



## CDT3483

### 6 音警報聲 IC

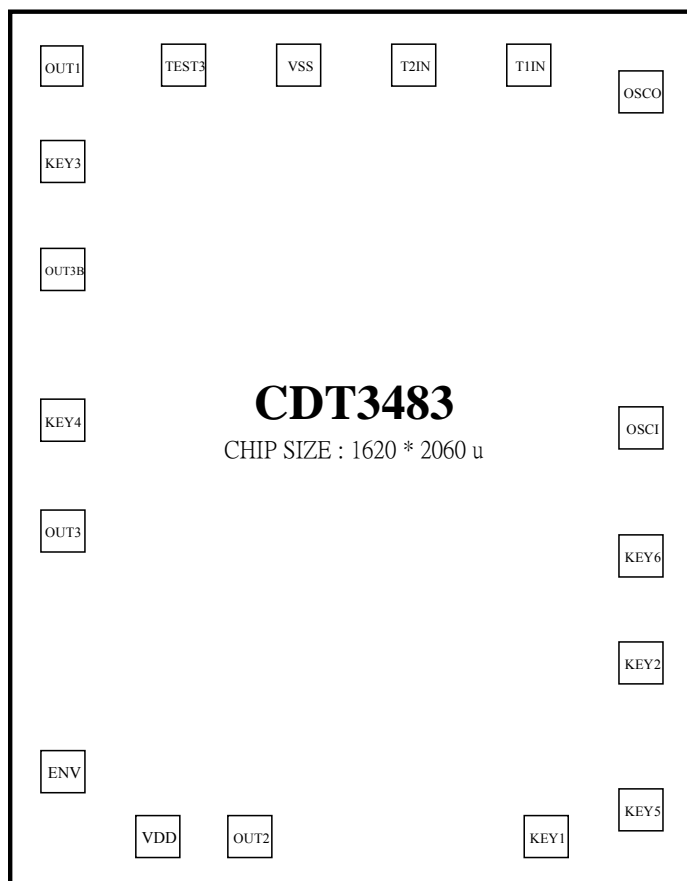
#### ● 產品特性(Features)

- CMOS 製程、低壓、低耗電
- 操作電壓 2.0~5.0V
- 6 個 KEY 控制 6 種聲音

#### ● 產品應用(Applications)

可應用於各式警報聲的電路上。

#### ● 位置圖(Pad Assignment)



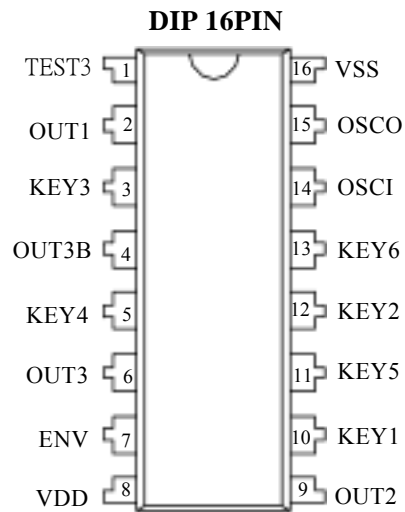
#### ● Pad 座標(Pad Coordinates)

(Unit: $\mu$ m)			
No.	Pad Name	X	Y
1	VDD	340	120
2	OUT2	540	120
3	KEY1	1210	120
4	KEY5	1420	180
5	KEY2	1420	515
6	KEY6	1420	755
7	OSCI	1420	1040
8	OSCO	1420	1800
9	T1IN	1165	1860
10	T2IN	910	1860
11	VSS	655	1860
12	TEST3	390	1860
13	OUT1	120	1860
14	KEY3	120	1645
15	OUT3B	120	1400
16	KEY4	120	1060
17	OUT3	120	815
18	ENV	120	265

