



ELECROW ESP32 Development Board Kit User Guide

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ELECROW ESP32 Development Board Kit



IMPORTANT SAFETY WARNING

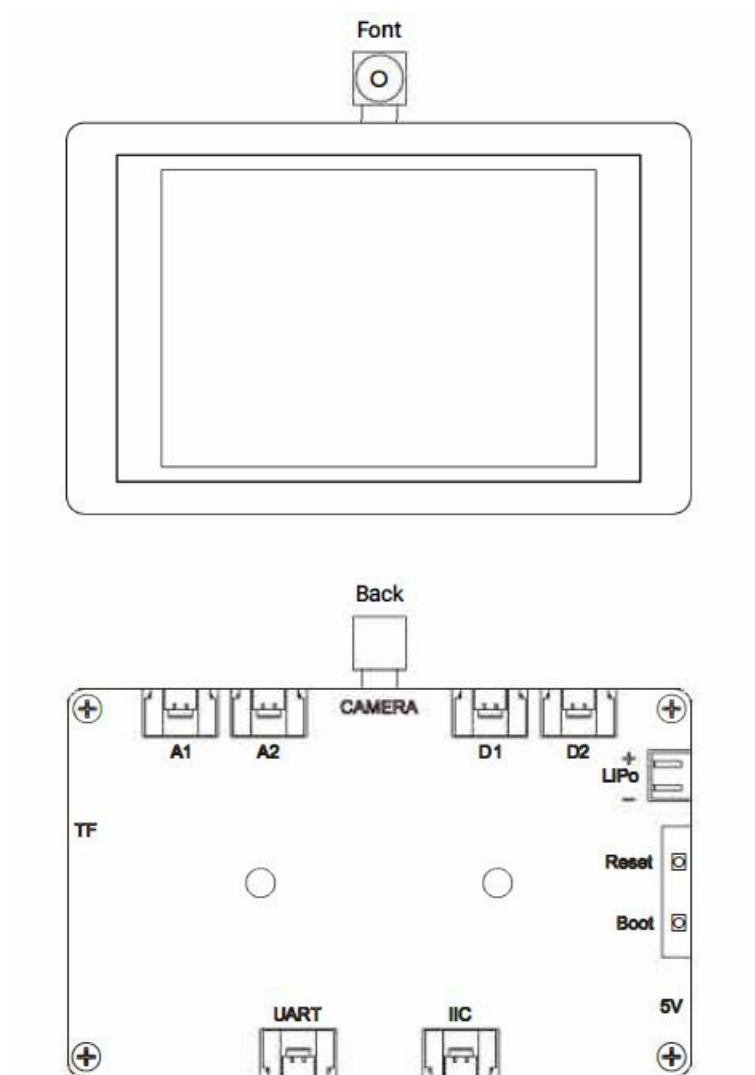
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance.
- Cleaning and user maintenance shall not be made by children without supervision.
- **WARNING:** Use the detachable supply unit provided with this appliance only.

Specification

Main Chip	Core Processor	Xtensa® 32-bit LX7
	Memory	16MB Flash 8MB PSRAM
	Maximum Speed	240Mhz
	Wi-Fi	802.11 a/b/g/n 1×1,2.4 GHz band supports 20 and 40 MHz bandwidth, Supports Station, SoftAP, and SoftAP + Station mixed modes.
	Bluetooth	BLE 5.0
LCD Screen	Resolution	320*480
	Display Size	3.5 inch
	Drive IC	ILI9488
	Touch	Capacitive Touch
	Interface	SPI Interface
Dther Modules	Camera	OV2640, 2M Pixel
	Microphone	MEMS Microphone
	SD Card	Onboard SD Card Slot
Interface	1x USB C 1x UART 1x I2C 2x Analog 2x Digital	
Button	RESET Button Press this button to reset the system.	
	Hold down the Boot button and press the reset BOOT Button button to initiate firmw are download mode. Users can download firmware through the serial port.	
Operating Environment	Operating Voltage USB DC5V, lithium battery 3.7V Operating Current Average current 83mA	
	Operating Temperature -10°C ~ 65°C	
Active Area	73.63(L)*49.79mm(W)	
Dimension Size	106(L)x66mm(W)*13mm(H)	

