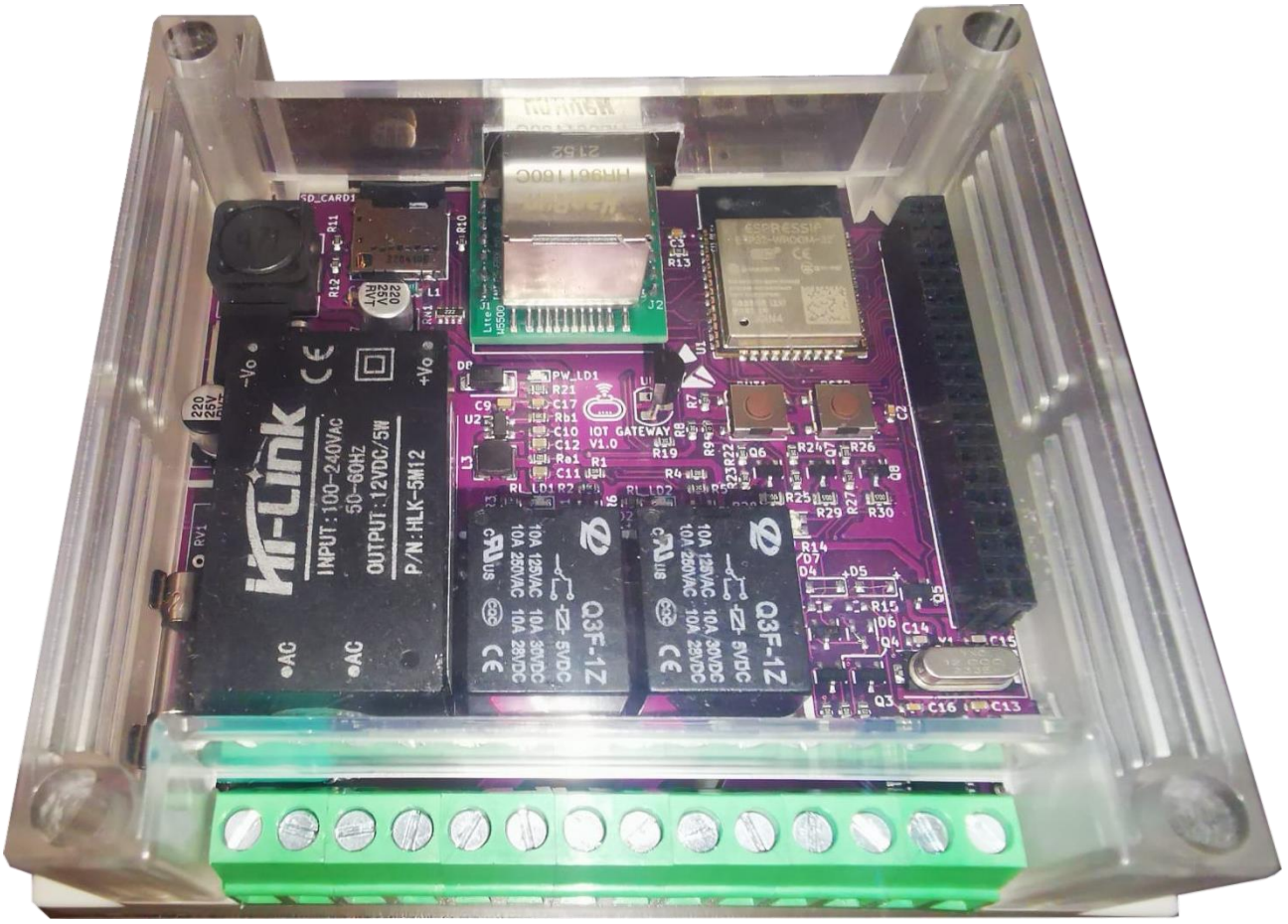


IOT GATEWAT - GT32WE WIFI/ETHERNET

ORDER CODE: GT32WE

Features:

