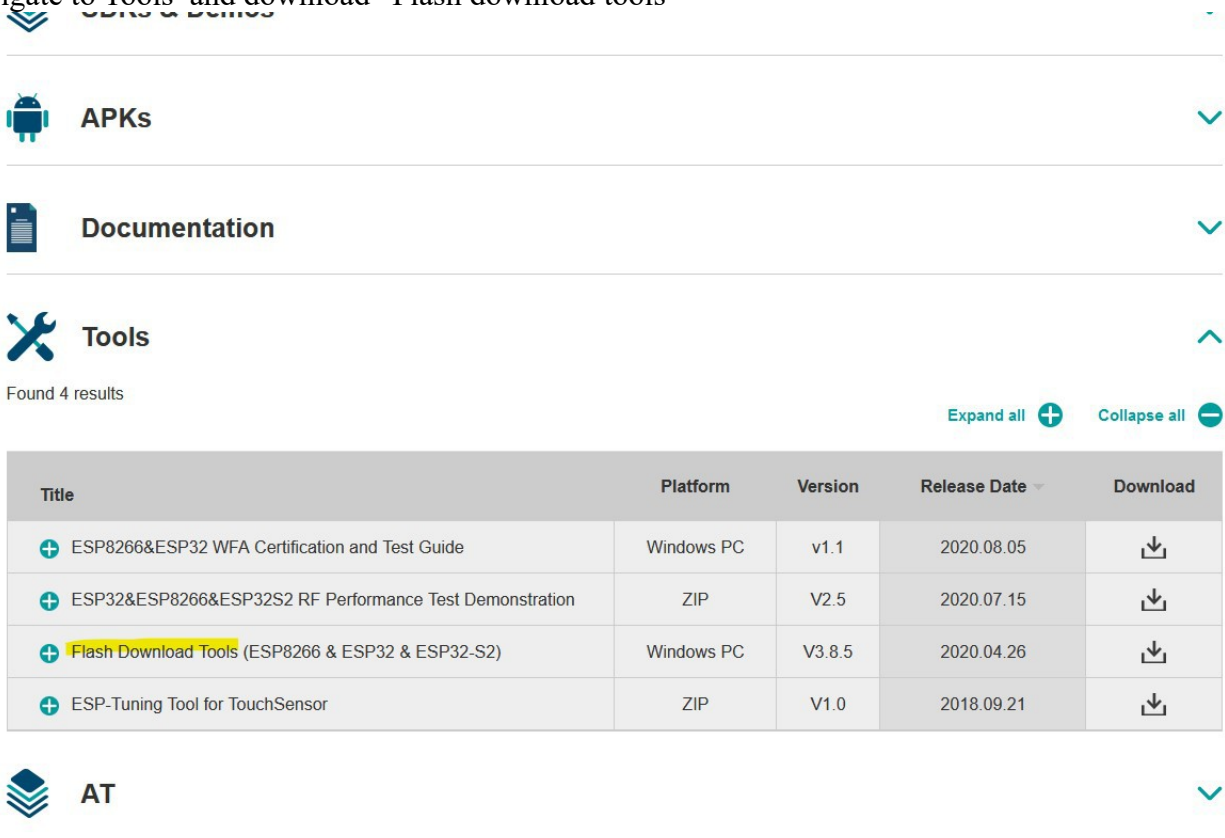


How to flash the binaries of the ESP32 edition of TCode controller





Head to <https://www.espressif.com/en/products/socs/esp32/resources>

Navigate to Tools and download “Flash download tools”



