

#### IoT Basic 2023 v 0.2

#### 1. Overview

- ESP32 on board
- Includes temperature and humidity sensor BME280
- 2 versions of boards: 18650 cells
  - powered with three AA batteries
  - powered with Li-Ion Cells, includes a USB connector to power the board and charge the Battery cells
- Includes programmer connector with UART and I2C



# WizzDev

### 2. Description

The WizzDev IoT Basic board is based on an ESP32 MCU. It includes a built-in temperature and humidity sensor, power supply circuit, and Li-Ion cells charging circuit. ESP32-WROOM-32D is a powerful, generic Wi-Fi + Bluetooth<sup>®</sup> + Bluetooth LE MCU module that targets a wide variety of applications, ranging from low-power sensor networks to the most demanding tasks. The chip embedded is designed to be scalable and adaptive. There are two CPU cores that can be individually controlled, and the CPU clock frequency is adjustable from 80 MHz to 240 MHz. The chip also has a low-power coprocessor that can be used instead of the CPU to save power while performing tasks that do not require much computing power, such as monitoring of peripherals.



# WizzDev

# 3. Technical specification

	Unit	Value
Power voltage	V	3.3
Maximum power voltage	V	5.5
Maximum current draw	mA	270
Average current draw when working	mA	65
Average current draw when sleeping	mA	4
Dimensions	mm * mm * mm	100*50*5 (without battery box)
Weight	g	20
Operating temperature range	C	-20 ÷ 60
Measure temperature range	C	-40 ÷ 85
Measure humidity range	%	0 ÷ 100

# 4. Pinout

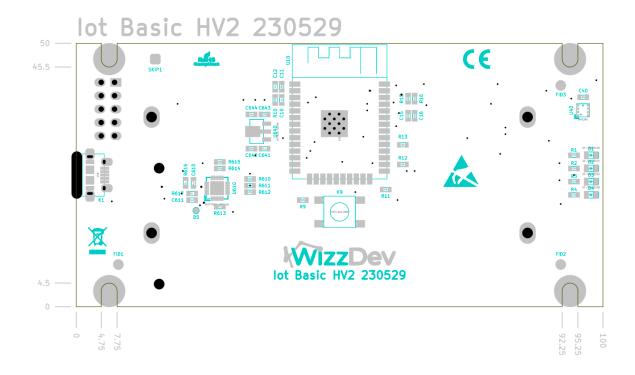
#### 4.1 Connector J10

		J10		
<u>3V3</u>	1		2	GND
EN	3		4	Тx
Boot	5	[ ]	6	Rx
	7	E ]	8	I2C-SDA
	9	E 1	10	I2C-SCL
Gold	lpin_	2x5_	1.27	_SMT

Pin	Signal		
1	3.3V		
2	GND		
3	EN		
4	Tx		
5	Boot		
6	Rx		
7	NC		
8	SDA		
9	NC		
10	SCL		

## WizzDev

### 5. Measure



## 6. Schematic

