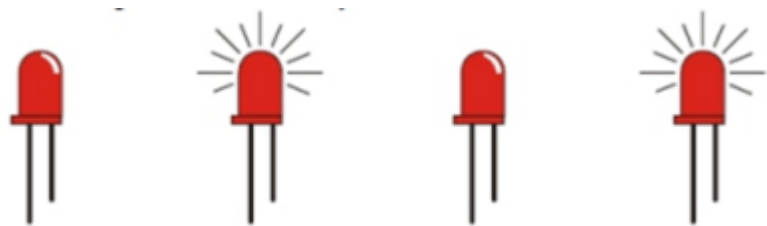


Project 01 Blink LED



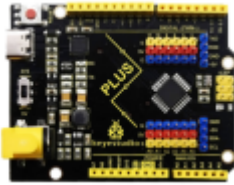
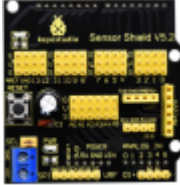
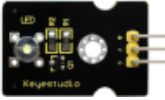


1. Description

In this lesson, we will conduct an experiment to make LED blink.
Connect GND and VCC to power. The LED will be on when signal end S is high level, on the contrary, LED will turn off when signal end S is low level.
In addition, the different blinking frequency can be presented by adjusting the delayed time.

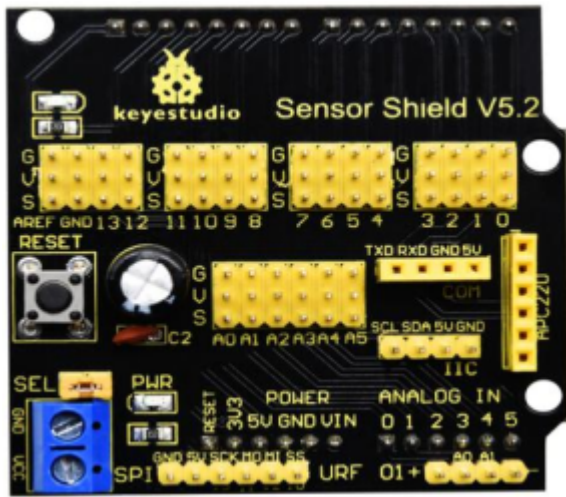
2. Parameters

- Control interface: digital port
- Working voltage: DC 3.3-5V
- Pin pitch: 2.54mm
- LED display color: white

3. Needed Components

PLUS control board*1	Expansion board*1	White LED*1	USB cable *1	3Pin F-F Dupont wire*1
				

