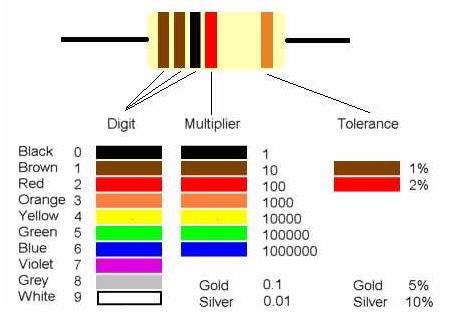
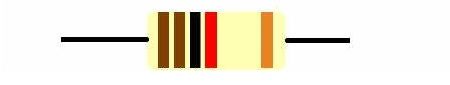
1. **Direnc Okuma**



Direncler 3 ya da 4 renkli olur, okunma sekli de su sekilde;

**4 Renkli ;**

**Digit1 – Digit2 – Digit3 – Digit Carpan - Tolerans**



**3 Renkli ;**

**Digit1 – Digit2 – Digit Carpan – Tolerans**



1. **Direncler**
   1. **470 Ohm**



**Sari** – **Mor** – **Kahverengi** – Altin

4 – 7 – 1 Tolerans: %5

47\*10 = 470

* 1. **1K Ohm**



**Kahverengi – Siyah – Kirmizi –** Altin

1 – 0 – 2 Tolerans: %5

10\*100 = 1000 = 1K

* 1. **2.2K Ohm**



**Kirmizi – Kirmizi – Kirmizi –** Altin

2 – 2 – 2 Tolerans: %5

22\*100 = 2200 = 2.2K

* 1. **10K Ohm**



