

深 圳 市 丽 晶 微 电 子 科 技 有 限 公 司

SHEN ZHEN ELITE CHIP MICROCUIT CO.,LTD

6368-30E0

60 秒延时 IC 芯片

1、芯片工作电压，DC2.2-5.5V。

2、两路电平信号输出，一路输出低电平，一路输出高电平，上电不工作，一个按键控制，触发一下，两路信号同步工作，延时 60 秒，时间到自动停止工作，重新触发重新工作 60 秒。工作中触发无效。

3、要求静态低功耗。

3.1 ABSOLUTE MAXIMUM RATING

| | |
|---|-------------------------|
| Supply voltage (Vdd)..... | - 0.3V ~ 6.0V |
| Input in voltage (Vin)..... | Vss – 0.2V ~ Vdd + 0.2V |
| Operating ambient temperature (Topr) | |
| EC2501DS, | -20°C ~ + 85°C |
| Storage ambient temperature (Tstor) | -40°C ~ + 125°C |

3.2 DC CHARACTERISTIC

(All of voltages refer to Vss, Vdd = 5.0V, Fosc = 4MHz, Fcpu=1MHz, ambient temperature is 25°C unless otherwise note.)

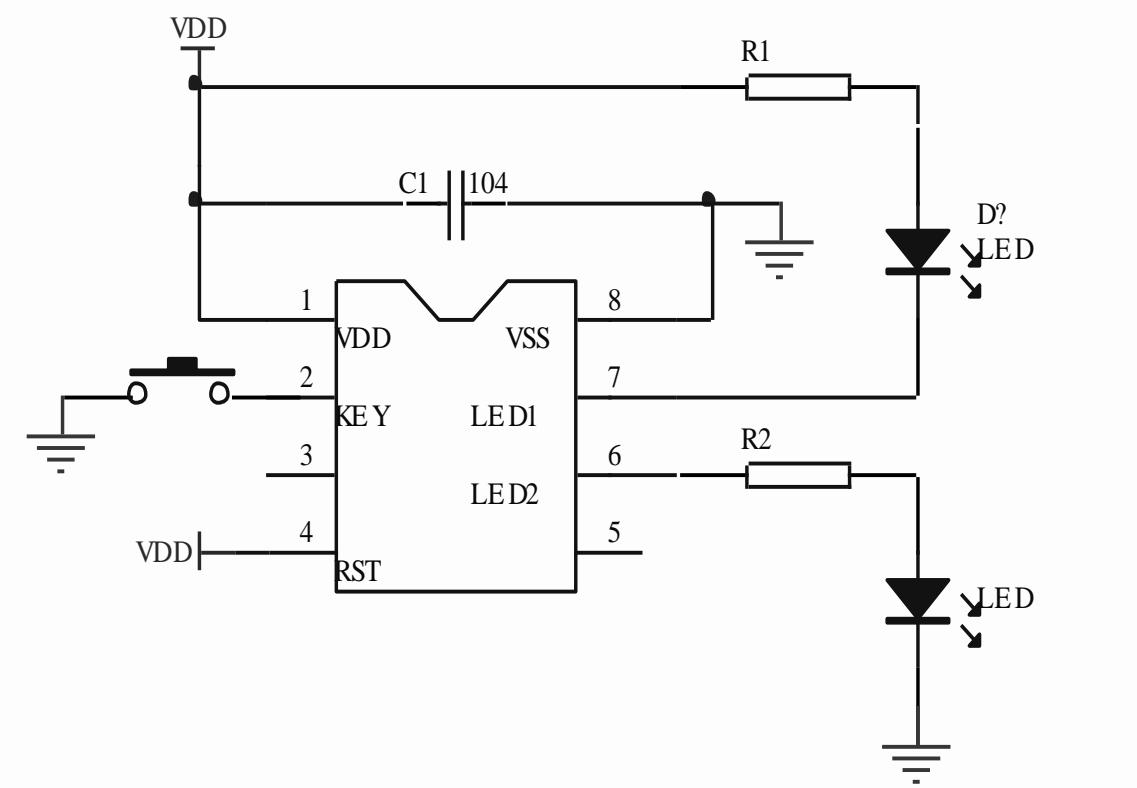
| PARAMETER | SYM. | DESCRIPTION | MIN. | TYP. | MAX. | UNIT | |
|--|-------|--|--|-------|--------|-------|-----|
| Operating voltage | Vdd | Normal mode, Vpp = Vdd, 25°C, Fcpu = 1MHz | 2.2 | - | 5.5 | V | |
| RAM Data Retention voltage | Vdr | | 1.5 | - | - | V | |
| *Vdd rise rate | Vpor | Vdd rise rate to ensure internal power-on reset | 0.05 | - | - | V/ms | |
| Input Low Voltage | ViL1 | All input ports | Vss | - | 0.3Vdd | V | |
| | ViL2 | Reset pin | Vss | - | 0.2Vdd | V | |
| Input High Voltage | ViH1 | All input ports | 0.7Vdd | - | Vdd | V | |
| | ViH2 | Reset pin | 0.8Vdd | - | Vdd | V | |
| Reset pin leakage current | Ilekg | Vin = Vdd, 25°C | - | - | 2 | uA | |
| I/O port input leakage current | Ilekg | Pull-up resistor disable, Vin = Vdd | - | - | 2 | uA | |
| I/O port pull-up resistor | Rup | Vin = Vss , Vdd = 3V | 100 | 200 | 300 | KΩ | |
