

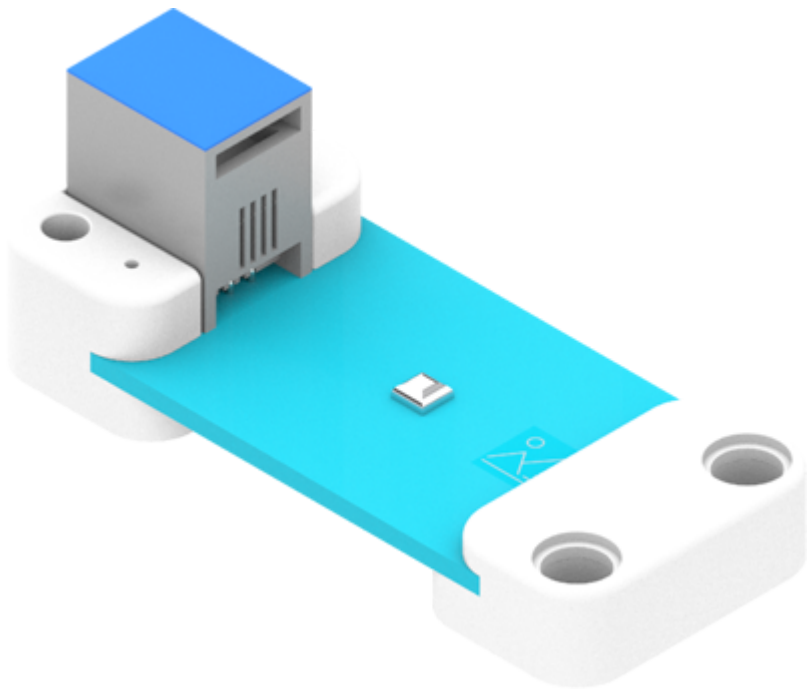
# BME280 Air Pressure Sensor(EF05022)

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## 23.1. Introduction

BME280 Pressure Sensor is an electric brick integrating temperature sensor, air pressure sensor and humidity sensor onboard. We can use it to calculate the altitude according to the measured air pressure.



## 23.2. Products Link

[ELECFREAKS PlanetX BME280 Environment Sensor](#)

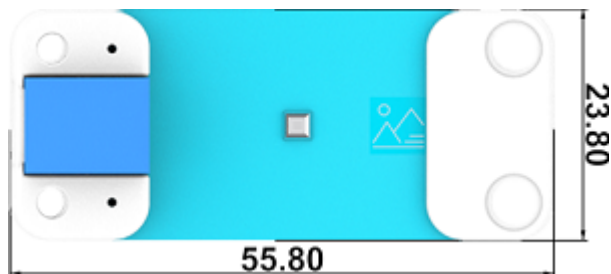
## 23.3. Characteristic

Designed in RJ11 connections, easy to plug.

## 23.4. Specification

Item	Parameter
SKU	EF05022
Connection	RJ11
Type of Connection	IIC
Working Voltage	3.3V
Core IC	BME280