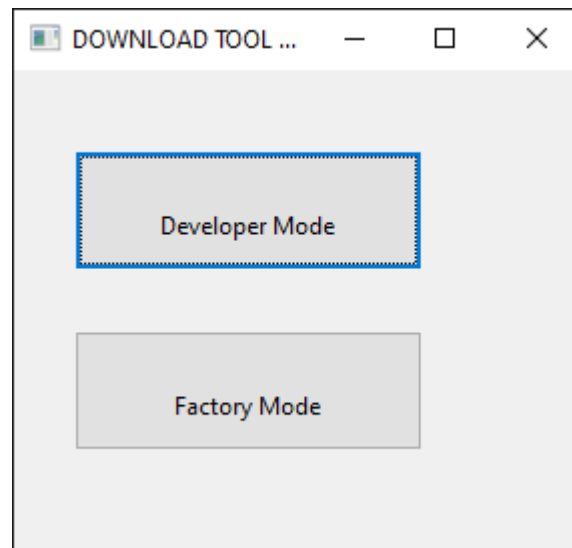
Found 4 results

Expand all + Collapse all -

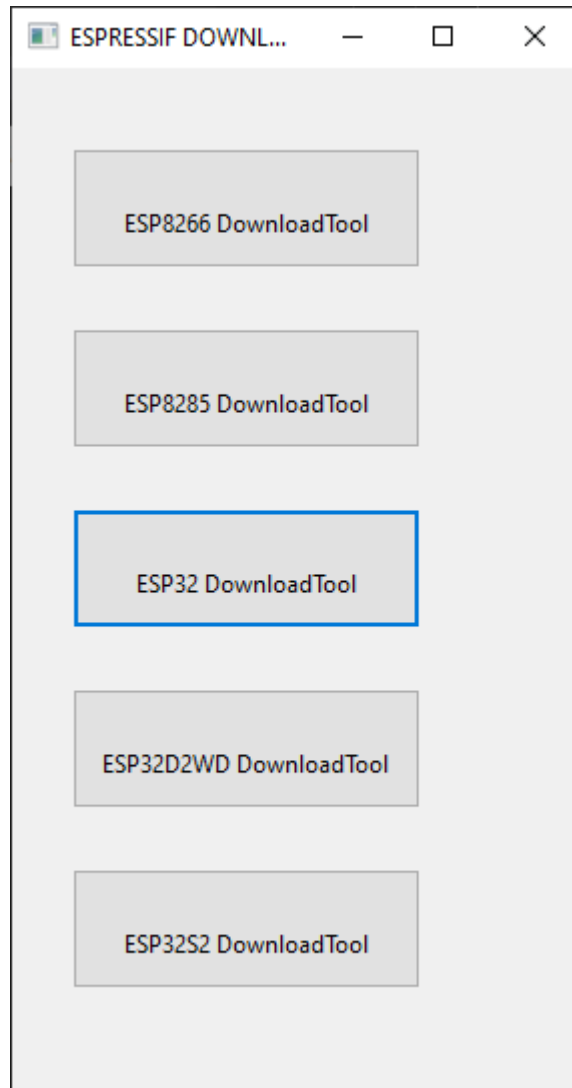
Title	Platform	Version	Release Date	Download
+ ESP8266&ESP32 WFA Certification and Test Guide	Windows PC	v1.1	2020.08.05	
+ ESP32&ESP8266&ESP32S2 RF Performance Test Demonstration	ZIP	V2.5	2020.07.15	
+ Flash Download Tools (ESP8266 & ESP32 & ESP32-S2)	Windows PC	V3.8.5	2020.04.26	
+ ESP-Tuning Tool for TouchSensor	ZIP	V1.0	2018.09.21	

Extract “flash\_download\_tool\_v3.8.5.zip” and start flash\_download\_tool\_3.8.5.exe

Click “Developer mode”



Click “ESP32 DownloadTool”



Browse to the ESP32 files selecting each one as in the image below.  
Enter the hex values to the right as in the image below  
Check each checkbox next to the file path.  
Select your COM port your ESP32 is on at the bottom of the window  
Click start

ESP32 DOWNLOAD TOOL V3.8.5

SPIDownloadHSPIDownloadGPIOConfig

☒

C:\Users\...Git\TCodeESP32\ESP32\bin\Release\a\_0x1000.bin

...

@

0x1000

☒

C:\Users\...Git\TCodeESP32\ESP32\bin\Release\b\_0x8000.bin

...

@

0x8000

☒

C:\Users\...Git\TCodeESP32\ESP32\bin\Release\c\_0x10000.bin

...

@

0x10000

☒

C:\Users\...Git\TCodeESP32\ESP32\bin\Release\d\_0xe000.bin

...

@

0xe000

☒

C:\Users\...Git\TCodeESP32\ESP32\bin\Release\e\_0x003d0000.bi

...

@

0x003d0000

☐

...

@

☐

...

@

☐

...

@

SpiFlashConfig

SPI SPEED

☒ 40MHz

☐ 26.7MHz

☐ 20MHz

☐ 80MHz

CombineBin

Default

SPI MODE

☐ QIO

☐ QOUT

☒ DIO

☐ DOUT

☐ FASTRD

FLASH SIZE

☐ 8Mbit

☐ 16Mbit

☒ 32Mbit

☐ 64Mbit

☐ 128Mbit

☐ SpiAutoSet

☐ DoNotChgBin

☐ LOCK SETTINGS

DETECTED INFO

flash vendor:  
5Eh : N/A  
flash devID:  
4016h  
QUAD;32Mbit  
crystal:  
40 Mhz