Chip Size = 1620 \* 2060  $\mu$ m

Note : IC 底座接 VDD

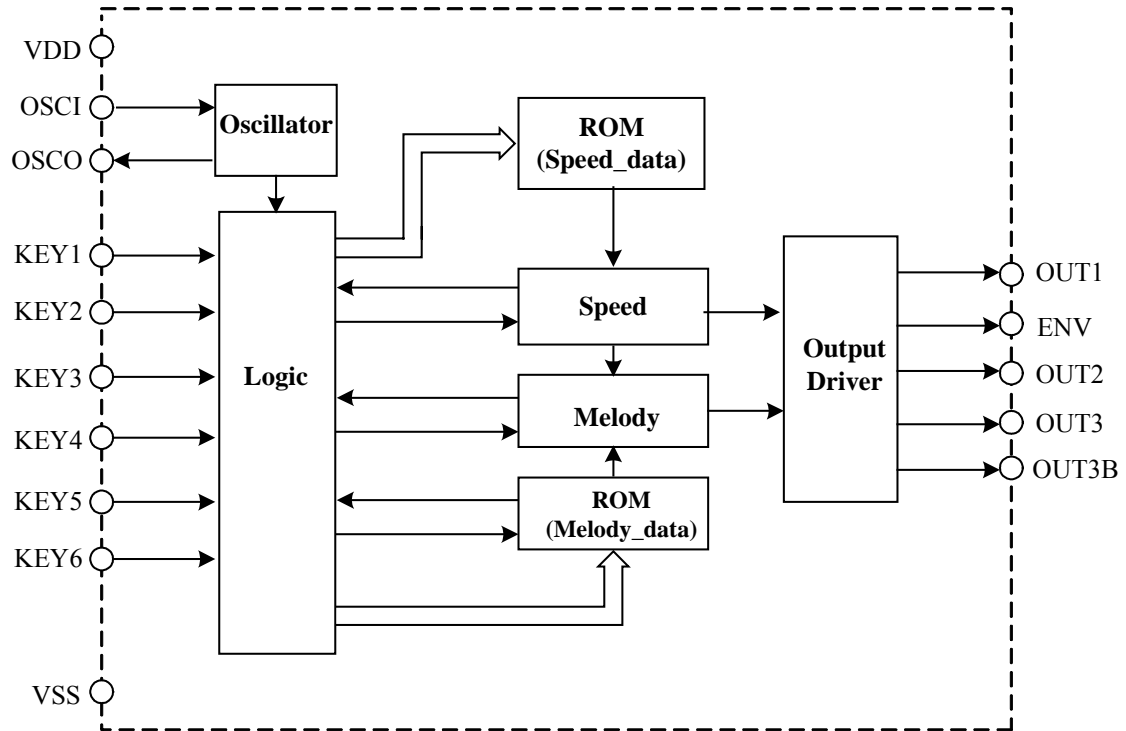
● 腳位圖(Pin Assignment)



● 腳位說明(Pad Description)

NO.	PIN NAME	I/O	FUNCTION
1	VDD	I	電源正端
2	OUT2	O	KEY3, KEY4 聲音輸出端
3	KEY1	I	聲音 1 觸發腳
4	KEY5	I	聲音 5 觸發腳
5	KEY2	I	聲音 2 觸發腳
6	KEY6	I	聲音 6 觸發腳
7	OSCI	I	振盪輸入端
8	OSCO	O	振盪輸出端
9	T1IN	I	測試模式設定腳
10	T2IN	I	測試腳
11	VSS	I	電源負端
12	TEST3	I	測試腳
13	OUT1	O	KEY1, KEY2 聲音輸出端
14	KEY3	I	聲音 3 觸發腳
15	OUT3B	O	KEY5, KEY6 聲音輸出端與 OUT3 反相
16	KEY4	I	聲音 4 觸發腳
17	OUT3	O	KEY5, KEY6 聲音輸出端
18	ENV	I	OUT1 輸出訊號的波形峰值控制腳

● 功能方塊圖(Block Diagram)



● **最大額定範圍(Absolute Maximum Ratings)**

- Supply Voltage ----- - 0.3V to 5.0V
- Input Voltage -----  $V_{SS}-0.3$  to  $V_{DD}+0.3$
- Operating Temperature ----- 0 to 70
- Storage Temperature----- - 50 to 125

\* Note : Stresses above those listed may cause permanent damage to the devices.


