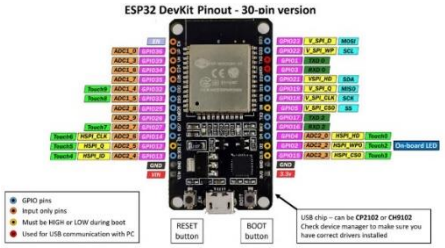
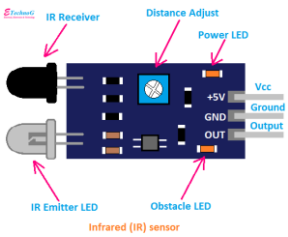
Hardware documentation

1. ESP32 : The ESP32 is a system on a chip microcontroller with integrated Wi-Fi and dual-mode Bluetooth. You can connect to the ESP32 using a MICRO USB cable, and it has a dual core.
   It has a GPIO pin with a voltage level of 3.3v, and the Vin, with a voltage level of 5v.



2. Infrared proximity sensor (חיישן מרחק אינפרא אדום):
   It's a digital sensor, which can detect proximity to another object. It has a built-in variable resistor which can adjust its detection threshold.
   The sensor works by applying a voltage to a pair of IR light-emitting diodes which in turn, emit IR light. This light propagates through the air and once it hits an object, it is reflected towards the sensor. The sensor's output can be decided by the IR receiver depending on the intensity of the response (the output is binary).



In the sketch below, 4 IR sensors are connected to the 3v and GND pin in the esp32 through their Vcc pin and GND pin respectively. In addition, each sensor sends their data to the esp32 through their output pin, where the first sensor is connected to pin #13, the second sensor is connected to pin #14, the third sensor is connected to pin #27 and the fourth sensor is connected to pin #4.