

M3096V	P. 1
6/12-LED LOTTO GAME IC	

■ Description

M3096V is a low voltage 6/12-LED controller IC specially design for lotto game.

The IC requires minimal external components.

■ Application Example

- 12 lamps lotto game
 - 6 lamps dice game
 - 10 lamps bingo game
- LED.
- 5 lamps bingo game
 - 2 lamps big or small game
 - 10+2 lamps big or small game
 - Other lotto games

seconds

■ Feature

- CMOS technology
- Operating voltage : 1.35~5.00V DC
- Low standby current < 5 μ A (@3VDC)
- Maximum 12 LED can be connected as :
 - 12 or 6 LED, LCN as center LED, IC will automatically stop after 6
 - 10 or 5 or 2 LED, use power on/off LED will chase sequentially for a few cycles and randomly stop at one
- IC directly drives piezo buzzer and generates sound effect which changes with LED chasing speed
- Single trigger input (High Level)

■ Product type

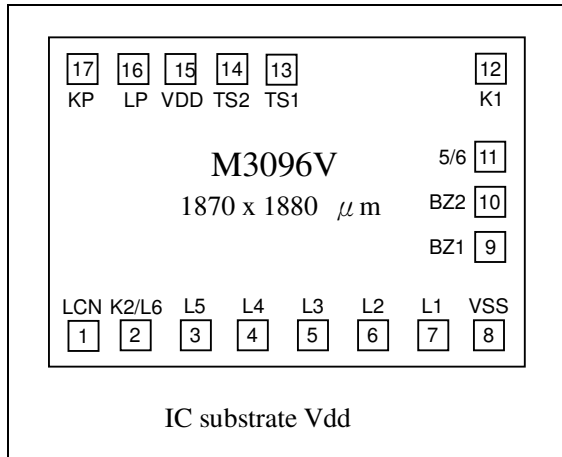
Part number	Package type
M3096V	Chip form
3906P	16 pin DIP

■ Explanation (reference to P.3 application circuits)

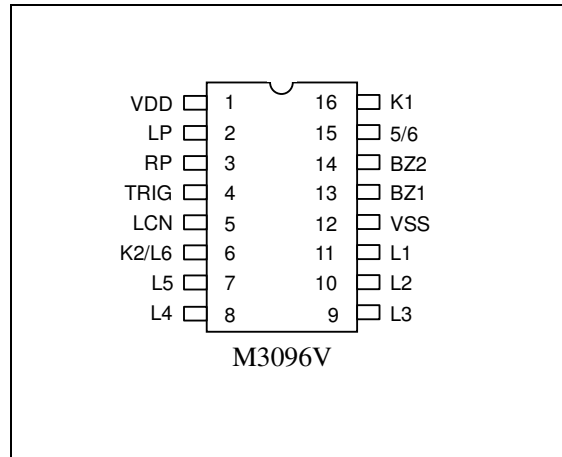
1. 12 or 6 LED + 1 LED (center LCN LED, auto chasing)
 - (1) Holding SW, 12 LED start to flash sequentially. LCN LED flashes indepently.
 - (2) After released SW, 10 and LCN LED start to slow down flashing speed
 - (3) When it stops at one LED, LCN LED keeps flashing.
 - (4) After 10 seconds, all LED turn off. IC enters standby mode. Retriggering SW will re-start the above sequence.
 - (5) IC can be connected as 12 or 6 LED application.
2. 10 or 5 LED + 2 LED (two center LCN LED, for big or small)
 - (1) Holding SW1, 10 LED start to flash sequentially. Two LCN LED do not flash.
 - (2) After released SW1, 10 LED start to slow down flashing speed.
 - (3) When it stops at one LED. Press SW2, LCN(11st and 12nd) LED will flash and stop at one.
 - (4) IC can be connected as 5, 10, 2 LED.
 - (5) Using only 11st and 12nd LED is for 2-LED application.

M3096V	P. 2
6/12-LED LOTTO GAME IC	

■ IC bonding pad diagram



■ 16 pin DIP package

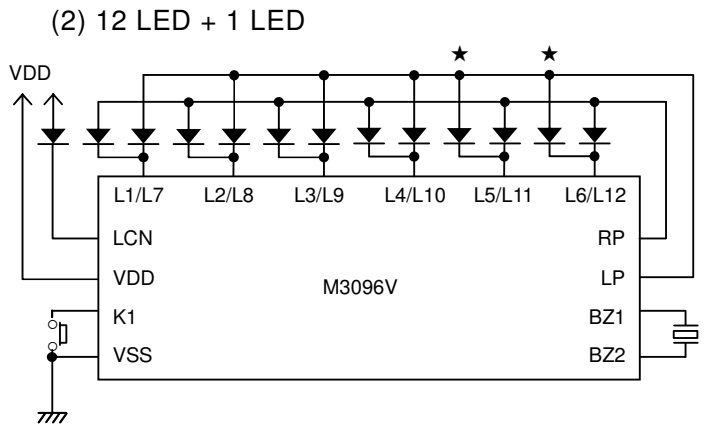
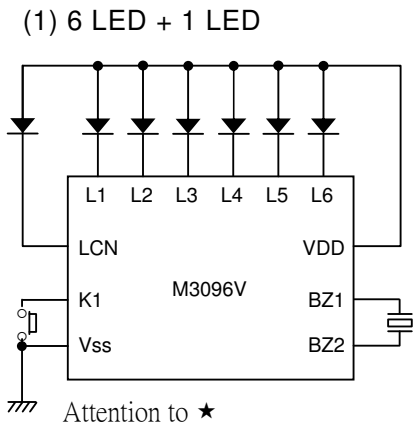


■ Pin description

Pad	DIP	Symbol	Function
1	5	LCN	Center LED output
2	6	K2/L6	SW2 key input or LED6/LED12 output
3	7	L5	LED5/LED11 output
4	8	L4	LED4/LED10 output
5	9	L3	LED3/LED9 output
6	10	L2	LED2/LED8 output
7	11	L1	LED1/LED7 output
8	12	Vss	Negative power supply
9	13	BZ1	Buzzer output port 1
10	14	BZ2	Buzzer output port 2
11	15	5/6	5(10)/6(12) LED output selection pin
12	16	K1	SW1 key input
13	--	TEST1	Test pin (internal use)
14	--	TEST2	Test pin (internal use)
15	1	Vdd	Positive power supply
16	2	LP	Left output
17	3	RP	Right output

■ Application Circuit

A. Auto power off (lotto game)



B. Power will not turn off automatically (bingo game)

