THAN 10 MINUTES.
- L. WHEN MEASURMENT IS OVER, IF THE TEMPERATURE RISES WITHIN 10 MINUTES, THEN REMEASURE THE TEMPERATURE, BUT THE ( ) MARK WILL NOT FLASH AGAIN. WHEN REMEASUREMENT IS OVER, THE BUZZER WILL NOT ALARM AGAIN.



# Preliminary

## TC8492A Consumer

- <3> WHEN PUSH SWITCH, BUZZER WILL ALARM "Bi" ABOUT 0.125 SEC.
- <4> WHEN POWER OFF: THE STAND-BY CURRENT 0.5 uA.
- <5> THE FREQUENCY OF BUZZER IS 4KHZ.
- <6> AFTER <2>-B, IF DETECT LOW VOLTAGE( $1.35 \pm 0.05$  V), THE LCD WILL ONLY DISPLAY BATTERY MARK " ▾ " AND THE MEASUREMENT MAYBE NOT ACCURATE, MEANS THERMOMETER MUST BE CHANGED BATTERY.
- <7> WHEN SENSOR CIRCUIT DETECT ERROR, LCD ONLY DISPLAY "E", IT WILL NOT MEASURE NORMALLY UNTIL THE ERROR STATUS CANCEL.
- <8> WHEN TEST2 PIN IS CONNECTED TO VDD, THE LCD DISPLAY THE REALTIME VALUE NOT THE HIGHEST VALUE, IN ORDER TO ADJUST THE REFERENCE RESISTANCE RF DURING THE PROCESS OF PRODUCING.
- <9> MEMORY (SM Pad) AND / (SFC Pad) FUNCTION IS USED PAD OPTION.

	PAD CONNECT TO VSS	PAD WITHOUT CONNECT
SFC Pad		
SM Pad	NO MEMORY FUNCTION	MEMORY FUNCTION

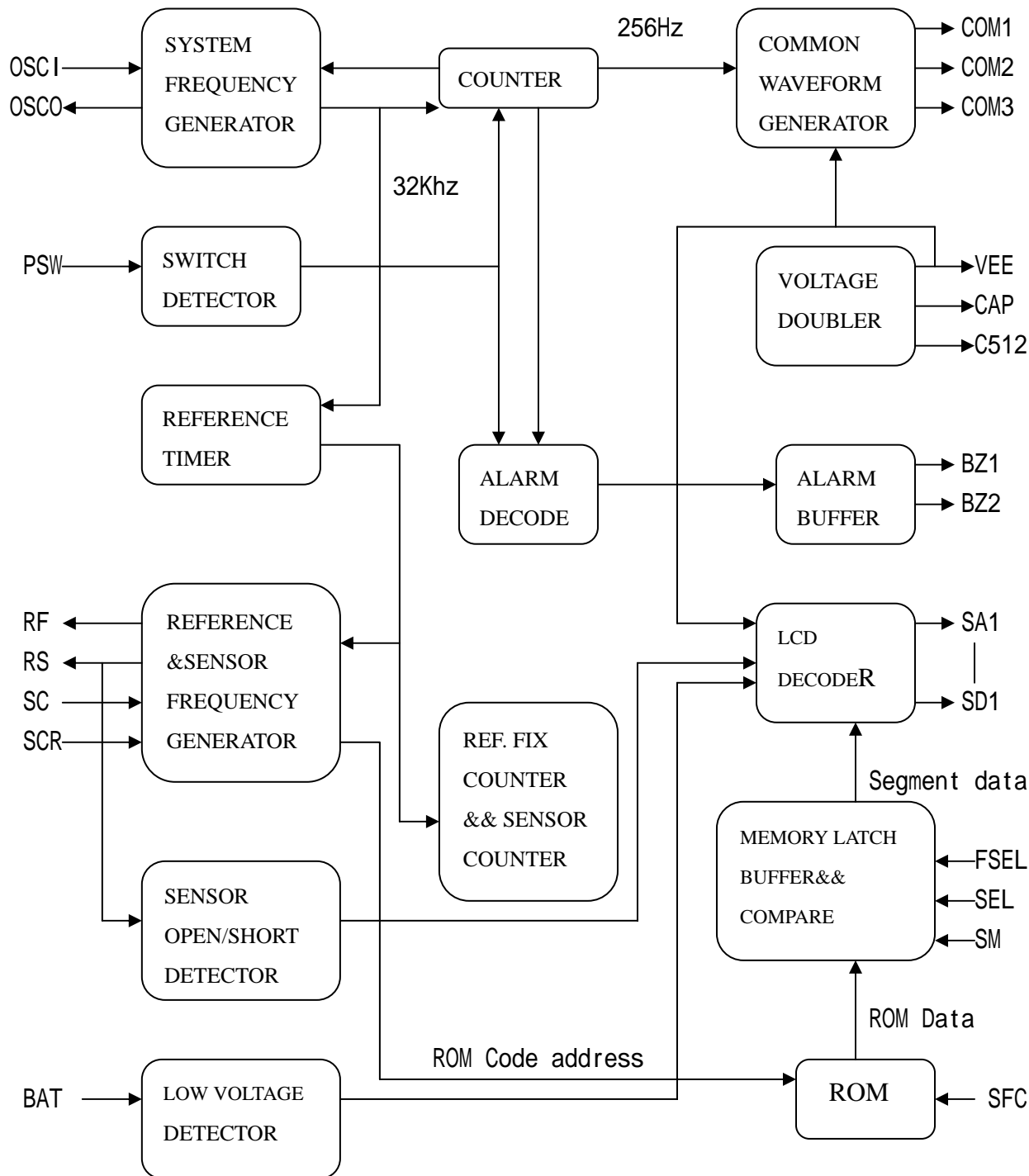
SEL Pad: NO CONNECT.