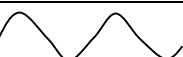
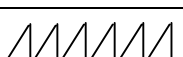
● **電氣特性(Electrical Characteristics)**

( $V_{DD}=3V$ ,  $T_A = 25$  , unless otherwise specified)

Symbol	Parameter	Condition	Min.	Typ.	Max.	Units
$V_{DD}$	Supply Voltage		2.0	3.0	5.0	V
$V_{IH}$	Input High Voltage		$0.7V_{DD}$		$V_{DD}+0.3$	V
$V_{IL}$	Input Low Voltage		$V_{SS}-0.3$		$0.3V_{DD}$	V
$I_{DD}$	Operating Current	@ $V_{DD} = 3V$ , no load			600	$\mu A$
$I_{STB}$	Standby Current	@ $V_{DD} = 3V$ , no load			5	$\mu A$
		@ $V_{DD} = 5V$ , no load			10	
$F_{OSC}$	Oscillator Frequency	$R_{osc} = 150 K\Omega$	109	128	147	KHz
$R_{IN}$	Pull-high resistor (KEY1~KEY6)	@ $V_{DD} = 5V$	KEY1		385	K $\Omega$
			KEY2		385	
			KEY3		185	
			KEY4		185	
			KEY5		890	
			KEY6		890	
		@ $V_{DD} = 3V$	KEY1		720	
			KEY2		720	
			KEY3		344	
			KEY4		344	
			KEY5		1.6M	
			KEY6		1.6M	
$I_{OL1}$	Sink Current (OUT1)	@ $V_{DD} = 3V$ , $V_{OL} = 1V$ , $V_{ENV} = 0V$		1		mA
$I_{OH1}$	Source Current (OUT1)	@ $V_{DD} = 3V$ , $V_{OL} = 2.4V$ , $V_{ENV} = 3V$		0.8		
$I_{OL2}$	Source Current (OUT2)	@ $V_{DD} = 3V$ , $V_{OH} = 2V$		1.98		mA
$I_{OL3}$	Sink Current (OUT3, OUT3B)	@ $V_{DD} = 3V$ , $V_{OL} = 1V$		10.7		mA
$I_{OH3}$	Source Current(OUT3, OUT3B)	@ $V_{DD} = 3V$ , $V_{OH} = 2V$		1.82		

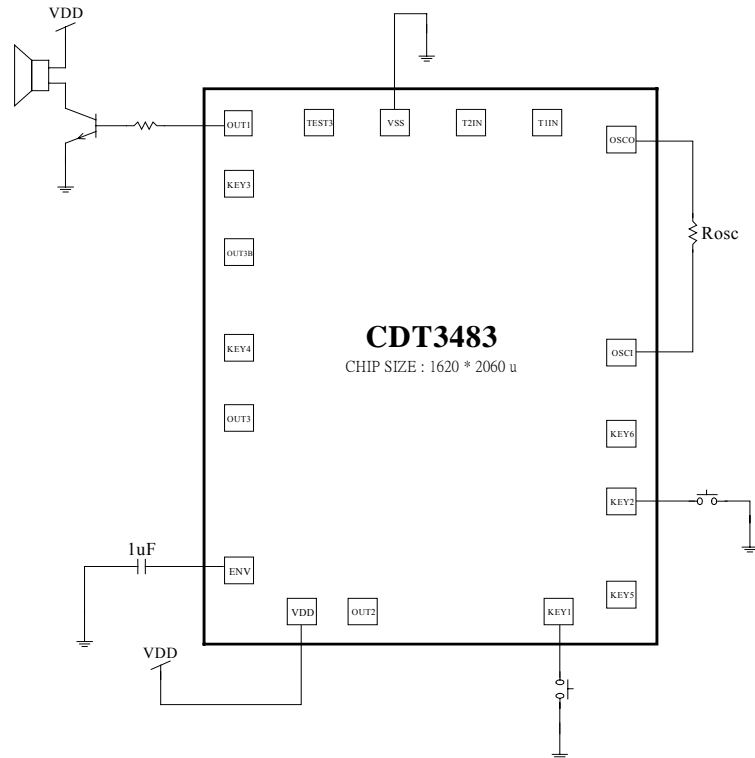
● 功能說明(Function Description)