- 40x Pin connection.
- 32x Digital INPUT / OUTPUT.
- 2x Relay (NO & NC).
- 1x W5500 Ethernet 10/100Mbps Communication.
- 1x MicroSD Card reader.
- 1x USB-device interface for configuring, monitoring and download.
- 1x WiFi wireless communication.
- 1x DS18B20 Temperature Sensor.
- Configurable WiFi / Ethernet Interface.
- Configurable data transferring protocol JSON / MQTT.
- Remote control / Activating Relay / Digital output
- OTA (Over the Air) Firmware upgrade.
- LED indicators to indicate Power, RGB configuring LED, Relay status.
- Surge and Fuse protection.
- AC Power in 230V.

Application:

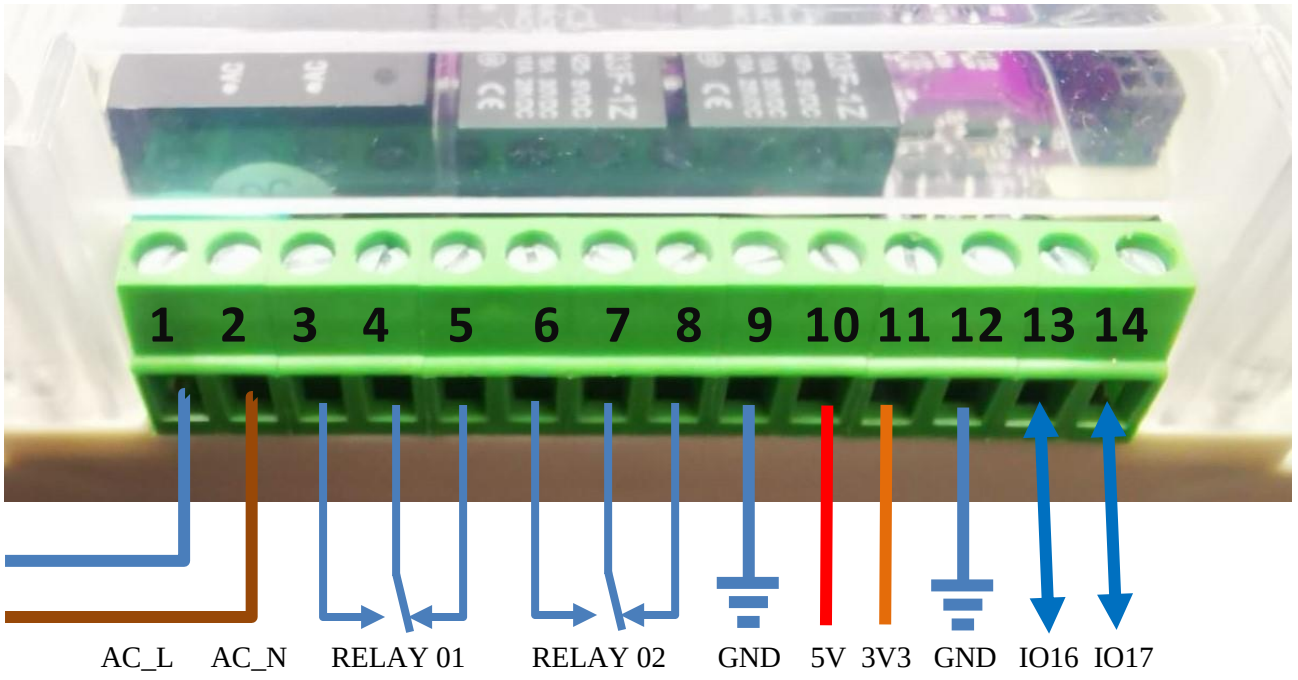
- IoT Applications.
- Loads controls.
- Smart Buildings.
- Educational Applications.
- Smart Home.
- Storage monitoring.
- Data acquisitions.
- Other IoT Applications.

