

General Description

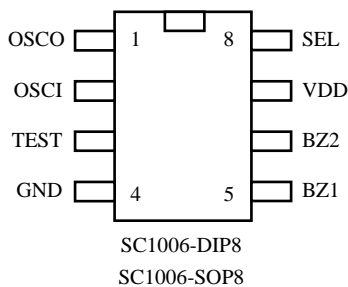
SC1006 is a CMOS process to manufacture the alarm sound generator ASIC, built-in voltage regulator circuit, reset capacitor, can directly enter the high-voltage power supply, and omit the diode and the reset capacitor voltage regulator.

SC1006 you can select mono or six-tone cycle of the output.

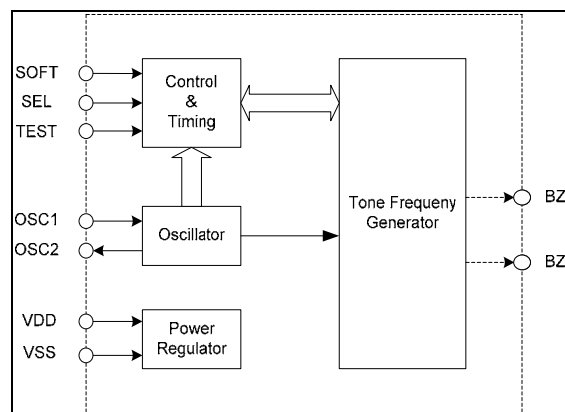
Features

- CMOS Process
- Low-power, high noise immunity
- Built-in oscillator
- Built-in voltage regulator circuits can be directly input 12V-24V power supply
- Built-in reset circuit, provincial and lack of external reset capacitor
- Power control, loop output

Pin Assignment



Block Diagram



Absolute Maximum Ratings

DC Supply Voltage V_{DD}	-----	-0.3V ~ 24V
Input Voltage Range V_{IN}	-----	-0.3 V_{DD} TO V_{DD} +0.3V
Storage Temperature T_{STG}	-----	-25 TO +125
Operating Temperature T_{OP}	-----	-10 TO +70

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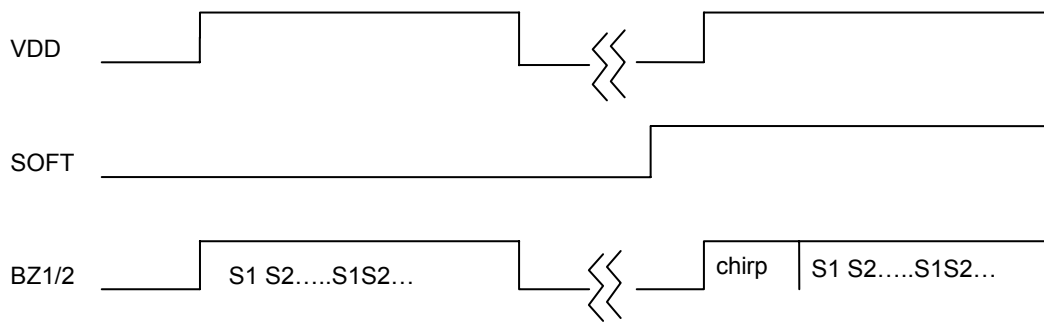
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Electronic Characteristics

Characteristics	Sym.	Min.	Typ.	Max.	Unit	Remark
Supply Voltage	V _{POW}		12	24	V	@R _Z =1KΩ
Operating Voltage	V _{DD}	--	4.2	4.5	V	@Power=12V, R _Z =1KΩ
Operating Current	I _{OP}	--	10	20	mA	No Load, @R _Z =1KΩ
BZ1/BZ2 Driving Current	I _{DRV}	--	3.0	--	mA	@V _{DS} =0.7V
Oscillator Frequency	F _{OSC}	--	128	--	KHZ	R _{Osc} = 300KΩ, F _{Osc} ±10%

