

深圳市普恩科技有限公司

地址：深圳市宝安区龙华镇民治街道民康路蓝坤大厦 1007

电话：0755-85286856 传真：0755-82484849

<http://www.salens.cn> sales@salens.cn

CN2008

.MCU Control LED with Melody

Features:

Operating voltage range: 2.4V~5.0V

Clock source: built in 64k Hz RC oscillator with external resistor and 32768 Hz crystal oscillator for option

1K bytes program ROM can be use.

Two timers.

One program frequent control register , use melody Generator.

One byte flag register.

One input port can option with pull high resistor (6 bits) , low 4 bits can option for wakeup

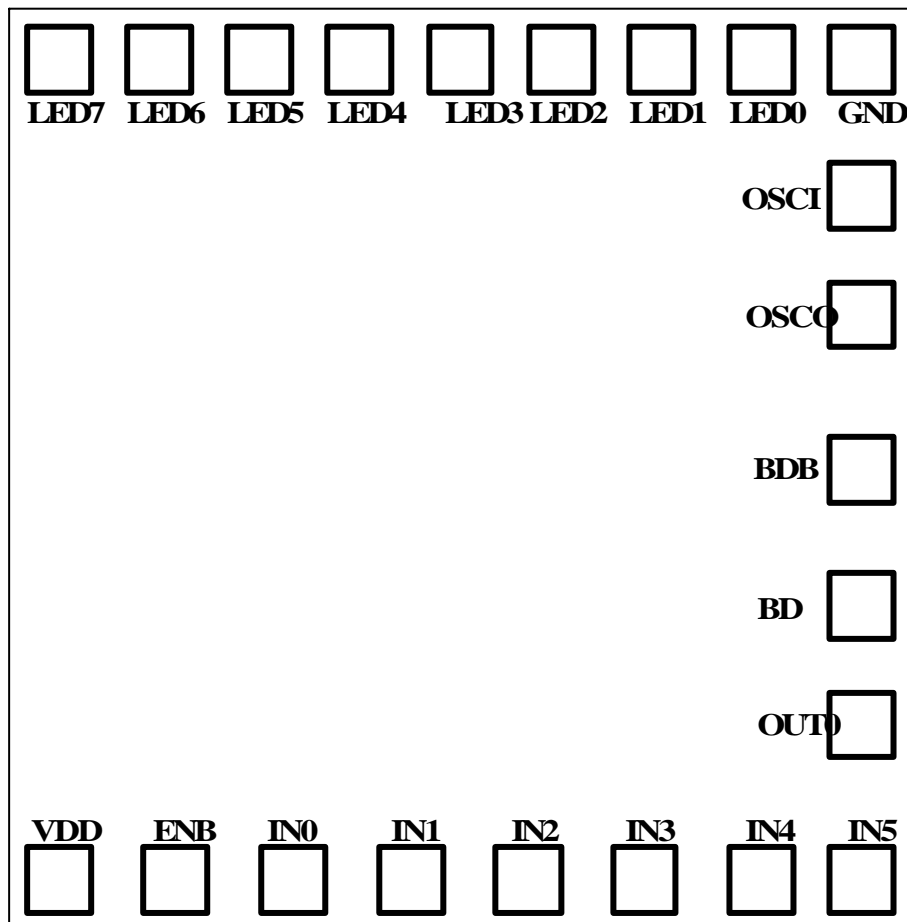
Sixteen bytes general register

Eight control registers, control LED with 256 level pulse width modulation output; Can option with normal (high low) output.

Three outputs.

Low power consumption

IC Bonding Pad



**Substrate should connect to GND

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Pad Name & Description:

VDD	Power supply
LED[0:7]	8 LED 256 steps PWM output
GND	Ground
OUT0	OUTPUT
OUT1/BD	OUTPUT or Piezo buzzer driving (built-in option)
OUT2/BDB	OUTPUT or Piezo buzzer driving (built-in option)
OSCI	RC or Crystal oscillator input (built-in option)
OSCO	RC or Crystal oscillator output (built-in option)
IN[0:5]	6 input pins for key or other
ENB	System Enable Input

Absolute Maximum Ratings :

RATING	VALUE
DC Supply Voltage	5.0V
Input/output Voltage	GND-0.3V to VDD+0.3V
Operating Temperature	-10°C to 60 °C
Storage Temperature	-25°C to 125°C

Notice: Stress greater than those listed under Absolute Maximum Ratings may cause permanent damage to the device, This is a stress rating only and functional operation of the device at these or any other conditions above those indicated in the operational sections of this specification is not implied, Exposure to absolute maximum rating conditions for extended period may affect reliability.

