

# Stopwatch

## **Abstract:**

We are going to construct a digital stopwatch circuit using 7 segment led display with the help of digital IC's like IC 4206 and IC 4017, the speciality of this digital stopwatch also features milliseconds count.

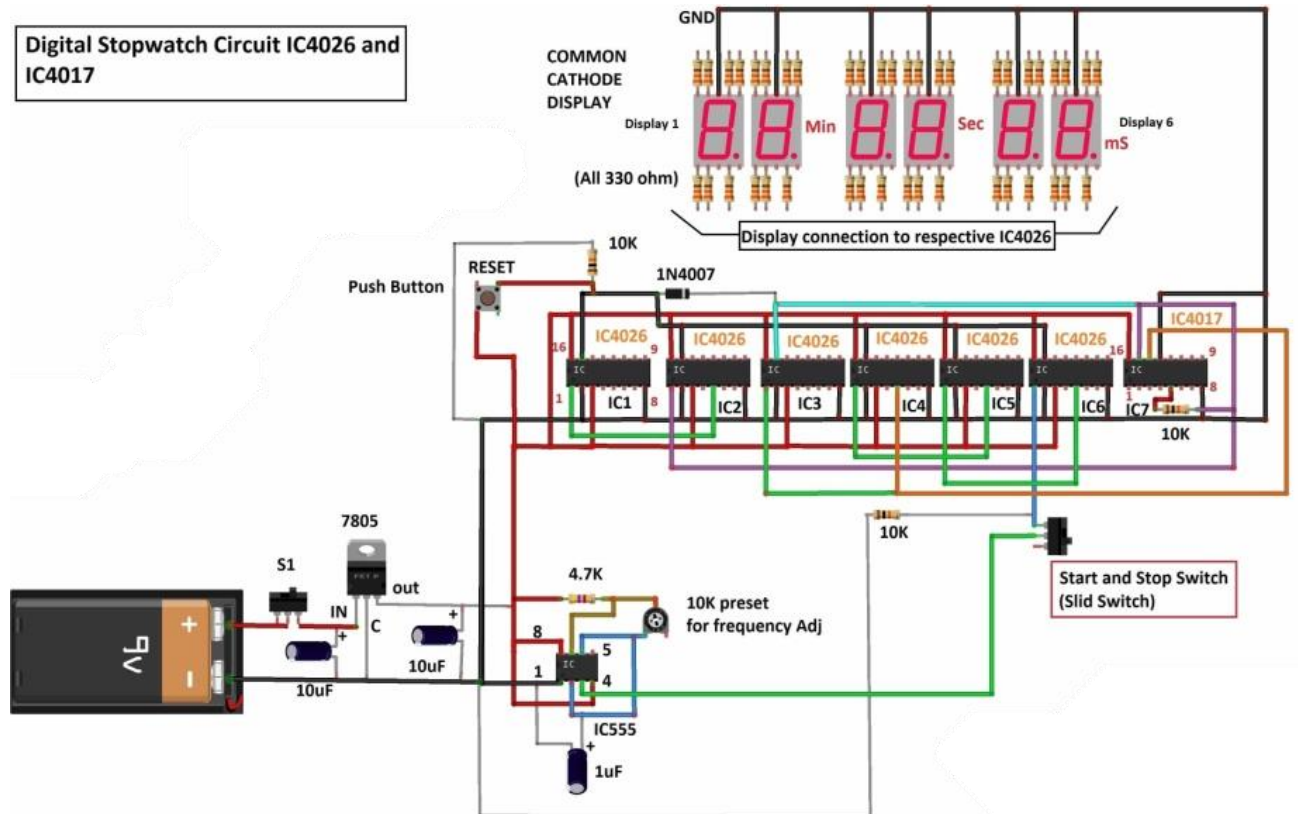
Stopwatch is a timer which is used to measure an event anywhere from milliseconds to several hours. We can start and stop the count of the stopwatch at any instant and also can be reset to zero to measure the timing of a new event.

Stopwatch needs no introduction; we use them at many points of our life to measure timings for several purposes like: During cooking to avoid the food to either overcooked or undercooked, during a sport event or even at science lab.

## **Component Required:**

1. 555 timer IC
2. 7-segment display
3. Resistor
4. 4026 IC
5. 9V Battery

## Circuit Diagram:



## Application of digital stopwatch:

- It can be used for sports purpose and quizzes games.
- This clock can be used for the experiment purpose .
- A digital stopwatch circuit can be worked as a clock in this counter will advance after every one second
- It is also used for jogging.

### **Advantages of digital stopwatch:**

- It is cheaper and easily assemble.
- The digital timer has advantages like the ability to make a custom looking timer no one else has, or with capabilities no manufactured timer has.
- The cheap custom COB microcontrollers with built in LCD segment drivers.

### **Disadvantage of digital stopwatch:**

- The LCD display is expensive.
- The battery of digital stopwatch is non-rechargeable.