Specification:

Digital Inputs / Output	
Number of digital inputs	32 GPIO programmable, see the pinout interface.
Max Input voltage range	0 - 3.3 VDC
Processor	
Xtensa® single-/dual-core 32-bit LX6 microprocessor(s)	32-bit ESP32
Cores	- 2 cores at 240 MHz: 994.26 CoreMark; 4.14 CoreMark/MHz - 1 core at 240 MHz: 504.85 CoreMark; 2.10 CoreMark/MHz
Memory	
ROM	448 KByte
SRAM	520 KByte
SRAM in RTC	16 KByte
QSPI Flash/SRAM	4 MBytes
Wireless Communication	
Wi-Fi	802.11 b/g/n/e/i (802.11n @ 2.4 GHz hasta 150 Mbit/s)
Bluetooth	Bluetooth v4.2 BR/EDR low Energy (BLE) up to 4 Mbps
Protocol	TCP/IP, JSON, MQTT, SSL, FTP, RESTful, Other
Security	AES / SHA-2 / RSA / ECC / RNG / Secure Boot
Wired Communication	
Ethernet 10/100 Mbps	Full and half duplex, 10 and 100-based, Module Optional
Chipset	W5500 Mini Module
Connector Type	RJ45
USB	USB micro Type included
Chipset	CH340T
Baud Rate	Up to 2000000 kbps
Relay	
No. of Relay	2 x 36 SERIES Miniature PCB relays 10 A - Optional
Power Rating	10 Amps 250VAC
Memory Micro SDCARD	
Memory Interface	MicroSD present.
Power Supply	
Supply Input Voltage	115V / 230VAC / 12VDC Optional
Permissible range, lower limit	100VAC
Permissible range, Upper limit	240VAC
Supply Input Voltage (USB connector)	5VDC Can work together with AC source
Installation	
Mounting	Wall / DIN Rail / Mounting Holes x 4
Enclosure	IP20 in Wall and DIN Rail Case
Dimensions	
Length	92 mm PCB
Height	30 mm whit components
Width	86 mm PCB
Weight	150 g

J3 Connector Pinout reference:

GPIO interface		
PIN	**Description**	**Observations**
1	AC Line	AC Power Line
2	AC Neutral	AC Power Neutral
3	REL01 NO	Relay 01, normally open
4	REL01 COM	Relay 01, common
5	REL01 NC	Relay 01, normally closed
6	REL02 NO	Relay 02, normally open
7	REL02 COM	Relay 02, common
8	REL02 NC	Relay 02, normally closed
9	GND	Ground
10	5V	5V DC output
11	3V3	3.3V DC output
12	GND	Ground
13	GPIO16/U2TX	GPIO16/U2TX, Input and output
14	GPIO17/U2RX	GPIO17/U2RX, Input and output