**Kahverengi – Siyah – Turuncu –** Altin

1 – 0 – 3 Tolerans: %5

10\*1000 = 10000 = 10K

* 1. **180 Ohm**



**Kahverengi – Gri – Kirmizi –** Altin

1 – 8 – 1 Tolerans: %5

18\*10 = 180

* 1. **22K Ohm**



**Kirmizi – Kirmizi – Turuncu –** Altin

2 –2 – 3 Tolerans: %5

22\*1000 = 22,000 = 22K

* 1. **1M Ohm**



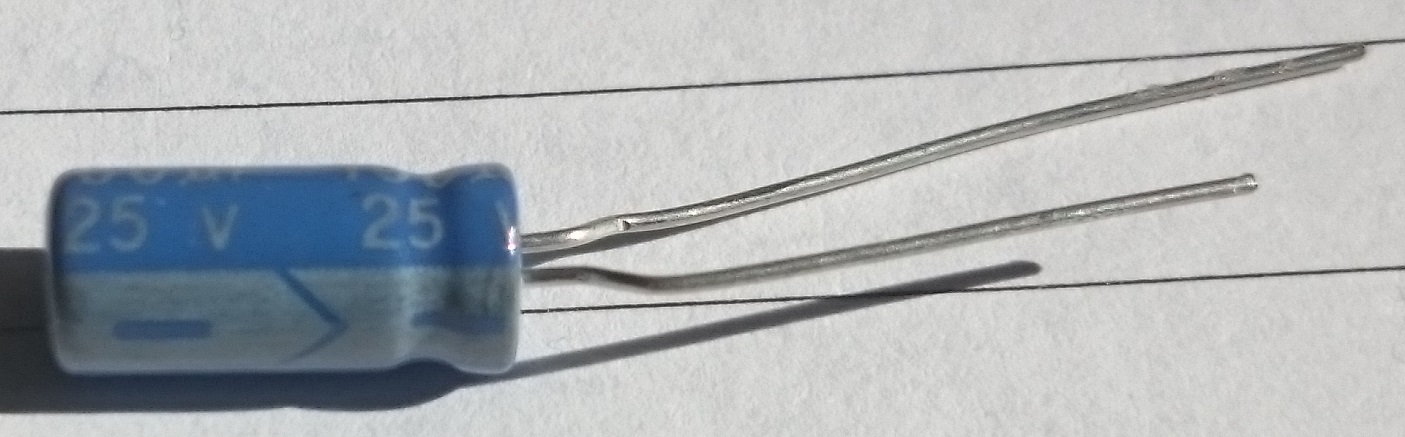
**Kahverengi – Siyah – Yesil –** Altin

1 – 0 – 5 Tolerans: %5

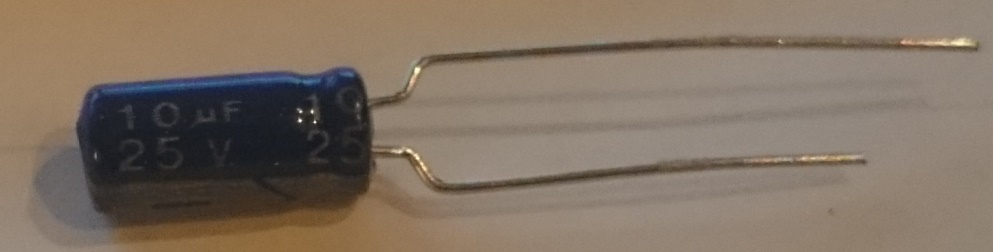
10\*100,000 = 1,000,000 = 1M

1. **Kapasitorler**
   1. **Polarizayon Sembolu**

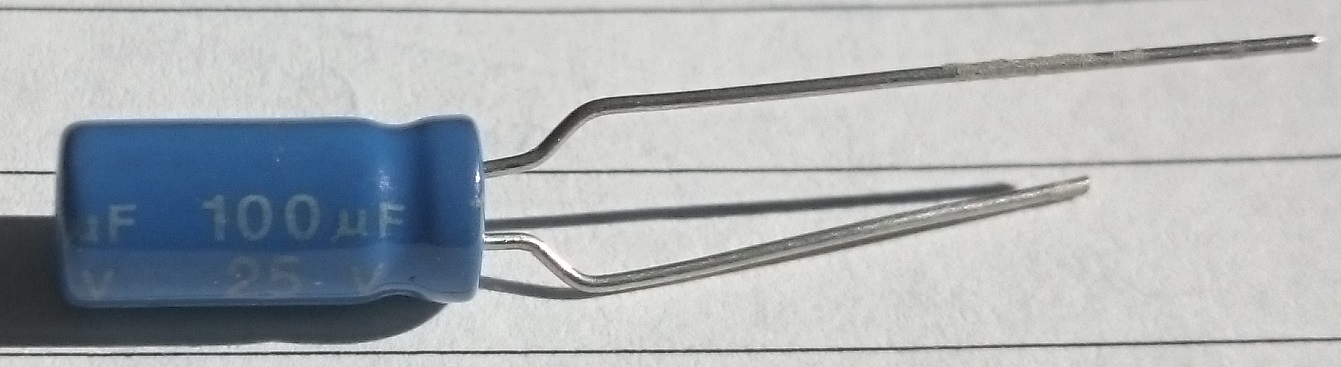
Asagida eksi sembolu ve ok isareti ile – kutup gosterilmektedir.



