CDT3050	P. 1
3-DIGIT DOWN TIMER IC	

■DESCRIPTION

The CDT3050 is a low voltage 3 digits LCD driver for advanced **Count Down Timer**.

Minimal components are used.

With START/STOP and RECALL setting functions.

LCD: 1/2 Duty, 1/2 Bias, 2 Commons

■FEATURES

- CMOS Technology
- Supply Voltage Range：1.2 ~ 1.8VDC
- Low Standby Current < 5μA
- With a Trigger Output Capability
- Time Setting： Max: 999 Minutes
  Min: 1 Minute
- 32768 Hz Crystal used
- LCD displays Seconds until the last minute
- 16 seconds, 4Hz (64 Sounds) BiBi Alarm when time runs out
- "★" - Operating symbol
- "S" - Seconds symbol

■APPLICATIONS

- Count Down Timer
- Electronic Timer
- Setting Control Timer

■DEVICE TYPE

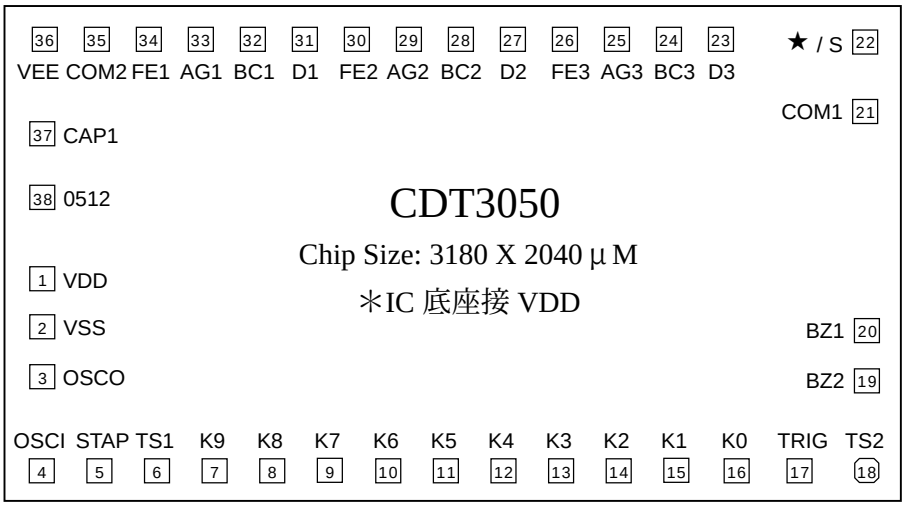
Type No.	Package
CDT3050	Chip form

■DC ELECTRONICAL CHARACTERISTICS

Characteristics	Symbol	Min	Type	Max	Unit
Operation Voltage	VDD	1.2	1.5	1.8	V
Operation Current	Idd	-	-	2.0	μA
BZ Driver Current	Ibz	2.0	-	-	mA
Crystal		-	32768	-	Hz
LCD Display Freq		-	32	-	Hz
K0~K9 Input Current	Ikey	-	-	5	μA
Trigger Output Current	Itrig	1	-	-	mA

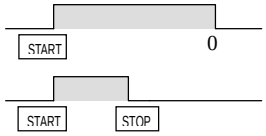
※ Above testing conditions are based on VDD=1.5V