- (1). 持續按 KEY 有聲音輸出，放開後停止輸出。  
KEY1 MODE 中當 KEY1 放開後，叮咚聲會持續輸出完 1 個 Cycle 後才結束。
- (2). OUT1 : KEY1, KEY2 輸出，同時按此 2 KEY，以 KEY2 優先輸出。  
OUT2 : KEY3, KEY4 輸出，同時按此 2 KEY，以 KEY3 優先輸出。  
OUT3, OUT3B : KEY5, KEY6 輸出，同時按此 2 KEY，以 KEY6 優先輸出。
- (3). OUT1, OUT2, OUT3 不可同時使用。
- (4).

KEY	聲音
KEY1	叮咚聲
KEY2	 慢
KEY3	
KEY4	 快
KEY5	警車聲
KEY6	單音

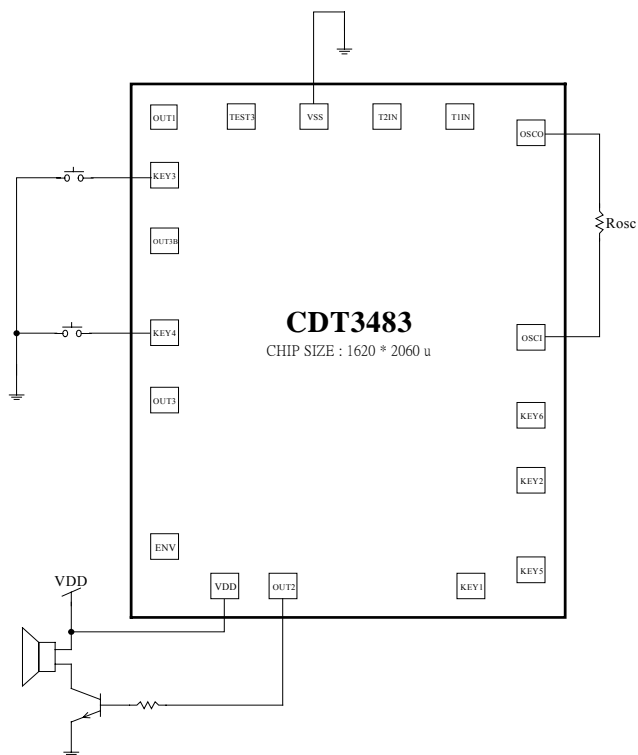
● 應用線路圖(Application Circuit)

- (1). OUT1 : (KEY1, KEY2)



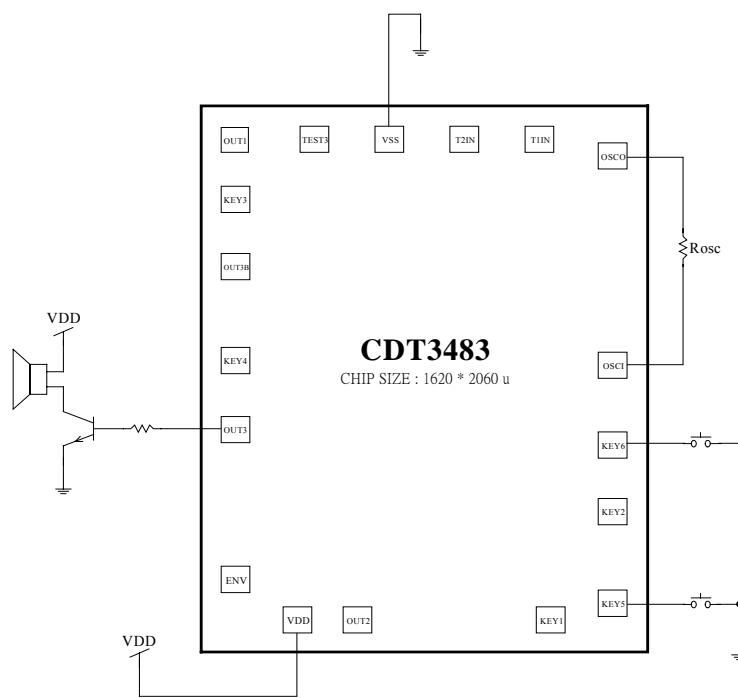
Rosc = 150KΩ

(2). OUT2 : (KEY3, KEY4)



