

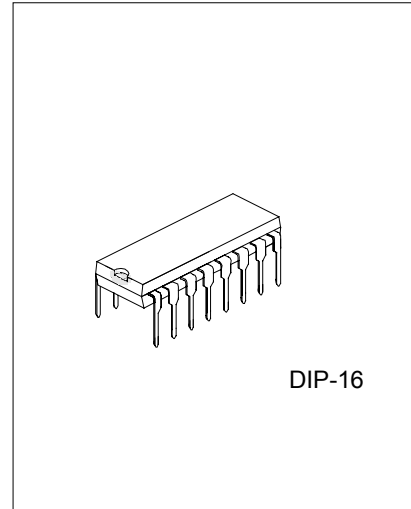
DUAL TONE MELODY XMAS LIGHT CONTROL

FEATURES

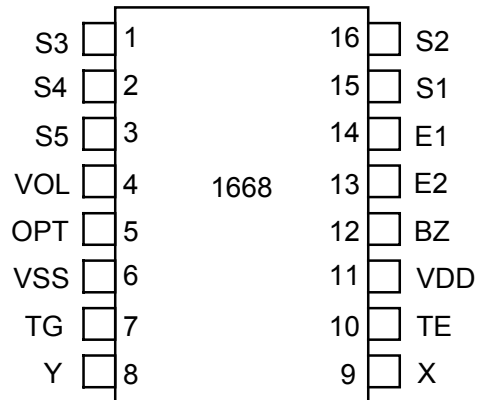
- \* 5 SCR outputs.
- \* 2 Mode sequence trigger key
- \* Mode 0: 7 function Vol pin control volume.  
Mode 1: 8 function Auto Volume control.
- \* OPT: "Floation" Mode 0  
"VSS" Mode 1.

APPLICATION

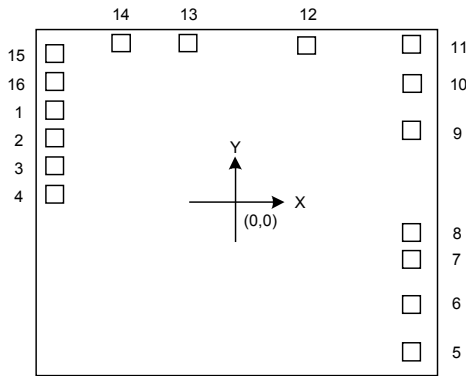
- \* Xmas light control etc..



Pin Assignment



PAD COORDINATES



CHIP SIZE: 2.00 × 1.72mm<sup>2</sup>  
 SUBSTRATE: VDD

| NO | NAME | X      | Y      |
|----|------|--------|--------|
| 1  | S3   | -911.3 | 436.3  |
| 2  | S4   | -911.3 | 296.4  |
| 3  | S5   | -911.3 | 156.4  |
| 4  | VOL  | -911.3 | 15     |
| 5  | OPT  | 896.4  | -772.8 |
| 6  | VSS  | 896.4  | -534.3 |
| 7  | TG   | 896.4  | -312.2 |
| 8  | Y    | 896.4  | -172.5 |
| 9  | X    | 896.4  | 338.2  |
| 10 | TE   | 896.4  | 571.8  |
| 11 | VDD  | 896.4  | 765.6  |
| 12 | BZ   | 369.6  | 757.1  |
| 13 | E2   | -218.2 | 772.7  |
| 14 | E1   | -554.5 | 772.7  |
| 15 | S1   | -911.3 | 716.4  |
| 16 | S2   | -911.3 | 576.4  |

UNIT:um

ELECTRICAL CHARACTERISTICS (VDD=4.3V,unless otherwise specified)

| PARAMETER             | SYMBOL | TEST CONDITIONS           | MIN. | TYP. | MAX. | UNIT |
|-----------------------|--------|---------------------------|------|------|------|------|
| Operating Voltage     | VDD    |                           |      | 4.3  | 5    | V    |
| Operating Current     | Iop    | No load                   |      |      | 2    | mA   |
| BZ Driving Current    | Ioh    | Vds=1V                    |      | 0.2  |      | mA   |
| Oscillator Frequency  | Fosc   | External ±30%, Rosc=270KΩ |      | 100  |      | KHz  |
| Operating Temperature | Topr   |                           | 0    | 25   | 60   | °C   |