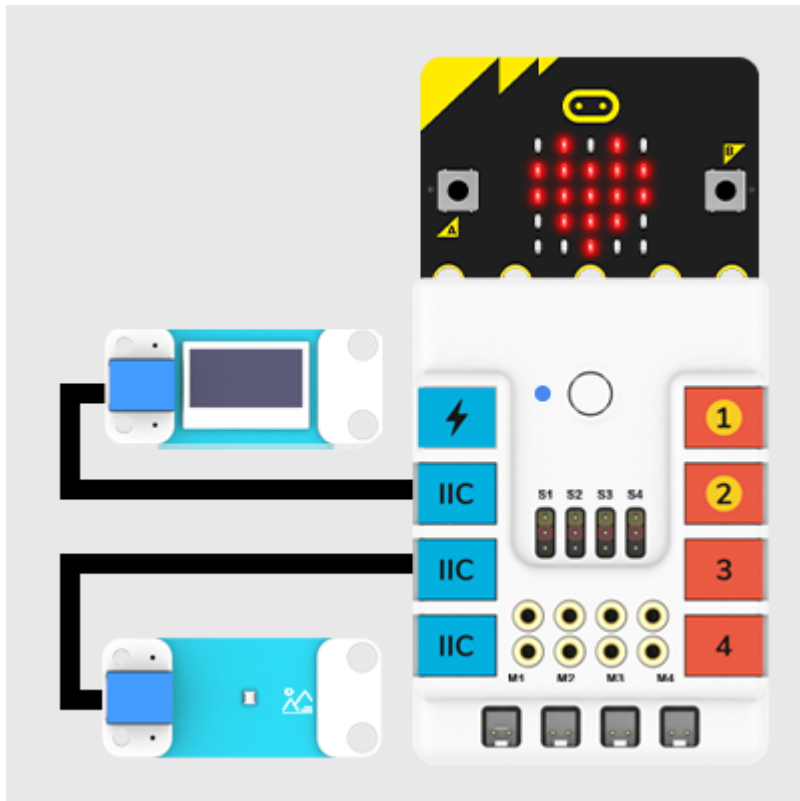
## 23.5. Outlook



## 23.6. Quick to Start

### 23.6.1. Materials Required and Diagram

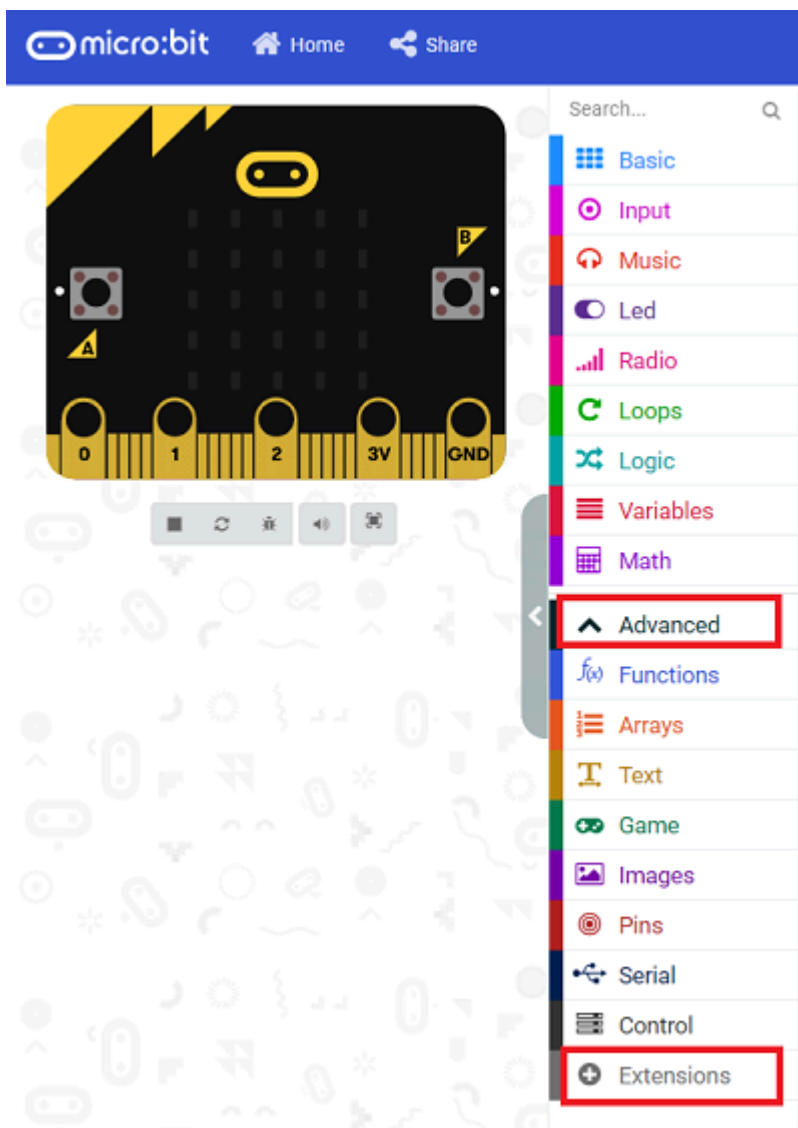
Connect the BME280 air pressure sensor to the IIC port and the OLED to the other IIC port in the Nezha expansion board as the picture shows.