Download Panel 1

FINISH

完成

AP: 2462ABF29A81 STA: 2462ABF29A80  
BT: 2462ABF29A82 ETHERNET: 2462ABF29A83

START

STOP

ERASE

COM: COM13

BAUD: 921600

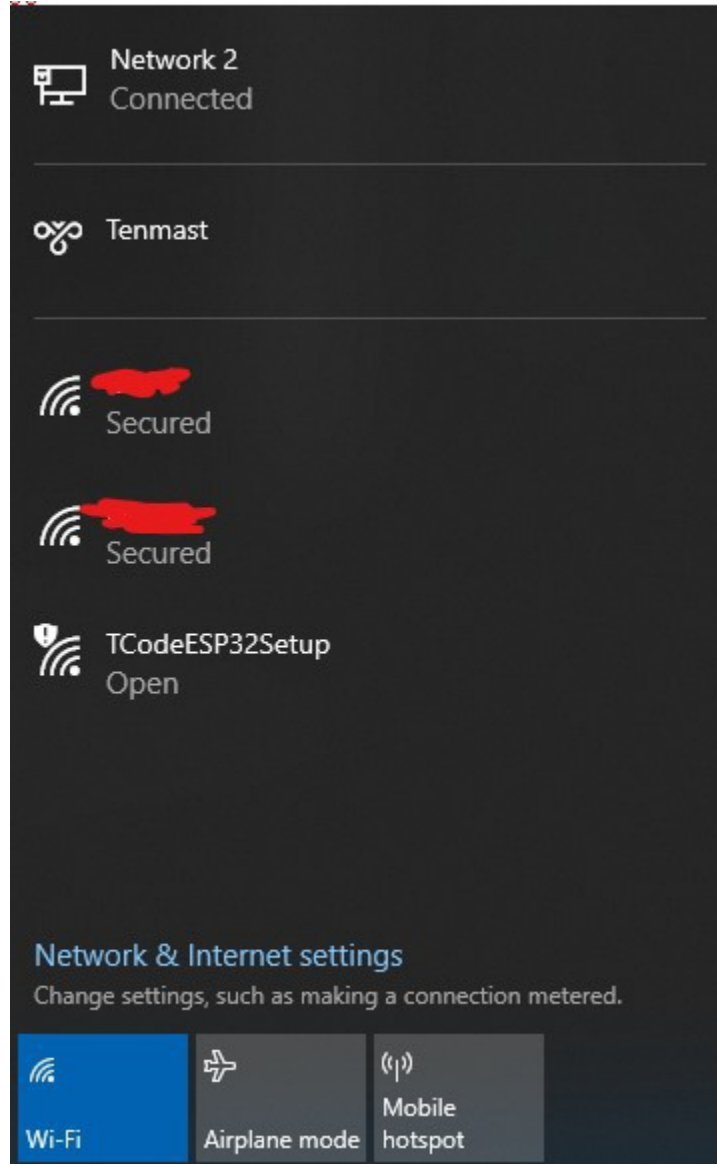
You should see this in the terminal

```
C:\Users\Downloads\flash_download_tool_v3.8.5\flash_download_tool_3.8.5.exe
Writing at 0x00184000... (91 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x00188000... (92 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x0018c000... (93 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x00190000... (94 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x00194000... (95 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x00198000... (96 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x0019c000... (97 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x001a0000... (98 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x001a4000... (99 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x001a8000... (100 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x003d0000... (8 %)266Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x003d4000... (16 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x003d8000... (25 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x003dc000... (33 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x003e0000... (41 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x003e4000... (50 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x003e8000... (58 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x003ec000... (66 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x003f0000... (75 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x003f4000... (83 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x003f8000... (91 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:
Writing at 0x003fc000... (100 %)66Loader_spi[1]][espDownloader.py][line:1891][INFO]:

is stub and send flash finish
[2020-08-06 19:24:03,631][EspDownloadPanel_ESP32_spi(1)][download_panel_info.py][line:494][INFO]: *****
[2020-08-06 19:24:03,631][EspDownloadPanel_ESP32_spi(1)][download_panel_info.py][line:495][INFO]: pic path: ./RESOURCE/F
INISH_S.bmp
[2020-08-06 19:24:03,631][EspDownloadPanel_ESP32_spi(1)][download_panel_info.py][line:496][INFO]: *****
*
```

Now that your image is flashed time to configure the wifi

Check your available wifi networks



Connect to TcodeESP32Setup (leave connect automatically **unchecked**)

No password

Once connected (It can be slow be patient. About 30 secs or so)