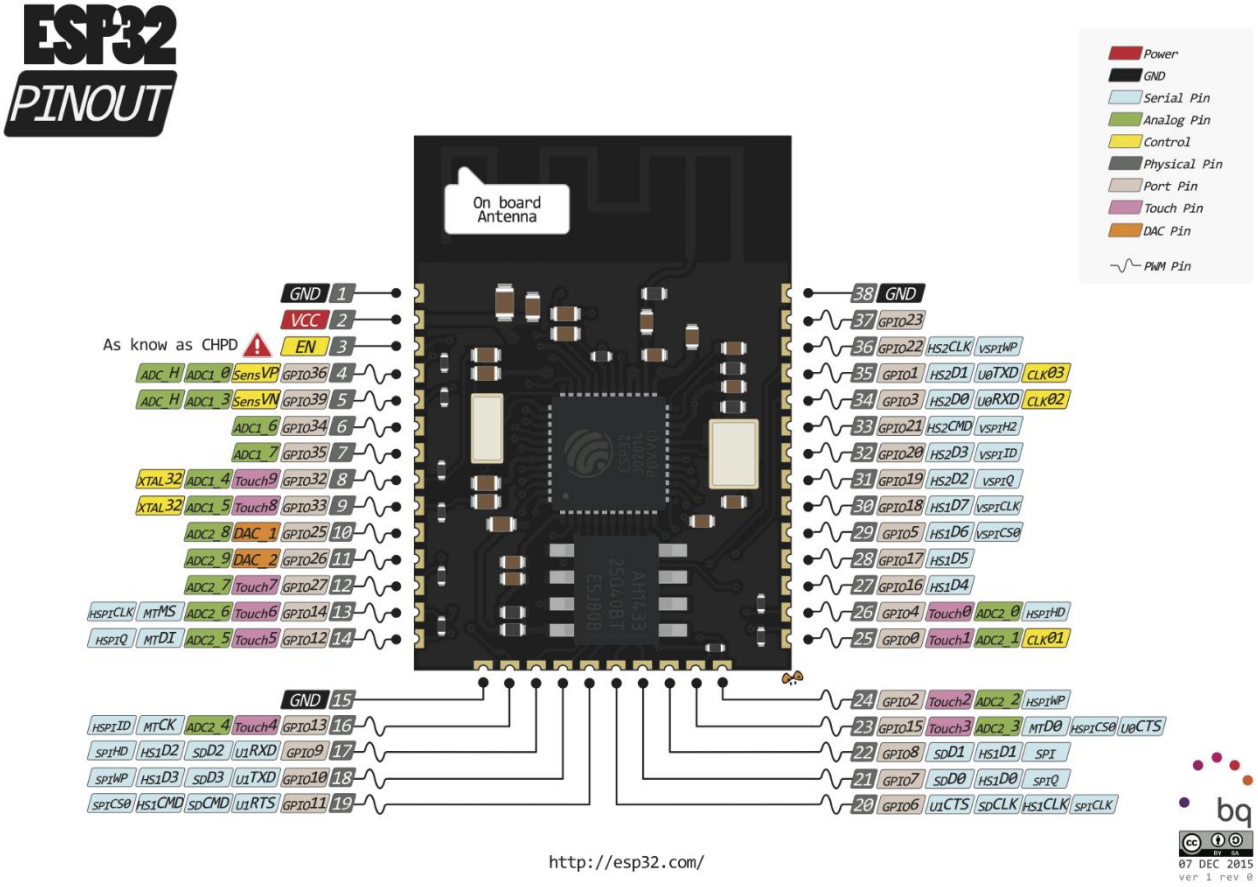


J2 Connector Pinout GPIO interface:

GPIO interface		
PIN	**Description**	**Observations**
1	GPIO0	Do not use.
2	GPIO1/UOTXD	TX pin – Do not use / Programming interface.
3	GPIO2/HS2_DATA0	Use for MicroSD Card – Do not use.
4	GPIO3/UORXD	RX pin – Do not use / Programming interface.
5	GPIO4	Ready to be used for I/O applications.
6	GPIO5	Ready to be used for I/O applications / Outputs PWM signal at startup.
7	GPIO6	Connected to integrated SPI flash – Do not use.
8	GPIO7	Connected to integrated SPI flash – Do not use.
9	GPIO8	Connected to integrated SPI flash – Do not use.
10	GPIO9	Connected to integrated SPI flash – Do not use.
11	GPIO10	Connected to integrated SPI flash – Do not use.
12	GPIO11	Connected to integrated SPI flash – Do not use.
13	GPIO12	Ready to be used for I/O applications / Boot failure if HIGH
14	GPIO13	Use for DS18B20, do not use
15	GPIO14/HS2_CLK	Use for MicroSD Card – Do not use.
16	GPIO15/HS2_CMD	Use for MicroSD Card – Do not use.
17	GPIO16/U2RXD	Ready to be used for I/O applications.
18	GPIO17/U2TXD	Ready to be used for I/O applications.
19	GPIO18/VS_SCK	Use for W5500 Ethernet Module (CLK Pin 4)
20	GPIO19/VS_MISO	Use for W5500 Ethernet Module (MISO Pin 7)
21	GPIO21/VS_CS	Use for W5500 Ethernet Module (CS Pin 5)
22	GPIO22	Ready to be used for I/O applications.
23	GPIO23/VS_MOSI	Use for W5500 Ethernet Module (MOSI Pin 3)
24	GPIO25/RGB_R	Use for RGB LED RED / Use according to your need, only recommended for states
25	GPIO26/RGB_G	Use for RGB LED GREEN / Use according to your need, only recommended for states
26	GPIO27/RGB_B	Use for RGB LED BLUE / Use according to your need, only recommended for states
27	GPIO32/REL1	Use in output to relay 01 – Do not use.
28	GPIO33/REL2	Use in output to relay 02 – Do not use.
29	GPI34	Ready to be used, entry only
30	GPI35	Ready to be used, entry only
31	GPI36	Ready to be used, entry only
32	GPI39	Ready to be used, entry only
33	ESP_EN	Do not use / Reset
34	GND	GND
35	GND	GND
36	GND	GND
37	3V3	3V3
38	3V3	3V3
39	5V	5V
40	5V	5V