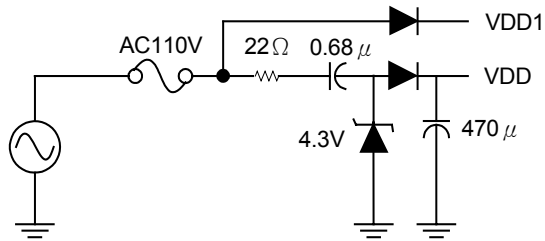
MODE FORMAT

| MODE | MODE 0            |  | MODE 1                           |        |
|------|-------------------|--|----------------------------------|--------|
|      | LIGHT             |  | LIGHT                            | VOLUME |
| M1   | Inphase           |  | Inphase                          | Max.   |
| M2   | 2 Mode Sequential |  | 2 Mode Sequential                | Middle |
| M3   | 1 Lamp Flash      |  | 1 Lamp Flash                     | Min.   |
| M4   | 2 Lamp Chasing    |  | Rotary                           | Max.   |
| M5   | M1~M4 Rotary      |  | Inphase + 2 Lamp Chasing         | Middle |
| M6   | M1~M4 Rotary      |  | 2 Mode Sequential + 1 Lamp Flash | Min.   |
| M7   | Steady on         |  | Rotary                           | Mute   |
| M8   |                   |  | Steady on                        |        |

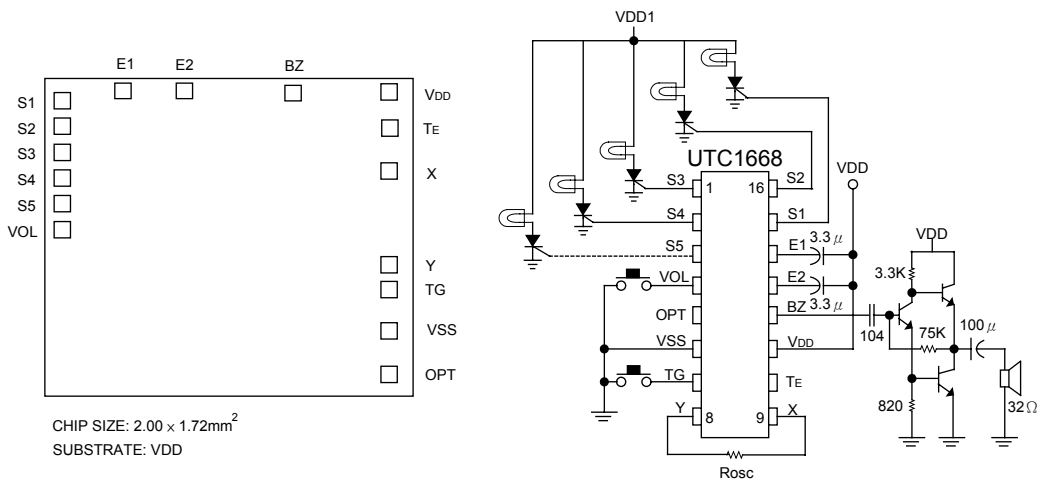
SONG LIST

| No. | SONG NAME                       | No. | SONG NAME                          |
|-----|---------------------------------|-----|------------------------------------|
| 1   | Angels we have heard on high    | 14  | Santa Claus coming to down         |
| 2   | Silent night                    | 15  | O Christmas tree                   |
| 3   | Away in a manger                | 16  | Rudolph, the red-nosed reindeer    |
| 4   | We three king of orient are     | 17  | What child is this                 |
| 5   | Jingle balls                    | 18  | I saw three ships                  |
| 6   | We wish you a merry Christmas   | 19  | O litter town of Bethlehem         |
| 7   | The twelve days of Christmas    | 20  | God rest you merry, gentlemen hark |
| 8   | Up on the housetop              | 21  | Deck the halls                     |
| 9   | Jolly old saint nickel          | 22  | The hearld angels sing             |
| 10  | Good king wencelas              | 23  | The snow lay on the ground         |
| 11  | O come ,all ye faithful         | 24  | Bring a torch                      |
| 12  | Joy to the world                | 25  | The first noel                     |
| 13  | It came upon the midnight clear |     |                                    |

APPLICATION CIRCUIT



APPLICATION DIAGRAM



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