| | | Vin = Vss , Vdd = 5V | 50 | 100 | 180 | | |
| I/O output source current sink current | IoH | Vop = Vdd – 0.5V | 8 | 15 | - | mA | |
| | IoL | Vop = Vss + 0.5V | 8 | 15 | - | | |
| *INTn trigger pulse width | Tint0 | INT0 interrupt request pulse width | 2/fcpu | - | - | cycle | |
| Supply Current | Idd1 | Run Mode (No loading, Fcpu = Fosc/4) | Vdd= 5V, 4Mhz Vdd= 3V, 4Mhz | - | 3 | 5 | mA |
| | | Slow Mode (Internal low RC, Stop high clock) | Vdd=5V, ILRC 32Khz Vdd=3V, ILRC 16Khz | - | 1.5 | 2 | uA |
| | Idd2 | Sleep Mode | Vdd= 5V, 25°C Vdd= 3V, 25°C | - | 20 | 40 | uA |
| | | | | - | 5 | 10 | uA |
| | Idd3 | Green Mode (No loading, Fcpu = Fosc/4, Watchdog Disable) | Vdd= 5V, 4Mhz Vdd= 3V, 4Mhz Vdd=5V, ILRC 32Khz Vdd=3V, ILRC 16Khz | - | 0.8 | 1.6 | uA |
| | | | | - | 0.7 | 1.4 | uA |
| | | | | - | 0.6 | 1.2 | mA |
| | | | | - | 0.25 | 0.5 | mA |
| Internal High Oscillator Freq. | Fihrc | Internal Hihg RC (IHRC) | 25°C, Vdd= 5V,Fcpu = 1MHz | 15.68 | 16 | 16.32 | Mhz |
| LVD Voltage | Vdet0 | Low voltage reset level, -20°C ~ + 85°C | 1.6 | 2.0 | 2.2 | V | |
| | Vdet1 | Low voltage reset/indicator level. Fcpu = 1 MHz, -20°C ~ + 85°C | 1.8 | 2.4 | 3 | V | |
| | Vdet2 | Low voltage reset/indicator level. Fcpu = 1 MHz, -20°C ~ + 85°C | 2.5 | 3.6 | 4.5 | V | |
| External oscillator (32KHz) match capacitor | C32K | Capacitor selection for crystal oscillator in 32Khz | 20 | 27 | 33 | pF | |

“.” These parameters are for design reference, not tested.

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4、参考电路图：



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