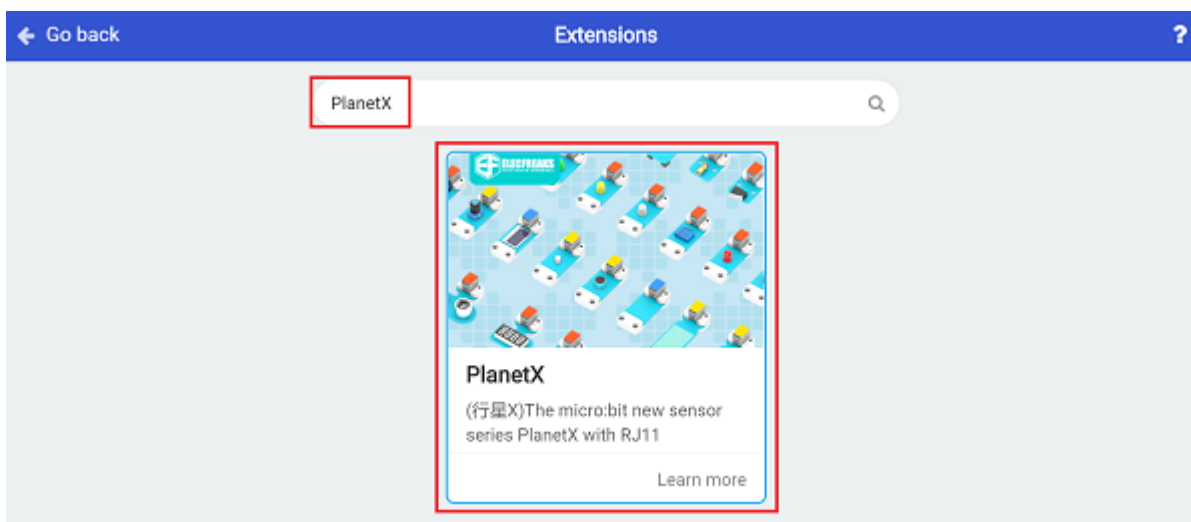
## 23.7. MakeCode Programming

### 23.7.1. Step 1

Click "Advanced" in the MakeCode drawer to see more choices.



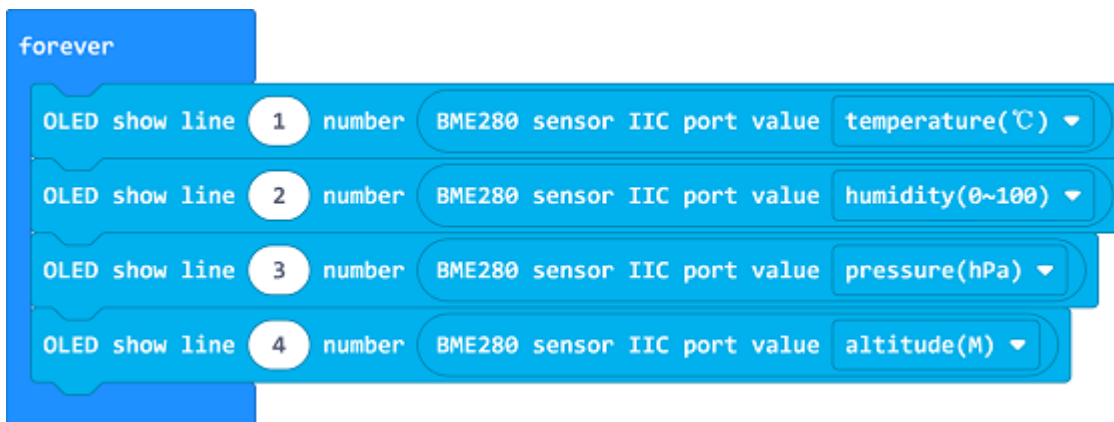
We need to add a package for programming, . Click "Extensions" in the bottom of the drawer and search with "PlanetX" in the dialogue box to download it.



**Note:** If you met a tip indicating that the codebase will be deleted due to incompatibility, you may continue as the tips say or build a new project in the menu.

## 23.7.2. Step 2

## 23.7.3. Code as below:



## 23.7.4. Link

Link: [https://makecode.microbit.org/\\_PXW5kc68kUyq](https://makecode.microbit.org/_PXW5kc68kUyq)

You may also download it directly below:

▶ Simulator    📌 Blokke    JS JavaScript    ▼    ✎ Redigér

```
for altid
  OLED show line (1) number BME280 sensor IIC port value temperature(°C)
  OLED show line (2) number BME280 sensor IIC port value humidity(0~100)
  OLED show line (3) number BME280 sensor IIC port value pressure(hPa)
  OLED show line (4) number BME280 sensor IIC port value altitude(M)
```

Microsoft MakeCode | Brugsbetingelser | Fortrolighed | 📄 Hent

### 23.7.5. Result

The values of the temperature, moisture, air pressure and the altitude in the current environment display on the OLED screen.

## 23.8. Relevant File

## 23.9. Technique File

By ELECFREAKS Team

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