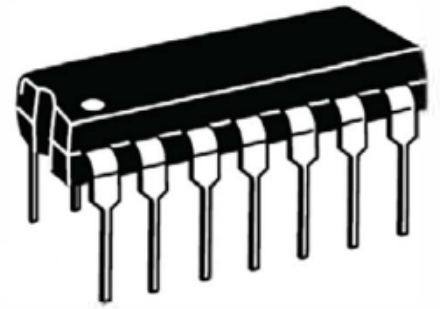


概述

NE556N是双路定时器，单路与NE555功能完全一致，能够产生精确的时钟信号或震荡，时钟信号由外接电阻和电容震荡产生，两路定时器相互独立工作，共用VCC和GND。

NE556N构成的电路可以用在电子控制、电子检测和电子报警等很多方面，它可以构成精确的计时器、分频器、脉冲发生器、时间延时发生器、脉宽调制、相位调制、以及锯齿电压发生器等，在微型计算机外围设备中可以用它来构成时钟发生器以产生所需时钟信号。

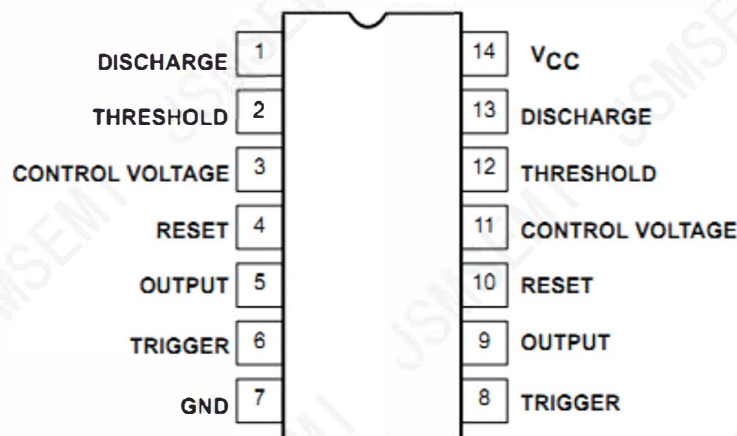


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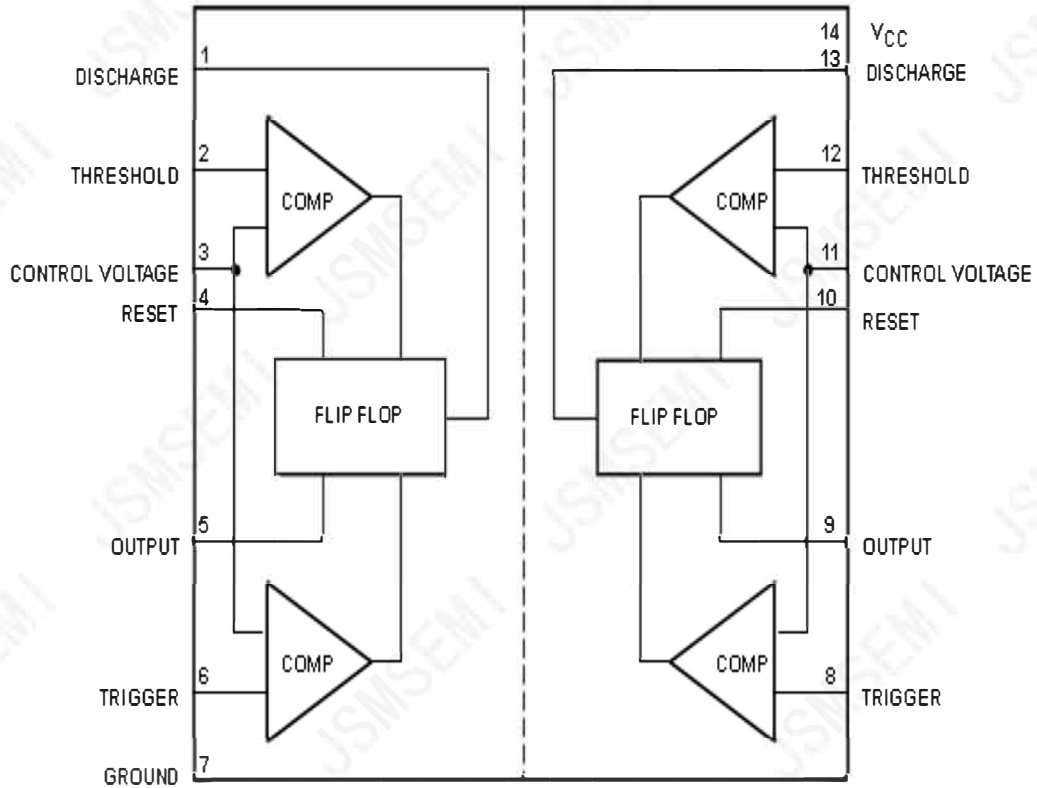
芯片特点