4. Sensor Expansion Board

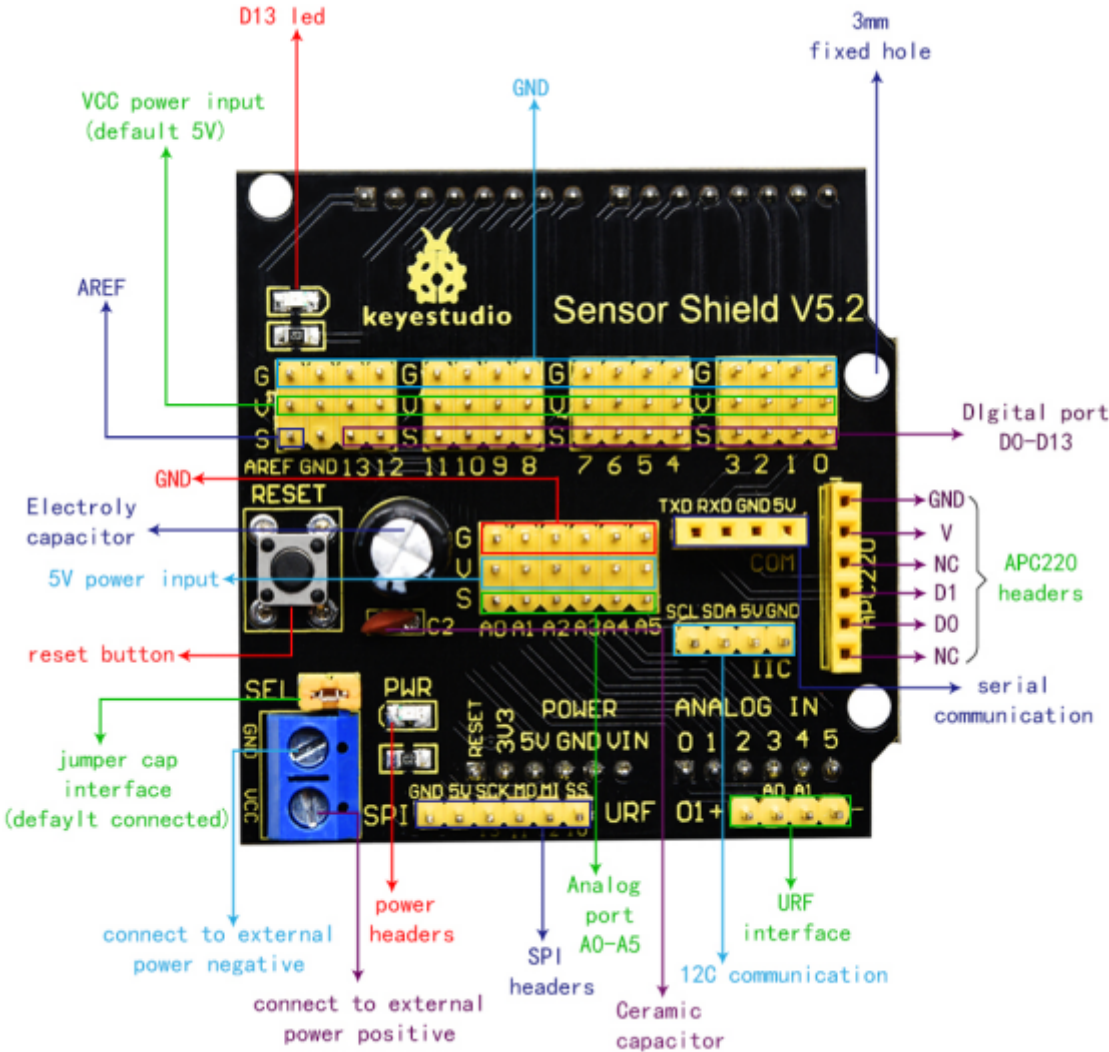


We usually combine Arduino control board with a large number of sensors and modules. However, the pins and ports are limited on control board.

To cope with this disadvantage, we just need to stack V5 sensor board on Keystudio PLUS control board.