Electrical Characteristics:

Parameter	Symb ol	Min	Type	Max	Condition
Operating Voltage	VDD	3V	5V	5.5V	
Standby Current	Istb	---	1uA	5uA	VDD=3V
Operating Current	Iop	---	50uA	300uA	VDD=3V Fosc=64khz
RC Oscillator freq	fosc	50KHz	64KHz	80KHz	
Crystal oscillator freq	fosc	---	32768Hz	---	
Input pull high resistor	R	50k	---	---	
Output PMOS driver current	Idrv	---	---		
LED NMOS sink current	Isink	---	15mA		VDD=4.5V R=100O
IC maximum current	I _{max}			200mA	VDD=4.5V

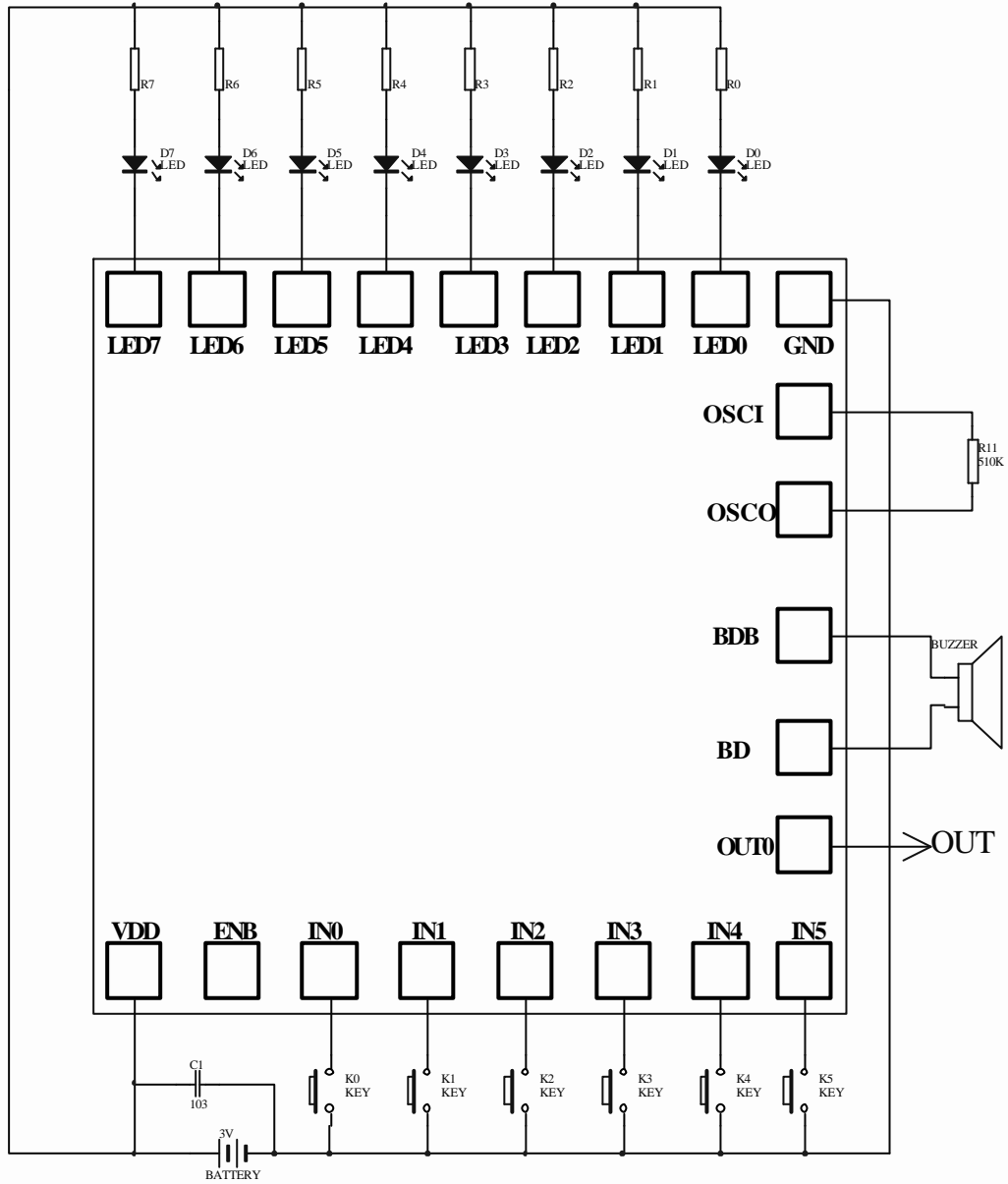
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Application circuit for RC oscillator :