- ◆ 关断时间短
- ◆ 工作在单稳态或多稳态电路
- ◆ 输出周期及占空比可调
- ◆ 高输出电流
- ◆ 从秒到小时定时
- ◆ 外围原件少
- ◆ 可代替双555

引脚排布



结构框图



上图为 NE556N内部结构框图

极限参数及建议使用条件

Tamb=25°C (除非另有说明)

参数名称	符号	极限	建议使用	单位
电源电压	VCC	18	5~15	V
工作环境温度	Tamb	0~70	0~70	°C
储藏温度	Tstg	-65~150	-65~150	°C

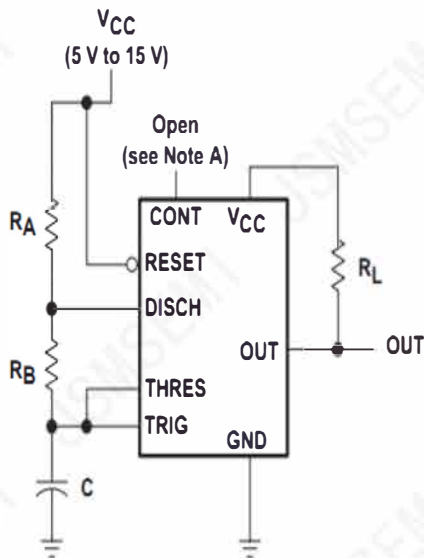
电参数 (TA=25°C, Vcc=+5V 到+15V)

参数名称	符号	测试条件	规范值			单位
			最小	典型	最大	
静态电流	I	VCC=5V		5	8	mA
		VCC=15V		16	24	
电源电压	VCC		4.5		16	V
触发电压	V _{TR}	VCC=5V		1.67		V
		VCC=15V		5		
复位电压	V _R		0.4	0.5	1	V
复位电流	I _R			0.1	0.4	mA
控制电压	V _{CON}	VCC=5V,	2.6	3.3	4	V
		VCC=15V	9	10	11	
输出高电平	V _{OH}	VCC=5V, I _{SOU} =100MA	2.75	3.3		V
		VCC=15V, I _{SOU} =100MA	12.75	13.3		
		VCC=15V, I _{SOU} =200MA		12.5		
输出低电平	V _{OL}	VCC=5V, I _{SIN} =5MA		0.25	0.35	V
		VCC=15V, I _{SIN} =10MA		0.1	0.25	
		VCC=15V, I _{SIN} =50MA		0.4	0.75	
		VCC=15V, I _{SIN} =100MA		2	2.5	
		VCC=15V, I _{SIN} =200MA		2.5		
输出上升时间	T _R		100	300	nS	
输出下降时间	T _F		100	300	nS	

功能表

触发电压 (V_{TR})	阈值电压 (V_{TH})	复位	输出	泄放端三极管
不相关	不相关	低	低	开
$<1/3V_{CC}$	不相关	高	高	关
$>1/3V_{CC}$	$>2/3V_{CC}$	高	低	开
$>1/3V_{CC}$	$<2/3V_{CC}$	高	维持	

典型应用



NOTE A: Bypassing the control-voltage input to ground with a capacitor may improve operation. This should be evaluated for individual applications.

Figure 1. Circuit for Astable Operation

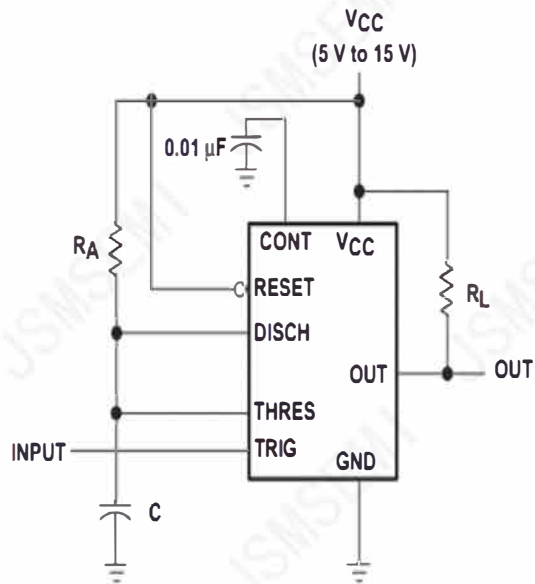


Figure 2. Circuit for Monostable Operation

图 1 为非稳态应用，图 2 为单稳态应用。

Revision History

Rev.	Change	Date
V1.0	Initial version	2/23/2024

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