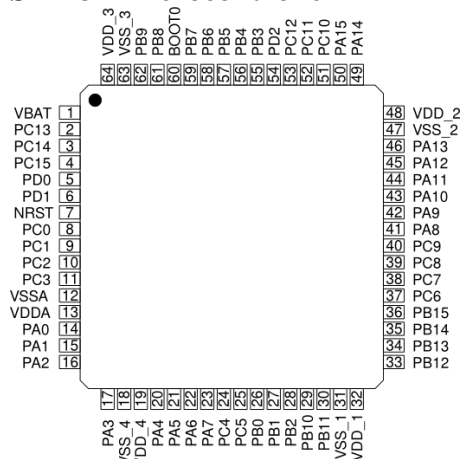


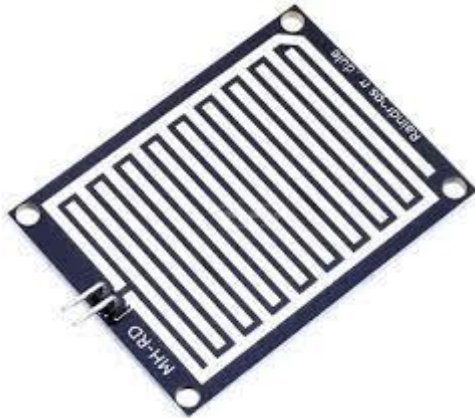
# Rain Sensing Automatic Car Wiper Using STM32 Microcontroller

## 1. STM32 Microcontroller



STM32 is a family of 32-bit microcontroller integrated circuits by STMicroelectronics. The STM32 chips are grouped into related series that are based around the same 32-bit ARM processor core, such as the Cortex-M33F, Cortex-M7F, Cortex-M4F, Cortex-M3, Cortex-M0+, or Cortex-M0.

## 2. Rain Sensor



A **rain sensor** or *rain switch* is a switching device activated by rainfall. There are two main applications for rain sensors. The first is a **water conservation** device connected to an automatic irrigation system that causes the system to shut down in the event of rainfall. The second is a device used to protect the interior of an automobile from rain and to support the automatic mode of window screen wipers.

## 3. Servo Motor



A **servomotor** (or **servo motor**) is a rotary actuator or linear actuator that allows for precise control of angular or linear position, velocity and acceleration. It consists of a suitable motocoupled to a sensor for position feedback. It also requires a relatively sophisticated controller, often a dedicated module designed specifically for use with servomotors.

#### 4. Wifer