* 1. **10 uF 25 V (Polarize)**

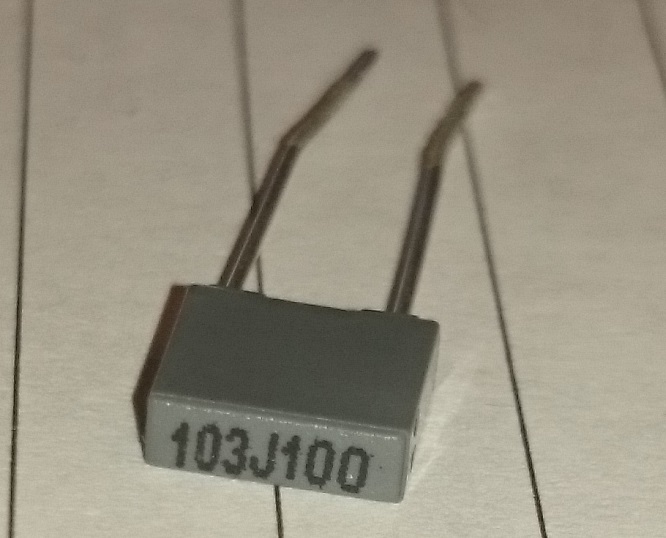


* 1. **100 uF 25 V (Polarize)**



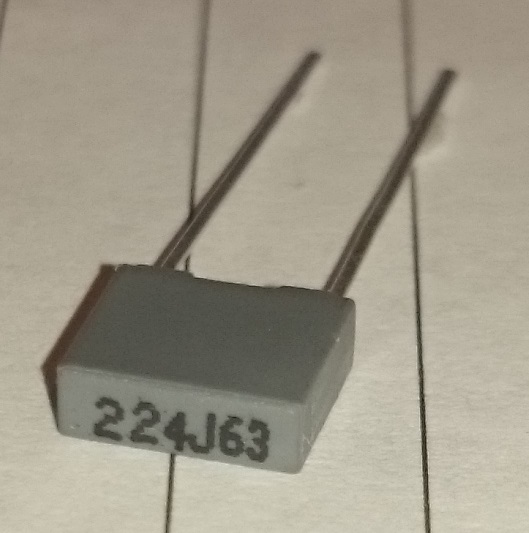
* 1. **100 nF 100 V**

**103J100**

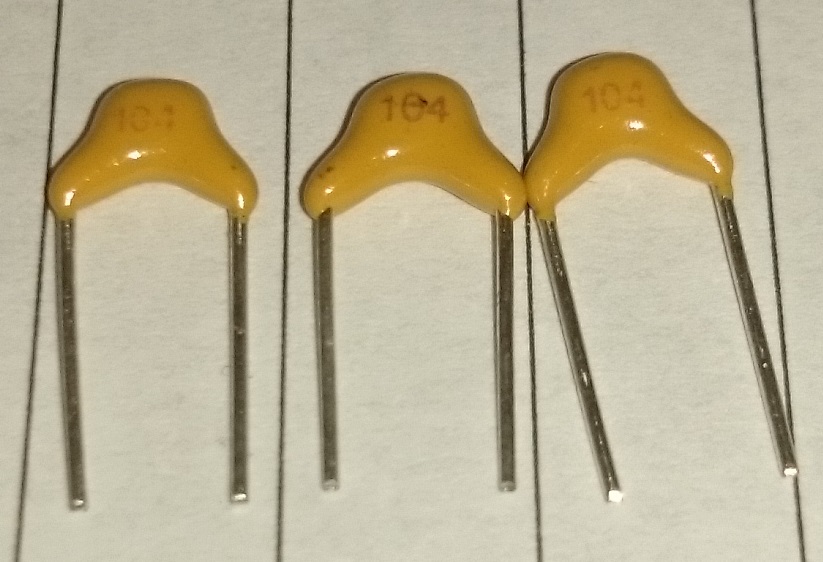


* 1. **220 nF 63 V**

**224H63**



* 1. **100 nF Seramik**



1. **Transistorler**
   1. **BC337 NPN & BC327 PNP (Ya da BC556 PNP)**



1. **Lojik Kapilar (Logic Gates)**
   1. **AND**
