

Minicomputer User Manual

DFR-13504

DFRobot Beetle ESP32 v2.0 IoT - microcontroller with WiFi Bluetooth

1. Usage Information and Warnings

- a. The device should operate in conditions consistent with its intended use.
- b. Avoid improper connection of wires. Incorrect connection may lead to short circuits and damage to the equipment.
- c. To ensure proper operation of the equipment, provide it with an appropriate power source according to its specifications.
- d. Do not directly touch unprotected parts of the equipment, as this may lead to short circuits or the transfer of electrostatic charges.
- e. Operating in high humidity environments can affect the operation of the electronics, leading to damage and errors in sensor readings.

2. Unpacking and Assembly

- a. **Unpacking** – checking the completeness of the set and the condition of the elements.
- b. **Connection** – plugging in the necessary elements to the minicomputer's connectors.
- c. **Operating System** – uploading the operating system to the data carrier.
- d. **Startup and Configuration** – configuring the minicomputer settings.

3. Intended Use

The product is intended for use within the parameter ranges specified by the manufacturer and should be used only by qualified personnel trained to operate this product. Before each use, check the product for damage and do not use it if any defects are found. Failure to follow the manufacturer's guidelines may cause potential product damage.

4. Technical Specification

Product Code	DFR-13504
EAN13	6959420914586
Weight:	0.011000 kg
Dimensions	Width:5.7, Height:2.6, Depth:6.2 cm
UC - Microcontroller	ESP32
UC - Digital pins	4
UC - analog in	4
UC - freq	240 MHz

UC - Flash	16 MB
UC - RAM	520 kB
UC - USB	microUSB
UC - Core	Tensilica
UC - WiFi	yes
UC - Bluetooth	yes
UC - core	2. Dual Core
UC - Connector	5V microUSB
UC - UART	yes
UC - I2C	yes
UC - SPI interface	no
Voltage to	3.5 V
Voltage from	6.5 V
Voltage output from	3.3 V
Output voltage to	5.0 V
Nominal output voltage	3.3 V

5. Contact Information

For product-related questions, please contact an authorized service center or the manufacturer:

- **Importer:** Botland. B. Derkacz Sp. K.
- **Address:** Gola 25, 63-640 Bralin
- **Phone Number:** 62 593 10 54
- **Website address:** www.botland.store