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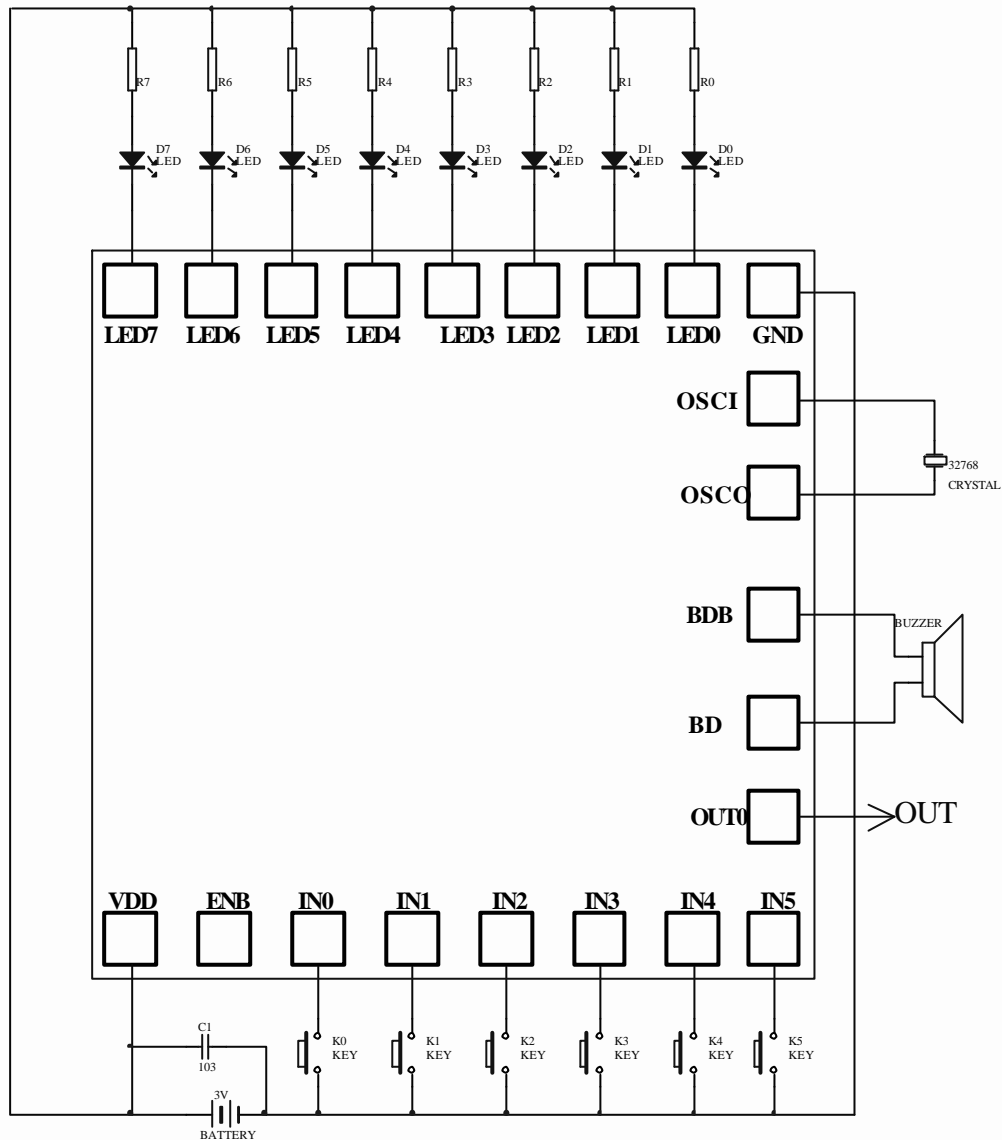
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Application circuit for crystal oscillator :



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