$R_{osc} = 150K\Omega$

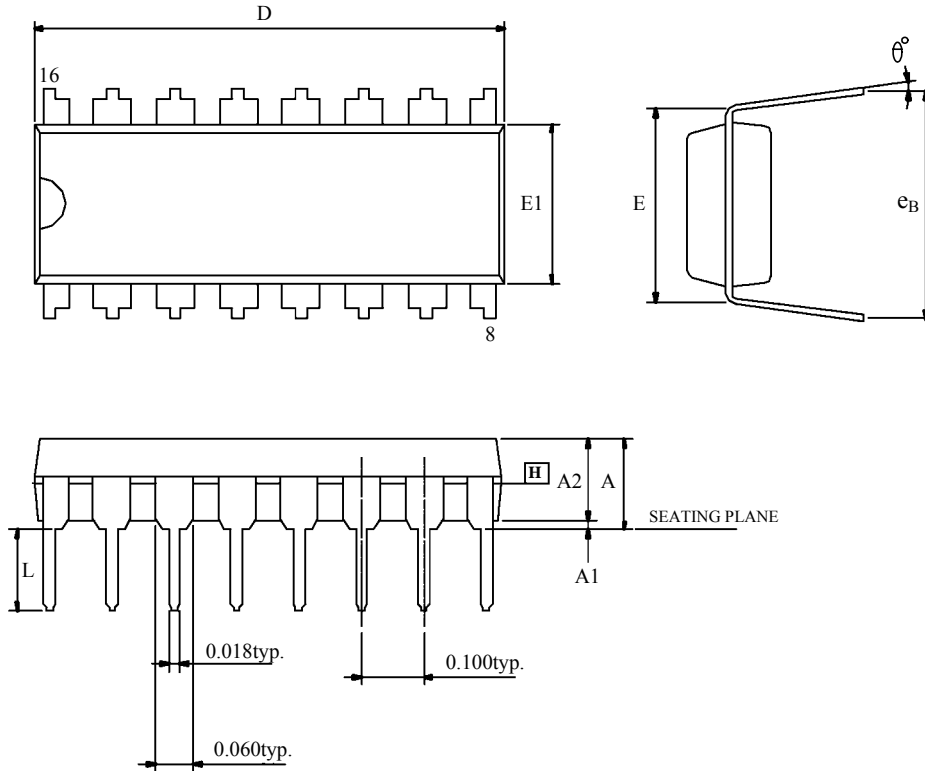
(3). OUT3 : (KEY5, KEY6)



$R_{osc} = 150K\Omega$

● 封裝外觀圖(Package Information)

• 16-pin DIP outline dimensions



Symbols	MIN.	NOR.	MAX.
A	-	-	0.210
A1	0.015	-	-
A2	0.125	0.130	0.135
D	0.735	0.755	0.775
E	0.300 BSC.		
E1	0.245	0.250	0.255
L	0.115	0.130	0.150
$e_B$	0.335	0.355	0.375
$\theta$	0	7	15

UNIT : INCH

NOTES.

1. JEDEC OUTLINE : MS-001 BB
2. "D", "E1" DIMENSIONS DO NOT INCLUDE MOLD FLASH OR PROTRUSIONS. MOLD FLASH OR PROTRUSIONS SHALL NOT EXCEED 0.010 INCH.
3.  $e_B$  IS MEASURED AT THE LEAD TIPS WITH THE LEADS UNCONSTRAINED.
4. POINTED OR ROUNDED LEAD TIPS ARE PREFERRED TO EASE INSERTION.
5. DISTANCE BETWEEN LEADS INCLUDING DAM BAR PROTRUSIONS TO BE 0.005 INCH MINIMUM.
6. DATUM PLANE  $\square$  COINCIDENT WITH THE BOTTOM OF LEAD, WHERE LEAD EXIT BODY.

\* CDT assumes no responsibility for the use of the specification described. CDT reserves the right to modify the product specification without notice.  
 ( 以上規格僅供參考，本公司得逕行修正，不另通知 )