      1. 74HC08

**M74HCT08B1**



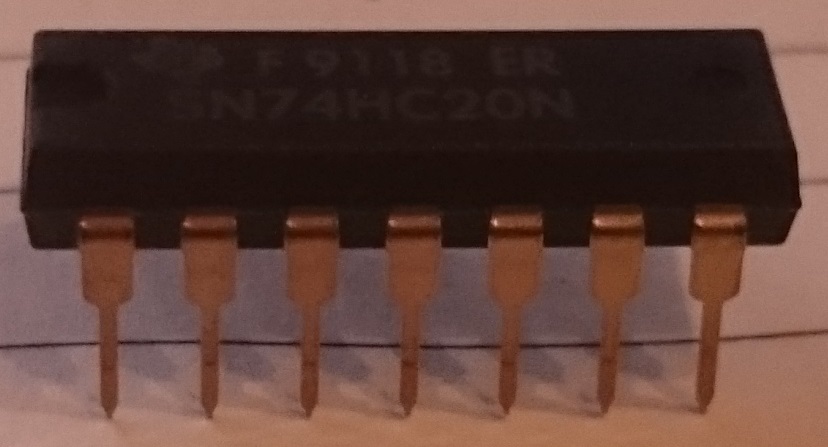
* 1. **OR**
     1. 74HC32

**SN74HC32N**



* 1. **NAND**
     1. 74HC20

**SN74HC20N**



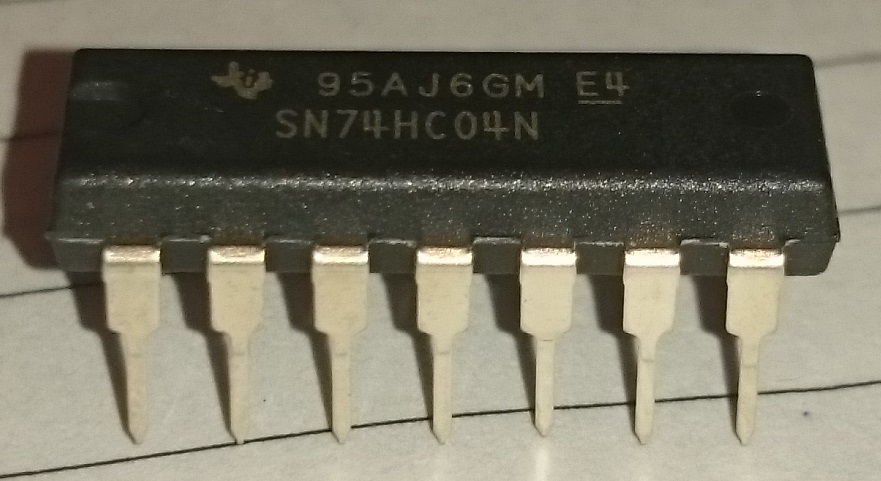
* 1. **NOR**
     1. 74HC02

**SN74F02N**



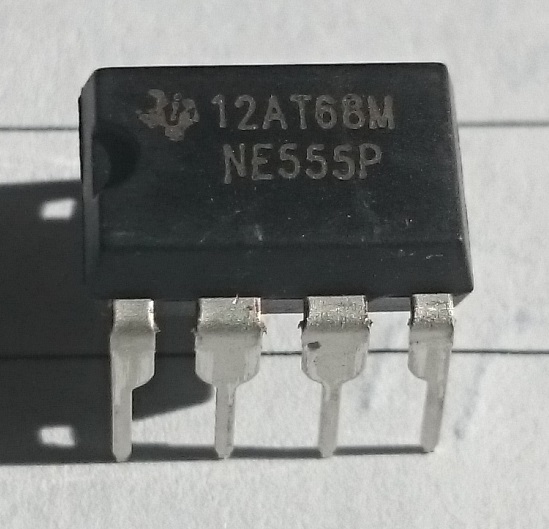
* 1. **NOT**
     1. 74HC04

**SN74HC04N**

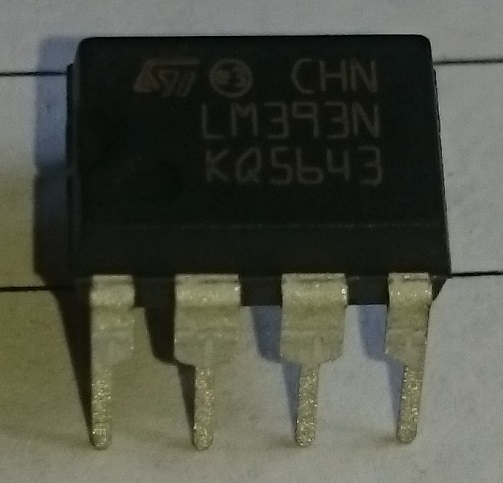


1. **Tumlesik Devreler**