Gateway Pinout

ESP-WROOM-32 Module



ESP-WROOM-32 Module Pinout

SOFTWARE

Program with Arduino IDE,

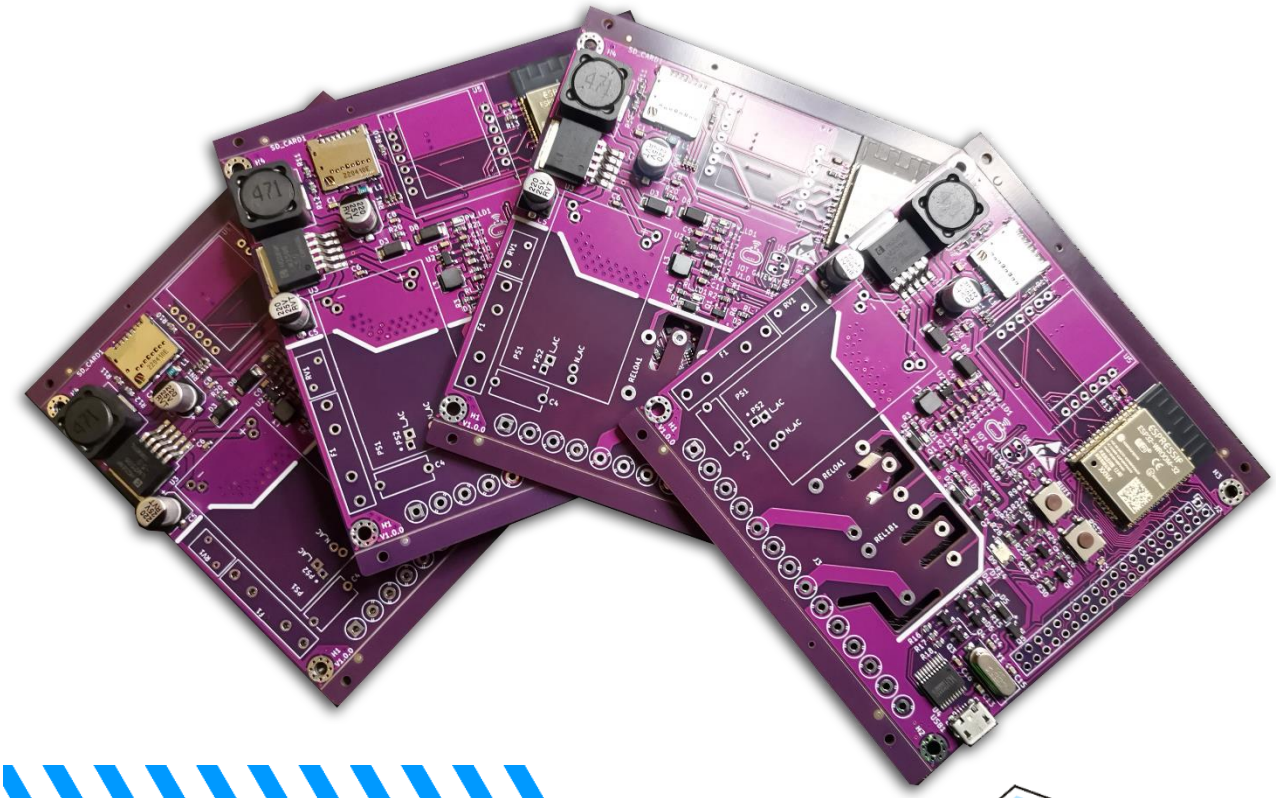
The original Arduino platform

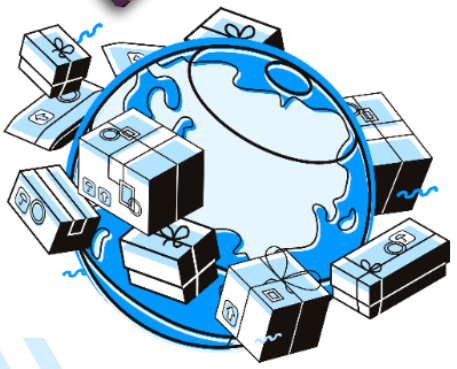
Program with PlatformIO,

