

Ai-WB2-12F Click



PID: MIKROE-5983

Ai-WB2-12F Click is a compact add-on board for easy integration into the Internet of Things (IoT) and smart home applications. This board features the [Ai-WB2-12F](#), a WiFi and BLE module from [Ai-Thinker Technology](#), powered by the BL602 chip supporting WiFi 802.11b/g/n and BLE 5.0 protocols. With a low-power 32-bit RISC CPU, 276KB of RAM, and various peripheral interfaces, it is well-equipped for a wide range of development projects. The module has an inbuilt PCB antenna, extensive WiFi security protocols, and many operational modes, making it highly efficient for power-sensitive applications. It also supports secure boot, AES encryption, and a public key accelerator, which ensures safe operation. This Click board™ is perfect for developers who need WiFi and BLE for their projects, providing a simple and secure platform for creating IoT, wearable, and smart home devices.

Ai-WB2-12F Click is fully compatible with the mikroBUS™ socket and can be used on any host system supporting the [mikroBUS™](#) standard. It comes with the [mikroSDK](#) open-source libraries, offering unparalleled flexibility for evaluation and customization. What sets this [Click board™](#) apart is the groundbreaking [ClickID](#) feature, enabling your host system to seamlessly and automatically detect and identify this add-on board.

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system.
 ISO 14001: 2015 certification of environmental management system.
 OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).

Specifications

Type	WiFi+BLE
Applications	Ideal for developers who need WiFi and BLE for their projects, providing a simple and secure platform for creating IoT, wearable, and smart home devices
On-board modules	Ai-WB2-12F - WiFi and BLE module from Ai-Thinker Technology
Key Features	Supporting WiFi 802.11b/g/n and BLE 5.0 protocols, low-power 32-bit RISC CPU, many peripheral interfaces, onboard PCB antenna, WiFi security protocols, BLE 5.0 and Bluetooth Mesh, encryption and security, and more
Interface	UART,USB
ClickID	Yes
Compatibility	mikroBUS™
Click board size	L (57.15 x 25.4 mm)
Input Voltage	3.3V

Resources

[mikroBUS™](#)

[mikroSDK](#)

[Click board™ Catalog](#)

[Click Boards™](#)

Downloads

[Ai-WB2-12F click example on Libstock](#)

[Ai-WB2-12F datasheet](#)

[Ai-WB2-12F click 2D and 3D files](#)

[Ai-WB2-12F click schematic](#)

Mikroe produces entire development toolchains for all major microcontroller architectures.

Committed to excellency, we are dedicated to helping engineers bring the project development up to speed and achieve outstanding results.



ISO 27001: 2013 certification of informational security management system.
 ISO 14001: 2015 certification of environmental management system.
 OHSAS 18001: 2008 certification of occupational health and safety management system.



ISO 9001: 2015 certification of quality management system (QMS).