- <10> THERMOMETER OTHERS CHARTER IS BELOW:

TEMPERATURE RANGE	32.0 ~44.0	89.6 ~ 111.2
ACCURANCY	$\pm 0.1$	$\pm 0.2$
RESOLUTION	0.1	0.1

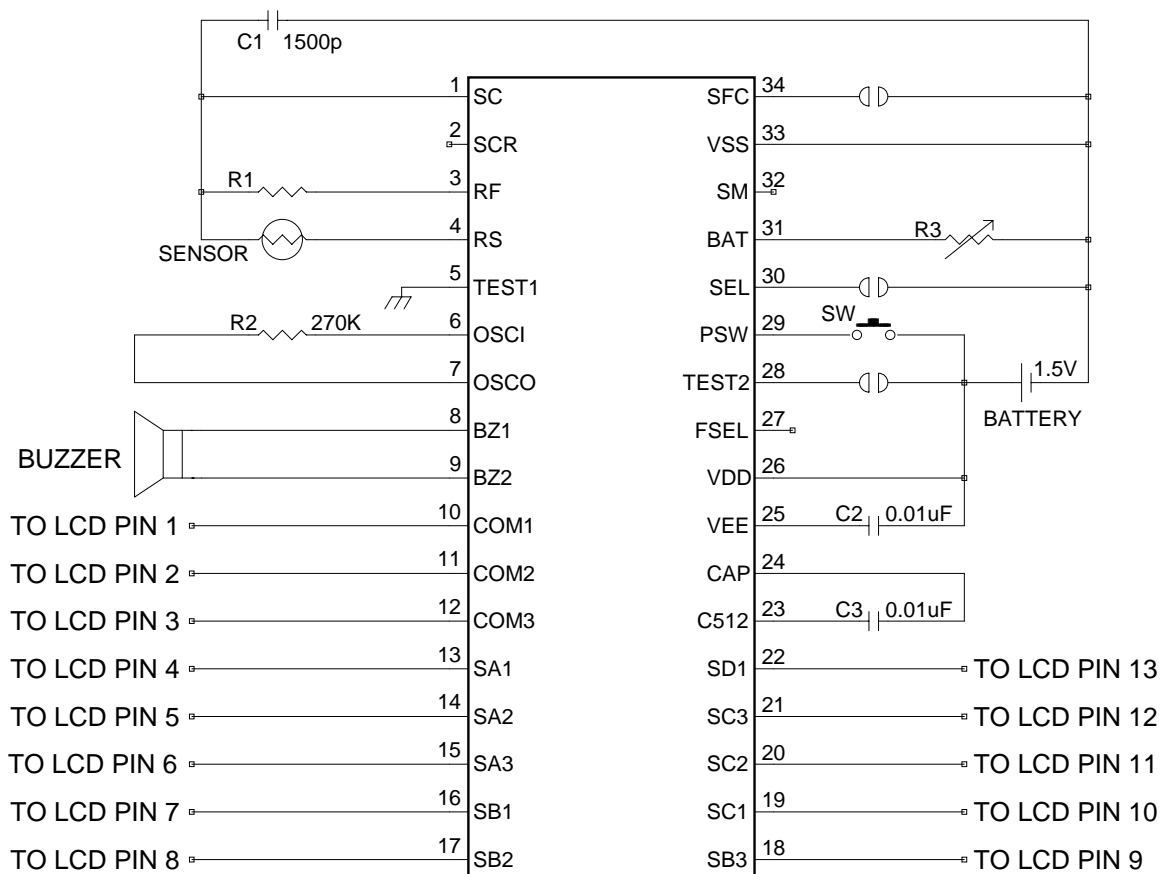


**BLOCK DIAGRAM :**





TC8492A THERMOMETER APPLICATION(FOR TC2156)