Open your internet browser and navigate to 192.168.1.1



Enter your wifi ssid and password and change the network info if required

### Device Settings

#### General Settings

Servo Frequency50

Auto T-Valve☐

Inverse T-Valve☐

RightServo PIN/ZERO131500

LeftServo PIN/ZERO151500

PitchLeftServo PIN/ZERO41500

ValveServo PIN/ZERO251500

TwistServo PIN/ZERO271500

TwistFeedBack PIN26

Continuous twist☐

Vibe0 PIN18

Vibe1/Lube PIN19

Manual lube PIN23

Manual lube speed (1-255)255

Udp port8000

Host nametcode

Friendly nameESP32 TCode

#### SR6 (Only) Settings

SR6 mode☒

Right Upper Servo PIN/ZERO121500

LeftUpper Servo PIN/ZERO21500

Pitch Right Servo PIN/ZERO141500

#### Wireless Settings

SSIDYOUR SSID HERE

Password\*\*\*\*\*  
☐ Show Password

Static IP☒

IP192.168.0.150

Gateway192.168.0.1

Subnet255.255.255.0

DNS 18.8.8.8

DNS 28.8.4.4

#### Display Settings

Display enabled☒

I2C address0x2c

Display rst PIN-1

Screen width128

Screen height64

Sleeve temperature enabled☐

Temp\_PIN5

Temperature control enabled☐

Heater\_PIN33

Target Temperature40

And wait for the Settings saved text to appear..

### SR6 (Only) Settings

SR6 mode☒

er Servo PIN/ZERO121500

er Servo PIN/ZERO21500

nt Servo PIN/ZERO141500

### Wireless Settings

SSIDYOUR SSID HERE

Password\*\*\*\*\*  
☐ Show Password

Static IP☒

IP192.168.0.150

Gateway192.168.0.1

Subnet255.255.255.0

DNS 18.8.8.8

DNS 28.8.4.4

Settings saved!  
Restart required!!

Click restart device or unplug and re-plug the usb powering the ESP32.

Your device should reboot and connect to the network.

You can verify this by either using serial monitor

```

Establishing connection to 
..Connected: IP: 192.168.0.145
UDP Listening
Bluetooth started
TCode v0.2
Ready!

```

You should now be able to access the configuration page from or what ever you type into the Host name field on the configuration.

Manual lube speed (1-255)	<input type="text" value="255"/>
Udp port	<input type="text" value="8000"/>
Host name	<input type="text" value="tcode"/>
Friendly name	<input type="text" value="ESP32 TCode"/>

Or by logging into your router and looking for A Device named “TcodeESP32”

10	TCodeESP32	192.168.0.145
----	------------	---------------

Once you have this IP address you can get into your machine settings via the web browser.

From here you can view the default pin out and change them if you know what you are doing.

General Settings	SR6 (Only) Settings
Servo Frequency <input type="text" value="330"/>	SR6 mode <input checked="" type="checkbox"/>
Auto T-Valve <input type="checkbox"/>	Right Upper Servo PIN/ZERO <input type="text" value="12"/> <input type="text" value="1500"/>
Inverse T-Valve <input type="checkbox"/>	LeftUpper Servo PIN/ZERO <input type="text" value="2"/> <input type="text" value="1500"/>
RightServo PIN/ZERO <input type="text" value="13"/> <input type="text" value="1500"/>	Pitch Right Servo PIN/ZERO <input type="text" value="14"/> <input type="text" value="1500"/>
LeftServo PIN/ZERO <input type="text" value="15"/> <input type="text" value="1500"/>	
PitchLeftServo PIN/ZERO <input type="text" value="4"/> <input type="text" value="1500"/>	
ValveServo PIN/ZERO <input type="text" value="25"/> <input type="text" value="1500"/>	
TwistServo PIN/ZERO <input type="text" value="27"/> <input type="text" value="1500"/>	
TwistFeedBack PIN <input type="text" value="26"/>	
Continuous twist <input type="checkbox"/>	
Vibe0 PIN <input type="text" value="18"/>	
Vibe1/Lube PIN <input type="text" value="19"/>	
Manual lube PIN <input type="text" value="23"/>	
Manual lube speed (1-255) <input type="text" value="255"/>	
Udp port <input type="text" value="8000"/>	
Host name <input type="text" value="tcode"/>	
Friendly name <input type="text" value="ESP32 TCode"/>	

You can also set the default servo zeros.

If you are using this in an **OSR MAKE SURE YOU UNCHECK “SR6 Mode”**

The ranges are only for receiving data in json format.

The only thing that does this at the time of this writing is Tcode Remote Gamepad output over the network. This was done so the OSR user has control over the range and speed for safety concerns.

The screenshot shows a web interface titled "TCode Settings" on a light gray background. At the top center is a button labeled "Restart device". Below the title, a red text label "Restart required!!" is visible on the right. A small note "(only affects json input)" is centered below the title. There are four sliders with white circular handles. The first three sliders are dark blue and labeled "X Range 99%", "Y Roll Range 99%", and "X Roll Range 99%". The fourth slider is white and labeled "Speed 1000ms". At the bottom center is a button labeled "Reset ALL settings".

Enjoy your wireless device!

PS.. this release is in its early stages with missing features and bugs. if you find any issues please report them on Github.