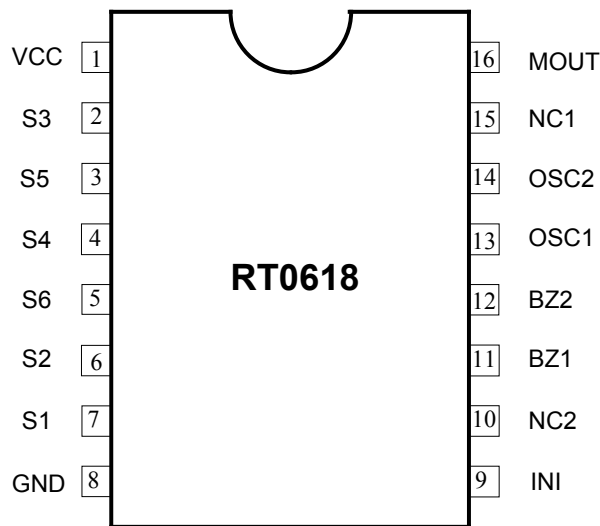The RT0618 is a CMOS design for six different alarm sounds application. According to the priority of the select keys. The sound of RT0618 will be generated in cycling sequence,

## FEATURES :

1. Auto Power off function, reduce power consumption.
2. Low Operating Voltage 2V~5V.
3. CMOS process.
4. On-chip RC oscillator.
5. 6 different sounds.
6. 6 prioritized keys for selecting 6 different sounds.
7. Low stand by current.

## PIN DIAGRAM

| VCC | 1 | | 16 | MOUT |
|---|---|---|---|---|
| S3 | 2 | | 15 | NC1 |
| S5 | 3 | | 14 | OSC2 |
| S4 | 4 | **RT0618** | 13 | OSC1 |
| S6 | 5 | | 12 | BZ2 |
| S2 | 6 | | 11 | BZ1 |
| S1 | 7 | | 10 | NC2 |
| GND | 8 | | 9 | INI |

## PIN OUT AND DESCRIPTION

| Symbol | Description | PIN | I/P, O/P |
|---|---|---|---|
| VCC | Power | 1 | |
| S1 | Sound selection keys. These connects | 2 | I/P |
| S2 | with internal pull-down Resistor. The | 3 | |
| S3 | sound output wiil be enabled when a key | 4 | |
| S4 | is connected to VDD, on other hands, the | 5 | |
| S5 | sound output will be disabled if a key is | 6 | |
| S6 | N.C. or connected to GND(ground). When two or more keys are selected in the same time, the sound will be generated in cycling sequence, according to the priority of the keys. The proirity of S!~S6 list below : S1>S2>S6>S4>S5>S3 | 7 | |
| GND | Ground | 8 | |
| INI | An internal pull-up resistor. Might disable BZ1, BZ2 when connected to GND. | 9 | I/P |
| BZ1 | Audio outputs | 11 | O/P |
| BZ2 | | 12 | |
| OSC1 | Oscillator pin | 13 | |
| OSC2 | | 14 | |
| MOUT | When S2 is selected a square wave will be sent out to this pin. | 16 | O/P |
| NC1 | No connecting | 15 | |
| NC2 | | 10 | |

## ELECTRICAL CHARACTERISTICS

VCC=3V,    Temp. =25°C

| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|---|---|---|---|---|---|
| Operating Voltage | VCC | 2.0 | 3.0 | 5.0 | V |
| Stand-By Current | Isb | | 10 | 20 | uA |
| Operating Current | Iop | | 300 | 500 | uA |
| BZ1, BZ2 | Ioh | 1.0 | | | mA |
| Driving Current | Iol | 1.0 | | | mA |
| Operating Frequency | Fop | 70 | 80 | 128 | K Hz |

## ABSOLUTE MAXIMUM RATINGS

| Symbol | Parameter | Rating | Unit |
|--------|-----------|--------|------|
| VCC | Supply Voltage | -0.3 ~ 6 | V |
| Vi | Input Voltage | -0.3 ~ Vcc+0.3 | V |
| Vo | Output Voltage | -0.3 ~ Vcc+0.3 | V |
| Tst | Storage Temperature | -40 ~ 125 | °C |
| Ttp | Operating Temperature | 0 ~ 65 | °C |

# APPLICATION CIRCUIT