

# FLUO | TECHNOLOGY

## Simplifying IoT

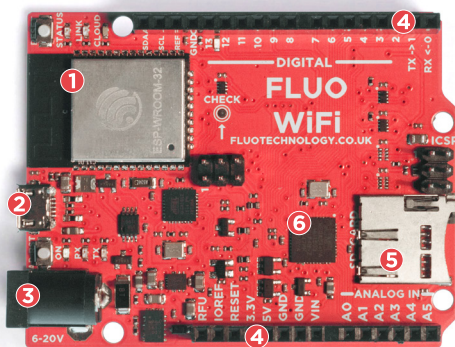
Fluo Technology provides a device platforms that enables users to quickly and easily build, connect and control their IoT applications.

We are a young startup company made in UK but with worldwide view.

The **FLUO WIFI** creates a synergy between the world of Things and the world of the Internet, and allows users to interact with it in the way Vmore simplest possible.

We give the opportunity to people as possible to have access to the world of IoT, and to be able to easily create their own IoT application.

- Giving space to their creativity.
- Making friendly technologies
- Provide them with a product design
- Providing them with the latest technology and making it simple.
- Create a beginner open IoT community.
- Allow them to participate in the Industry 4.0 revolution



1 WI-FI + BLUETOOTH LOW ENERGY



2 USB MICRO



3 POWER JACK 6-20 V



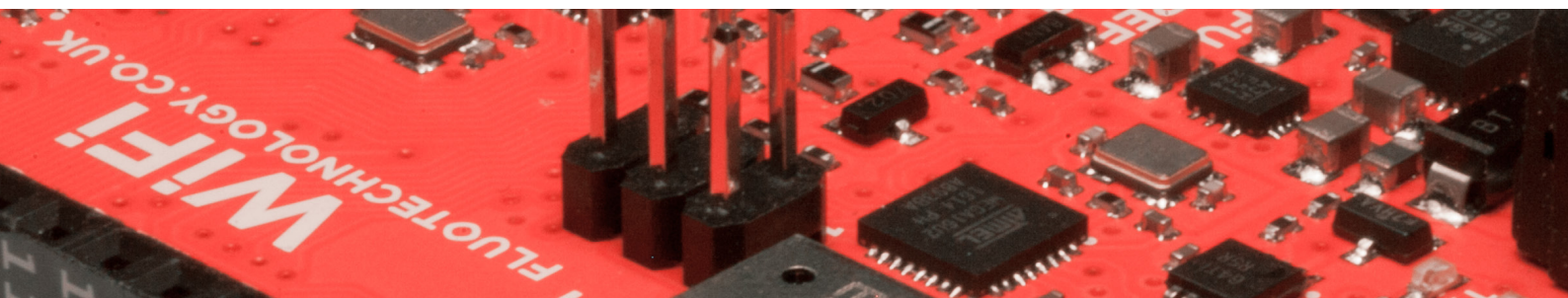
4 CONNECTORS FOR ARDUINIO SHIELD R3

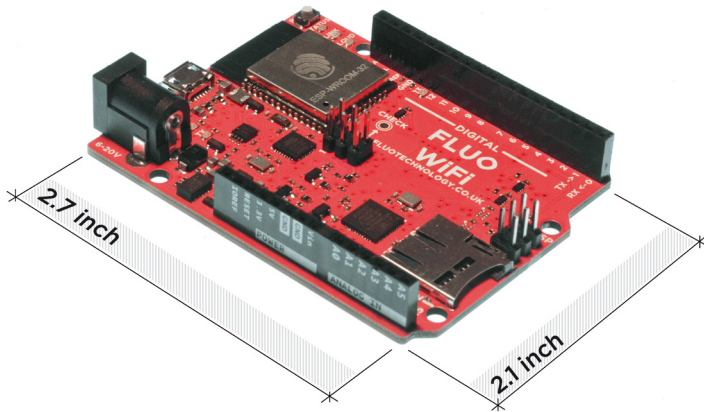


5 SD CARD CONNECTOR



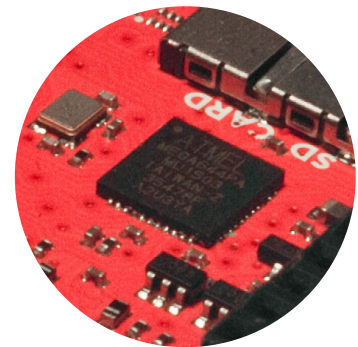
6 MICRO CONTROLLER





## IO MICROCONTROLLER

CPU Name	<b>Atmega 644p</b>
Architecture	<b>Atmel AVR 8-bit</b>
Core Clock	<b>16 MHz</b>
Flash Memory	<b>64 KBytes</b>
SRAM	<b>4 KBytes</b>
GPIO - Program I/O	<b>32</b> (but used only 20)
Interface	<b>SPI-I2C-UART</b>
Operating Voltage	<b>5V</b>



## CONNECTIVITY PROCESSOR (WROOM32 MODULE)

CPU Name	<b>Espressif ESP32</b>
Architecture	<b>dual core system (XTENSA LX6)</b>
Core Clock	<b>160 MHz + 160 MHz</b>
Flash Memory	<b>16 MByte</b>
SRAM	<b>520 KB</b>
Bluetooth	<b>Legacy and Low Energy</b>
WiFi	<b>802.11 class BGN</b>

150.0 mbps data rate with ht 40 (49 mhz channel width, 400 ns guard interval, 1 spatial stream, 64-QASM, 5/6 coding rate)

Hardware accelerated encryption (security data)

AES / SHA2 / Elliptical Curve Cryptography / RSA-4096

## FLUO WIFI TECH SPECS

Connectivity	<b>WiFi 802.11 class BGN/ Bluetooth 4.0 LE</b>
Wire Interface	<b>USB micro</b> (programming, debugging, wired connection)
Power IN (real)	<b>6-20 V</b>
Operating Voltage	<b>5 V</b>
Arduino compatible Plin Headers	<b>R3</b>
Arduino Shield compatibility	<b>100%</b>
Power Consumption	<b>250 mA</b> (estimated)
Size	<b>2.1"X2.7"</b>
Weight	<b>0.060 Kg</b>