Timing Diagram

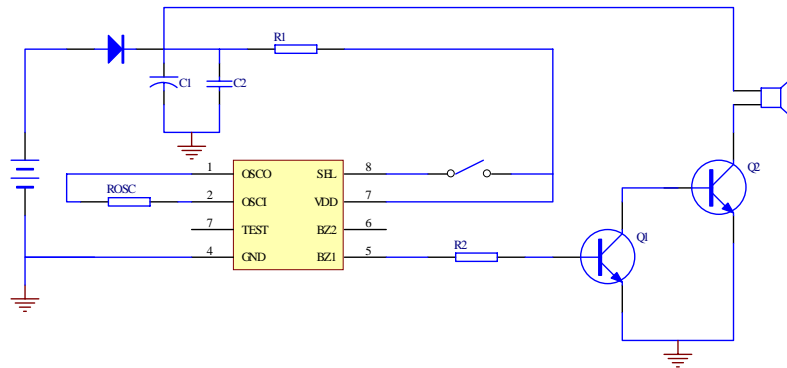


Pin Description

NAME	I/O	SC1006 DIP/SOP	Description
TEST	O	3	TEST PIN
GND	Power	4	GND
BZ1	O	5	Audio output pin 1
BZ2	O	6	Audio output pin 2
VDD	Power	7	Power
SEL	I	8	1/6 tones cycle output SEL=OPEN : 6 tones cycle SEL=VDD : 1 tone cycle
SOFT	I	--	Soft sound select pin SOFT=OPEN : Without soft sound SOFT=VDD : With soft sound
OSCO	O	1	Oscillator output pin
OSCI	I	2	Oscillator input pin

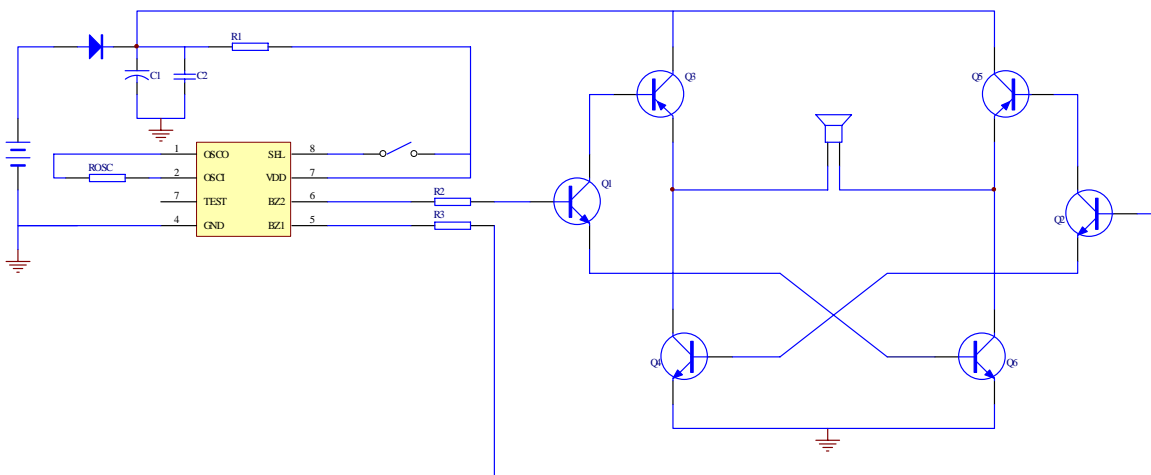
Application Diagram

- **Single pin output Application**



P/N	8Pin State	Description
SC1006	OPEN	6 Tones cycle
	VDD	1 Tones cycle

- **Dual Pin output**



Rosc EX-CHANGE

SC1006	ROSC(KΩ)	470	430	390	330	300	270	240	220
	FOSC(KHZ)	85	89	99	116	128	137	160	177