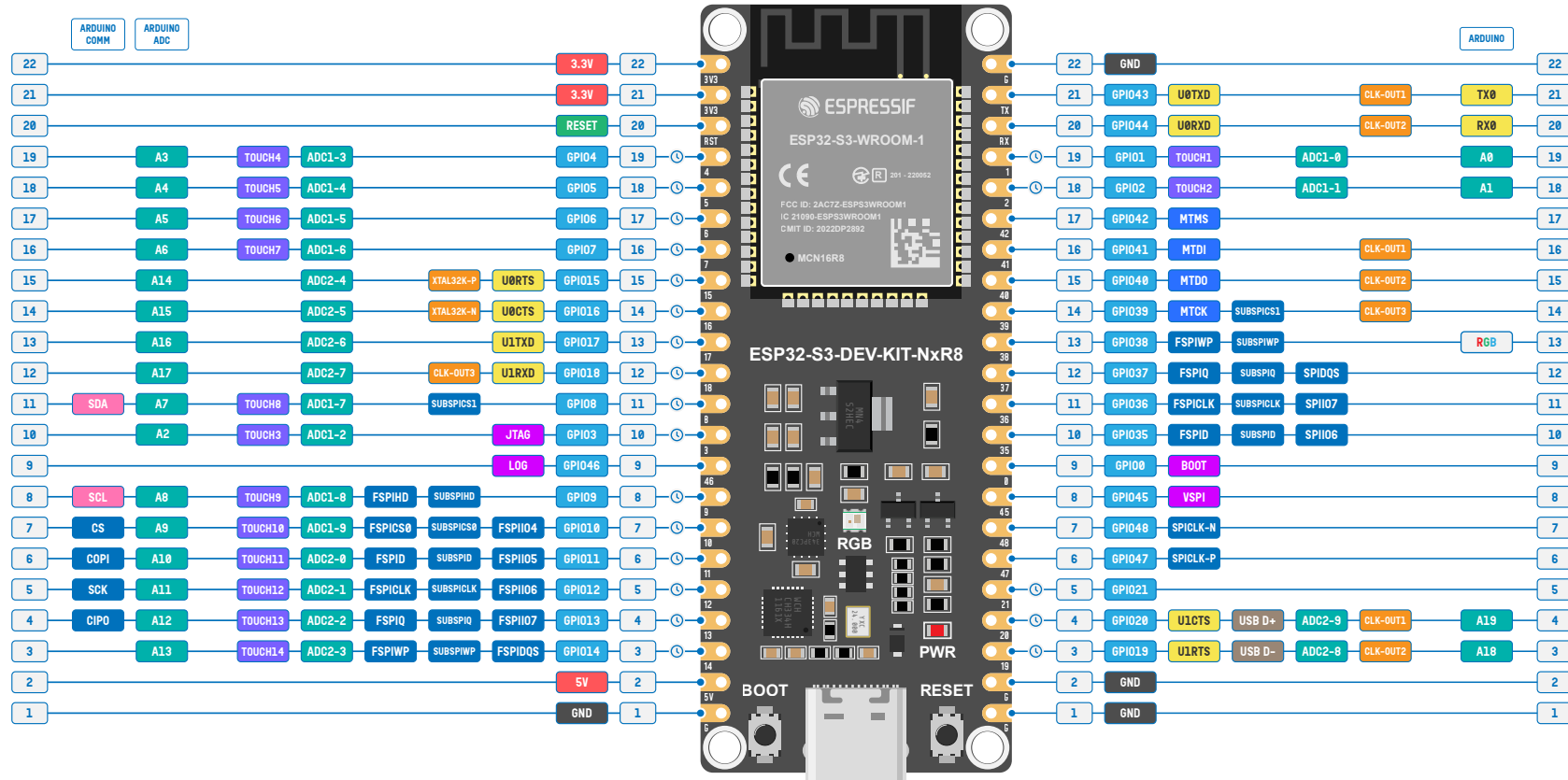


ESP32-S3-DEV-KIT-NxR8 PINOUT



PHYSICAL PIN	POSITIVE SUPPLY	CLOCK IN/OUT	SPI
CONTROL	GROUND SUPPLY	TOUCH INPUTS	UART
GPIO	ADC INPUTS	I2C	USB
JTAG	RTC IO	BOOTSTRAP	RTC POWER DOMAIN

- GPIOs 22-25 are not available from the chip.
- TX0 and RX0 can be accessed as **Serial0** in Arduino.
- USB-CDC can be accessed as **Serial** in Arduino.
- Both **Serial** and **Serial0** can be used for programming.
- All GPIO pins support PWM and interrupts.
- Built-in RGB LED is connected to **GPIO38**.
- Arduino pin references are as per **ESP32-S3-DevKitC-1** definition.
- All touch input pins can be used as **TI-TM** in Arduino.
- Most peripheral functions can be assigned to any GPIO pins, thanks to the IO MUX.

Board Name: ESP32-S3-DEV-KIT-NxR8
Vendor: WaveShare (SKU 29409)
Module: ESP32-S3-WROOM-1
Flash: 16 MB (N16R8) / 8 MB (N8R8)
PSRAM: 8 MB
MCU: ESP32-S3, 32-Bit Xtensa, Dual-Core, 240 MHz,
 Wi-Fi IEEE 802.11 b/g/n 2.4 GHz + BLE 5 Mesh,
 512 KB SRAM, 16 KB in RTC, 384 KB ROM, 45 GPIOs, 4x SPI, 3x UART,
 2x I2C, 4x Touch, 2x I2S, RMT, LED PWM, USB-OTG, TMAU/CAN,
 2x 12-bit ADC, 1x LCD interface, DVP



Rev. 0.1, 21-06-2025
 Design: Vishnu Mohanan
 This work is licensed under a Creative Commons
 Attribution-ShareAlike 4.0 International License