■PAD ASSIGNMENT



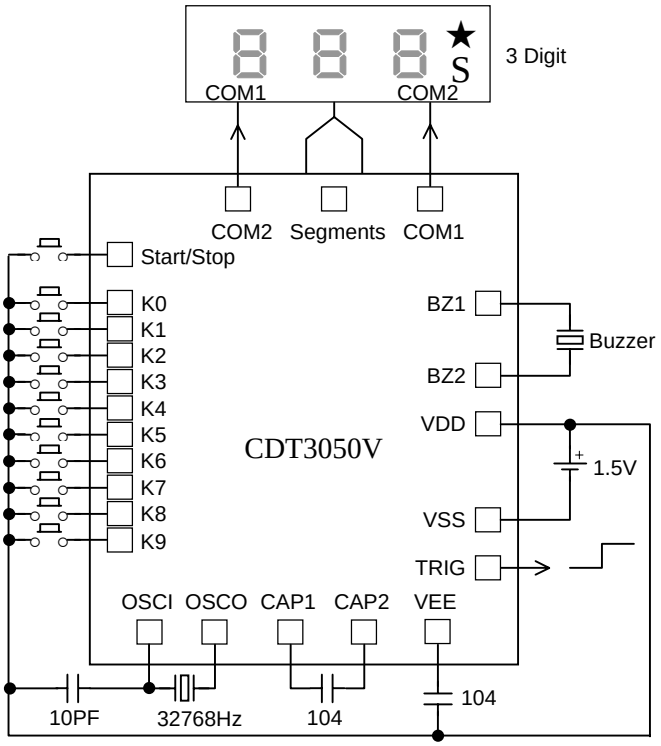
■PIN DESCRIPTIONS

Chip PAD	Symbol	Functions Description
1	VDD	Positive Power Supply
2	VSS	Negative Power Supply
3	OSCO	Oscillator Output , with 32,768Hz Crystal
4	OSCI	Oscillator Input
5	STAP	START/STOP key, START, STOP push switch
6	TS1	Internal Testing pin
7	K9	Time Setting Key (9)
8	K8	Time Setting Key (8)
9	K7	Time Setting Key (7)
10	K6	Time Setting Key (6)
11	K5	Time Setting Key (5)
12	K4	Time Setting Key (4)
13	K3	Time Setting Key (3)
14	K2	Time Setting Key (2)
15	K1	Time Setting Key (1)
16	K0	Time Setting Key (0)

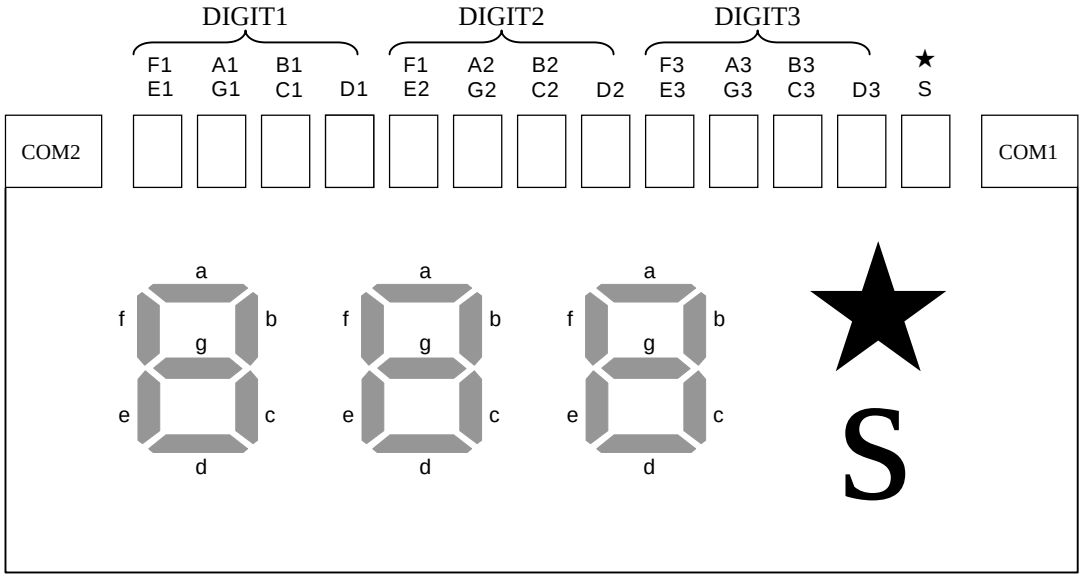
Chip PAD	Symbol	Functions Description
17	TRIG	Trigger Output ： 
18	TS2	Internal Testing pin
19 20	BZ2 BZ1	Buzzer Output Buzzer Output Continues BiBi Alarm, 16sec 4Hz – 64 Sounds
21 22 23 24 25 26 27 28 29 30 31 32 33 34 35	COM1 ★/S D3 BC3 AG3 FE3 D2 BC2 AG2 FE2 D1 BC1 AG1 FE1 COM2	LCD Common1 (★) Timer is working；(S) Seconds symbol LCD segment LCD segment LCD segment LCD segment LCD segment LCD segment LCD segment LCD segment LCD segment LCD segment LCD segment LCD segment LCD Common2
36	VEE	Voltage Doubled Input
37	CAP1	Voltage Doubled Capacitor
38	0512	Voltage Doubled Capacitor

■APPLICATION CIRCUITS

10 KEYS SETTING TIMER



■LCD DRAWING



COM2	F1	A1	B1	/	F2	A2	B2	/	F3	A3	B3	/	★	/
/	E1	G1	C1	D1	E2	G2	C2	D2	E3	G3	C3	D3	S	COM1