

## Description:

ADIY Ai WB2 12F dev-Kit is a development board designed for Ai WB2 12F modules. Ai WB2 12F is a Wi-Fi & Bluetooth module developed by Shenzhen Ai Thinker Technology Co., Ltd. The module is equipped with a BL602 chip as the core processor and supports Wi-Fi 802.11b/g/n protocol and BLE 5.0 protocol. The BL602 chip has a built-in 32-bit RISC CPU with low power consumption, 276KB RAM, and a wide range of peripheral interfaces, including SDIO, SPI, UART, VDC, IR remote, PWM, ADC, DAC, PIR, and GPIO. It can be widely used on the Internet of Things (IoT), mobile devices, wearable electronic devices, smart homes, and other fields.

## Features:

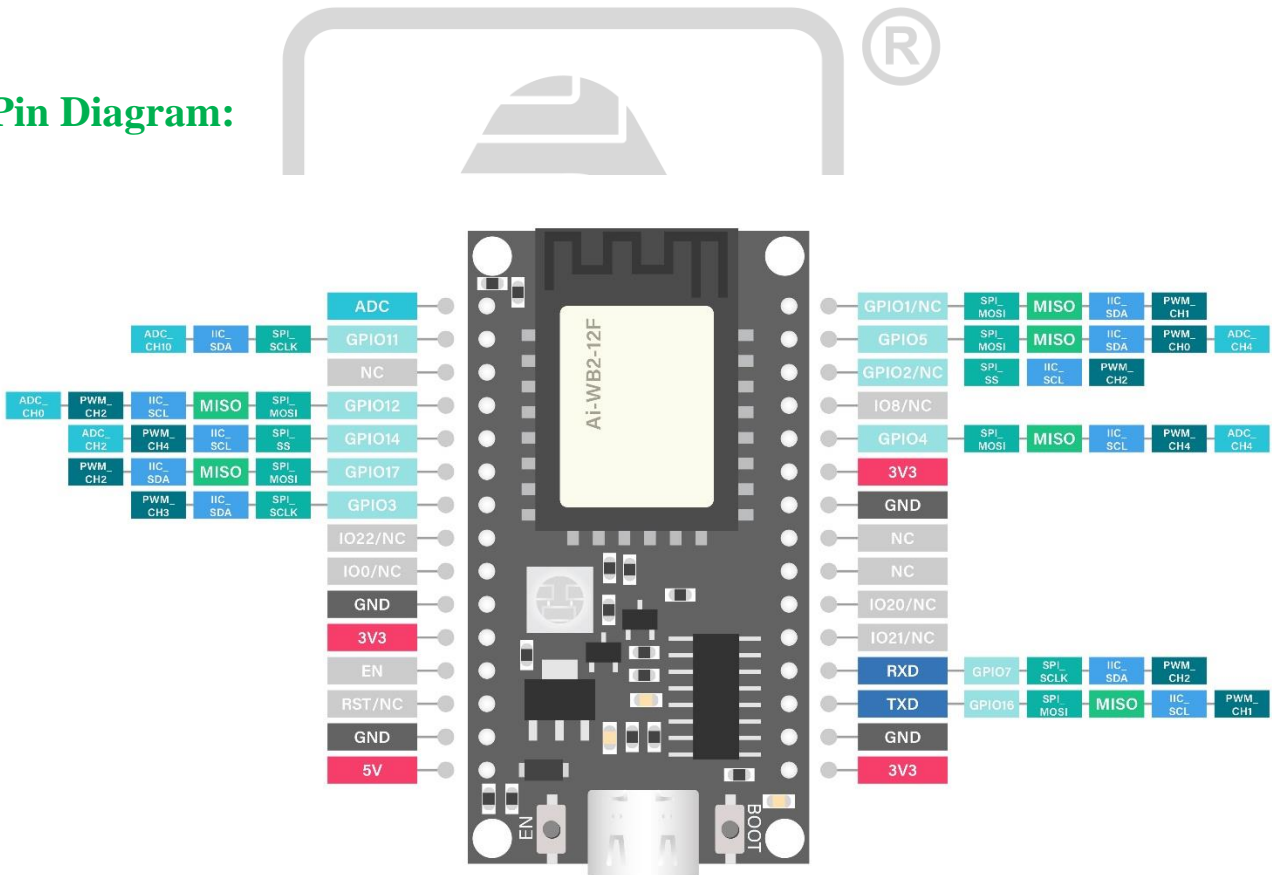
1. DIP 30 package
2. Supports IEEE 802.11 b/g/n protocol
3. Wi Fi security supports WPS/WEP/WPA/WPA2 Personal/WPA2 Enterprise/WPA3
4. Supports 20MHz bandwidth with a maximum speed of 72.2 Mbps
5. Bluetooth BLE 5.0, Bluetooth Mesh
6. Supports Station + BLE mode, Station + Soft AP + BLE mode
7. Supports 32-bit RISC CPU and 276KB RAM
8. Secure Startup. Images with ECC 256 signatures are supported
9. Supports real time AES decryption (OTFAD) in QSPI and SPI Flash, and supports AES 128 CTR mode
10. Supports AES 128-, 192-, and 256-bit encryption engines
11. Supports SHA 1/224/256
12. Real random number generator (TRNG)
13. Supports SDIO, SPI, UART, VDC, IR remote, PWM, ADC, DAC, PIR, and GPIO
14. Integrated Wi-Fi MAC/BB/RF/PA/LNA/Bluetooth
15. Quick Start of universal AT commands
16. Supports secondary development and integrates Windows and Linux development environments

## Specifications:

- Model: ADIY Ai WB2 12F Kit
- Package: DIP 30
- Size: 49.66×25.40 (±0.2)mm
- Antenna On Board: PCB antenna
- Frequency: 2400 ~ 2483.5MHz
- Operation temperature: 40°C ~ 85°C

- Storage environment: 40°C ~ 125°C, < 90%RH
- Power supply Support voltage: 3.3V or 5V,
- Power supply current:  $\geq 500\text{mA}$
- Interfaces: UART/GPIO/ADC/PWM/I2C/SPI I/O
- UART: rate Default value: 115200 bps
- Bluetooth: BLE 5.0
- Security: WPS/WEP/WPA/WPA2 Personal/WPA2 Enterprise/WPA3
- Flash: Default: 4MByte

## Pin Diagram:



(BACK)