Same code with different development platforms

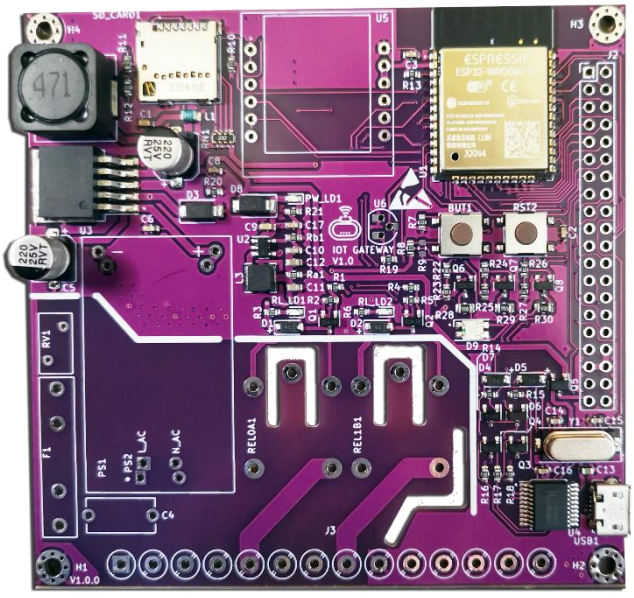
Program with Espressif IDE,

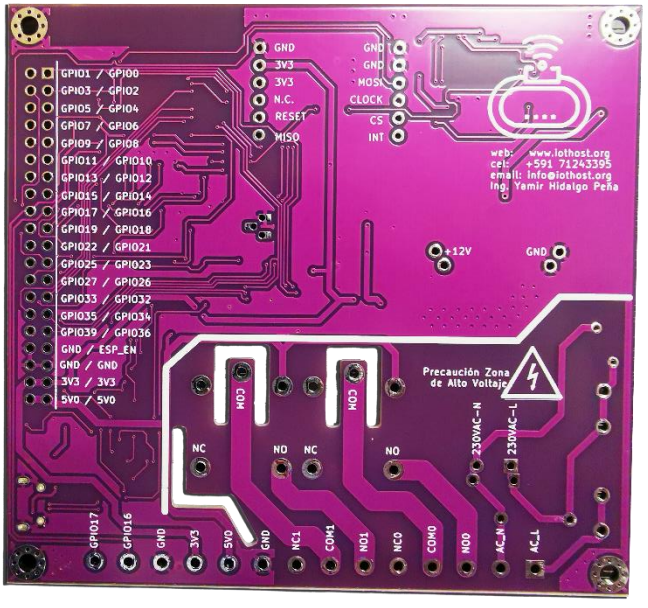
Espressif IoT Development Framework (esp-idf)





Envíos a todo el mundo





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