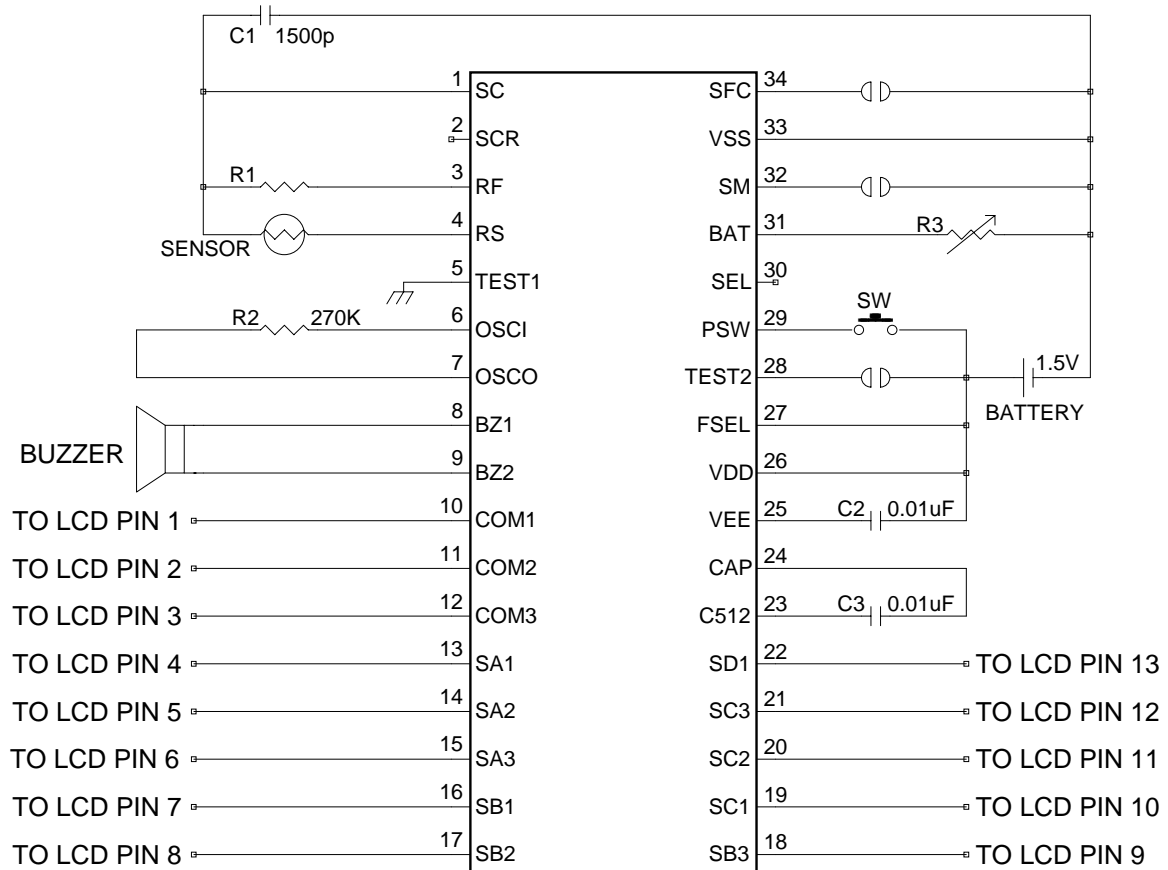
REMARK:

1. Sensor is use ET-503 sensor.
2. RF is selected according to sensor type.
- 3.

	NC	VSS
SFC pad	°C	°F
SEL pad	LCD-1 (▲)	LCD-2 (M)



TC8492A THERMOMETER APPLICATION(FOR TC2156)



REMARK:

1. Sensor is use ET-503 sensor.
2. RF is selected according to sensor type.
- 3.

	NC	VSS
SFC pad	°C	°F
SM pad	MEMORY	NO MEMORY

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