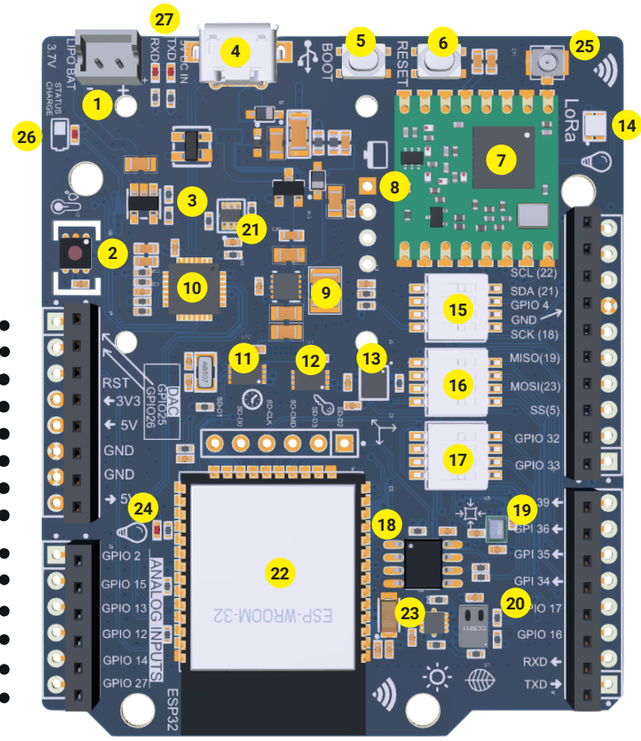
Discover 32

EXPRESSIF IDF

ARDUINO IDE

- Power
- GND
- Serial Pin
- Analog Pin
- Control
- Port Pin
- Touch Pin
- DAC Pin
- PWM Pin



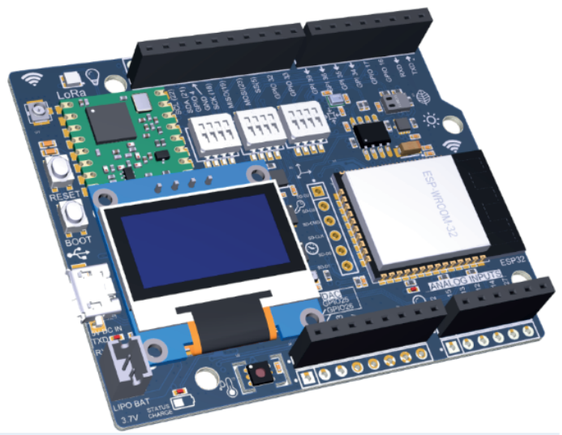
DAC_1 RTCIO6 ADC2_8 EMAC RXD0 GPIO25
DAC_2 RTCIO7 ADC2_9 EMAC RXD1 GPIO26
JTAG RESET RESET ChipPU
3.3V
OUTPUT 5V
GND
GND
INPUT 5V

HSPI WP Touch 2 RTCIO 12 ADC2_2 GPIO 2
JTAG TDO HS2 CMD SD CMD HSPI CS0 MTDO Touch 3 RTCIO13 ADC2_3 EMAC RXD3 GPIO 15
JTAG TCK HS2 DATA3 SD DATA3 HSPI ID MTCK Touch 4 RTCIO14 ADC2_4 EMAC RXER GPIO 13
JTAG TDI HS2 CMD2 SD DATA2 HSPI Q MTDI Touch 5 RTCIO15 ADC2_5 EMAC TXD3 GPIO 12
JTAG TMS HS2 CLK SD CKL HSPI CLK MTMS Touch 6 RTCIO16 ADC2_6 EMAC TXD2 GPIO 14
Touch 7 RTCIO17 ADC2_7 EMAC RXDV GPIO 27

GPIO22 EMAC TXD1 U0RTS VSPI WP I2C SCL
GPIO21 EMAC TXEN VSPI HD I2C SDA
GPIO4 EMAC TXER ADC2_0 RTCIO10 Touch_0 HSPI HD SD DATA1 HS2 DATA1
GND
GPIO18 VSPI CLK HS1 DATA7 SPI SCK
GPIO19 EMAC TXD0 U0CTS VSPI Q SPI MISO
GPIO23 VSPI ID HS1 STROBE SPI MOSI
GPIO5 EMAC RXCLK VSPI CS0 HS1 DATA6 SPI SS
GPIO32 ADC1_4 RTCIO9 Touch_9 XTAL 32Khz
GPIO33 ADC1_5 RTCIO8 Touch_8 XTAL 32Khz
GPIO39 ADC PA ADC1_3 RTCIO3 Sens VN
GPIO36 ADC PA ADC1_0 RTCIO0 Sens VP
GPIO35 ADC1_7 RTCIO5 VDET 2
GPIO34 ADC1_6 RTCIO4 VDET 1
GPIO17 EMAC CO180 U2TXD HS1 DATA5 STATUS LED *Hello world*
GPIO16 EMAC CLKOUT U2RXD HS1 DATA4
GPIO3 U0RXD CLK OUT2
GPIO1 EMAC RXD2 U0TXD CLK OUT3

SD CARD

SD DATA2 HSI DATA2 U1RXD SPI HD GPIO 9
SD DATA3 HSI DATA3 U1TXD SPI WP GPIO 10
SD CMD HSI CMD U1RTS SPI CS0 GPIO 11
SD CLK HSI CLK U1CTS SPI CLK GPIO 6
SD DATA0 HSI DATA0 U1RTS SPI Q GPIO 7
SD DATA1 HSI DATA1 U1CTS SPI D GPIO 8



1. External Battery Connector (Li-Polymer / Li-Ion Single Cell)
2. Environmental Sensor: Precision Temperature and Relative Humidity Sensor, Silicon Labs SI7021
3. Integrated Li-Polymer / Li-Ion Battery Charge management controller, Microchip MCP73831
4. USB Micro B Connector, USB program and Debugger
5. BOOT mode button (ROM serial bootloader)
6. RESET button
7. LoRaTM Modem, Low Power Long Range Transceiver Radio Module 868 Mhz, RFM95W
8. Slot for Display OLED I2C 0.95inch
9. High Efficiency DC-DC Converter Power supply
10. Single Chip USB to UART Bridge , silicon Labs CP2102
11. Tiny Real Time Clock and calendar, NXP PCF85063TP
12. Cryptographic accelerator with Secure Hardware-based Key Storage, Microchip ATECC508A
13. Montion tracking, 3D accelerometer and 3D gyroscope, ST Electronics LSM6DS3
14. Addressable RGB color Led , Worldsemi co. WS2812B
15. Dip Switch settings for using Lora Modem
16. Dip Switch Settings for using Interrupts os I2C sensors
17. Dip Switch Settings for using PSRAM and the addressable LED WS2812B
18. 4MB PSRAM * Optional
19. Absolute Barometric Digital Sensor, Bosch BMP280
20. Indoor Air Quality Sensor

Digital gas sensor solution that senses a wide range of Total Volatile Organic Compounds (TVOCs), including equivalent carbon dioxide (eCO2) and metal oxide (MOX) levels.
AMS CCS811
21. Circuit for Automatic Upload / Flashing ESP32
22. Expressif ESP32-WROOM-32 module (CPU, Memory and Wifi/Ble Wireless connectivity)
23. UV index and Ambient Light Sensor, Silicon Labs SI1133
24. Status Led Blue on GPIO17
25. U.FL Connector for External Antenna 868 MHz.
26. Battery charging status indication Led
27. UART0 activity indication Leds

Globaltronic
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