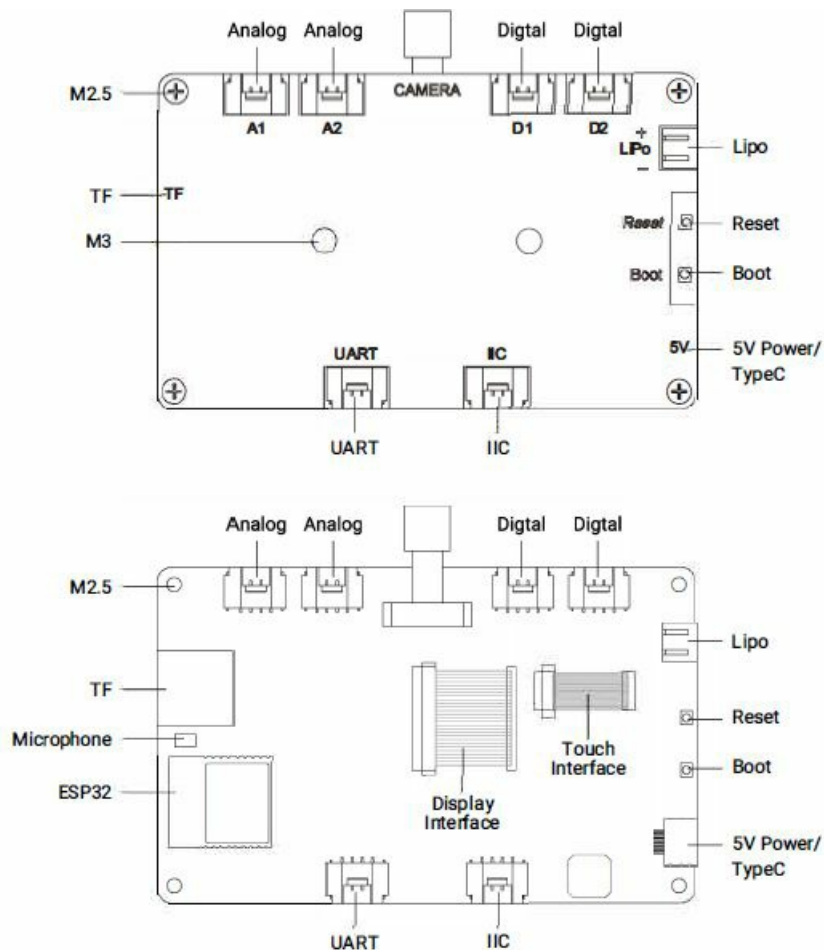
Part List

- 1 x 3.5 inch SPI Display with camera (included Acrylic Shell)
- 1 x USB C Cable



Hardware and Interface

Hardware Overview



- RESET button.
Press this button to reset the system.
- LiPo port.
Lithium battery charging interface (lithium battery not included)
- BOOT button.
Hold down the Boot button and press the RESET button to initiate firmware download mode. Users can download firmware through the serial port
- 5V Power/Type C interface.
It serves as the power supply for the development board and the communication interface between the PC and ESP-WROOM-32.
- 6 Crowtail interfaces (2*Analog, 2*Digital, 1 *UART, 1 *IIC).
Users can program the ESP32-S3 to communicate with peripherals connected to the Crowtail interface.

Schematic Diagram of 10 Port

	GND	ESP32 S3	GND	
	3V3		101	SCL
RESET	EN\RST		102	SDA
vs	104		TXDO	UARTO_TX
HS	105		RXDO	UARTO_RX
D9	106		1042	SPI_D/I
MCLK	107		1041	MIC_SD
D8	1015		1040	D2 GPIO
D7	1016		1039	MIC_CLK
PCLK	1017		1038	MIC_WS
D6	1018		NC	
D2	108		NC	
	1019		NC	
	1020		100	TP_INT/DOWNL
cs	103		1045	
BACK	1046		1048	D4
	109		1047	D3
cs	1010		1021	D5
D1 GPIO	1011		1014	SPI_MISO
SPI_SCL	1012		1013	SPI_MOSI

Expansion Resources

- [Schematic Diagram](#)
- [Source Code](#)
- [ESP32 Series Datasheet](#)
- [Arduino Libraries](#)
- [16 Learning Lessons for LVGL](#)
- [LVGL Reference](#)

DISPOSAL

Information on the disposal for Waste Electrical & Electronic Equipment (WEEE). This symbol on the products and accompanying documents means that used electrical and electronic products should not be mixed with general household waste. For proper disposal for treatment, recovery and recycling, please take these products to

designated collection points where they will be accepted on a free of charge basis. In some countries you may be able to return your products to your local retailer upon the purchase of a new product. Disposing of this product correctly will help you save valuable resources and prevent any possible effects on human health and the environment, which could otherwise arise from inappropriate waste handling. Please contact your local authority for further details of your nearest collection point for WEEE

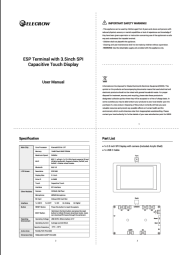
For More Details Please Scan the QR Code.



Contact Technical Support

E-mail: techsupport@elecrow.com

Documents / Resources

	<p>ELECROW ESP32 Development Board Kit [pdf] User Guide ESP32 Development Board Kit, ESP32, Development Board Kit, Board Kit</p>
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References

- [User Manual](#)