   1. **TIMER**

**LM555**



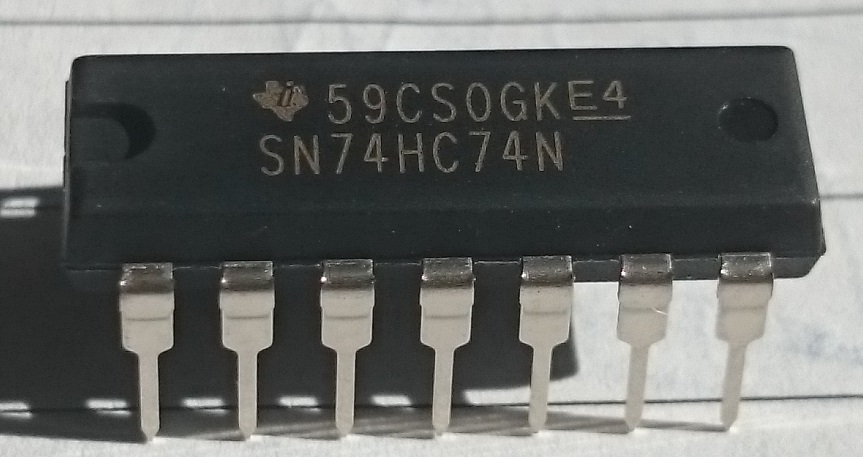
* 1. **LM393**



* 1. **LM358**



* 1. **74HC74 Dual D Type Flip-Flop**



* 1. **4017 COUNTER**

**HCF4017BE**

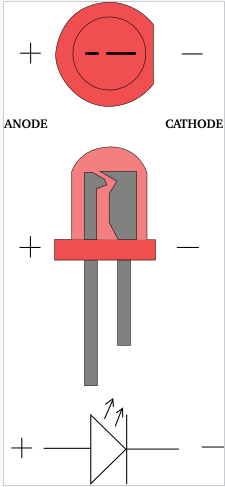
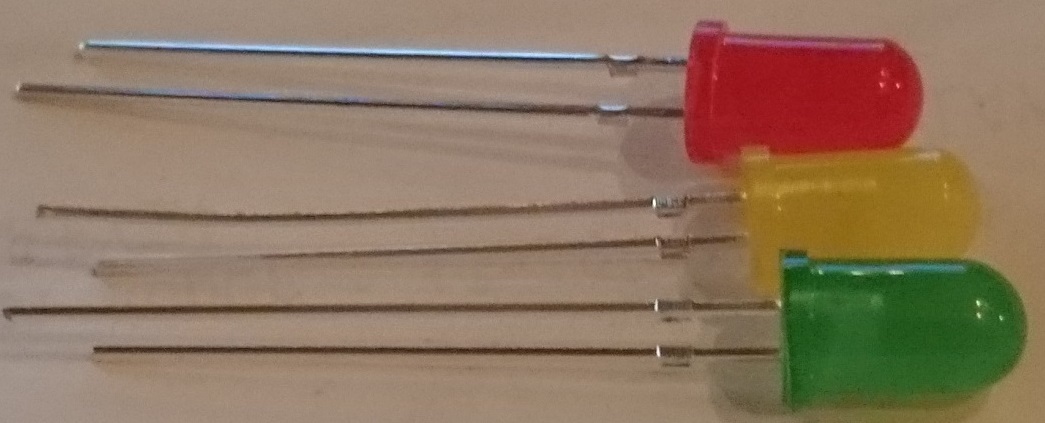


1. **Guc Kaynaklari**
   1. **5V 1A**

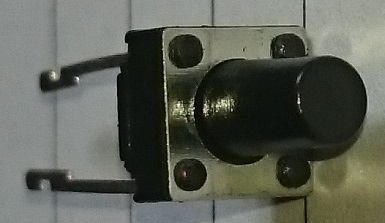


* 1. **x**

1. **Diger**
   1. **LED’ler**



* 1. **Buton**



* 1. x