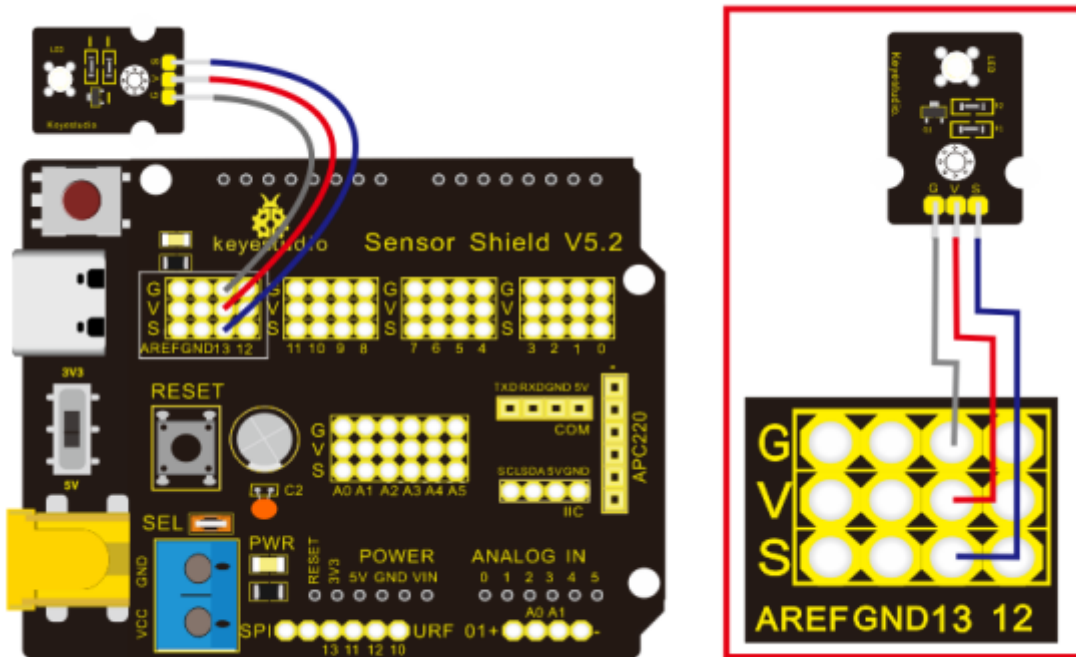
This V5 shield can be directly attached to sensors with 3 pin connectors, and be extended the commonly used communication ports as well, such as serial communication, IIC communication and SPI communication ports. What's more, the shield comes with a reset button and 2 signal lights.

Pins Description:



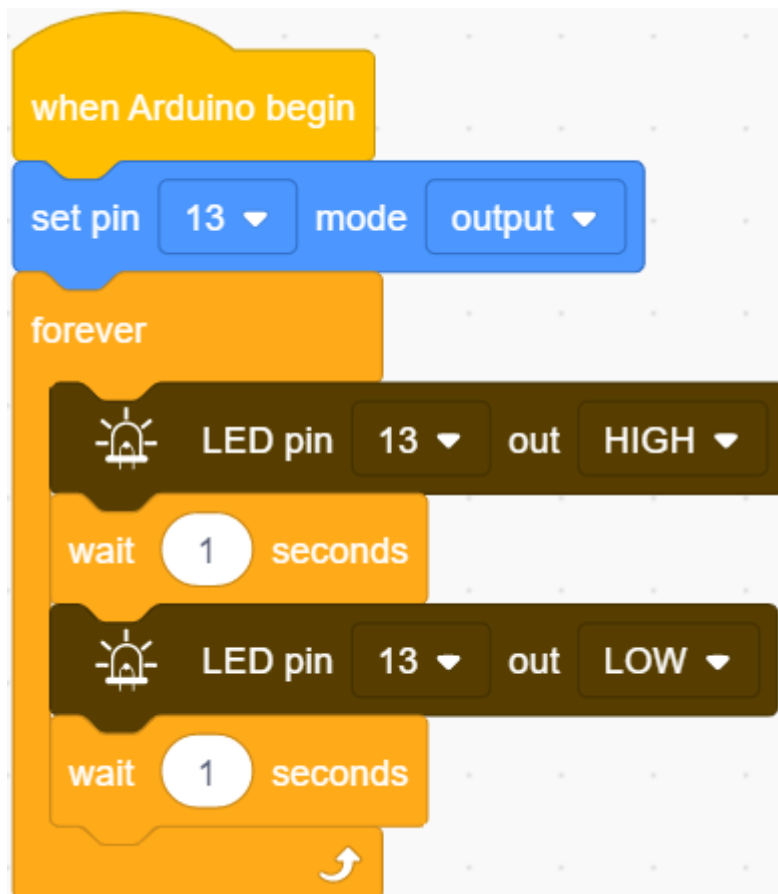
5. Wiring Diagram

Link LED module with D13 of shield.



Note: pin G, V and S of white LED module are linked with G, V and 13 of V5 board.

6. Test Code



7. Test Result

After the code is uploaded, the white LED alternately flashes for 1000ms.

