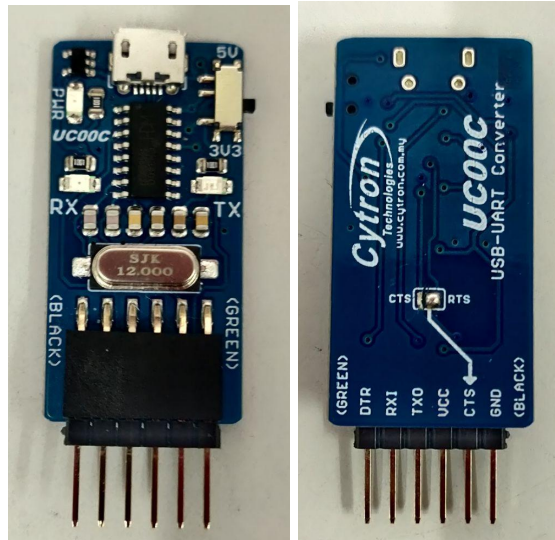
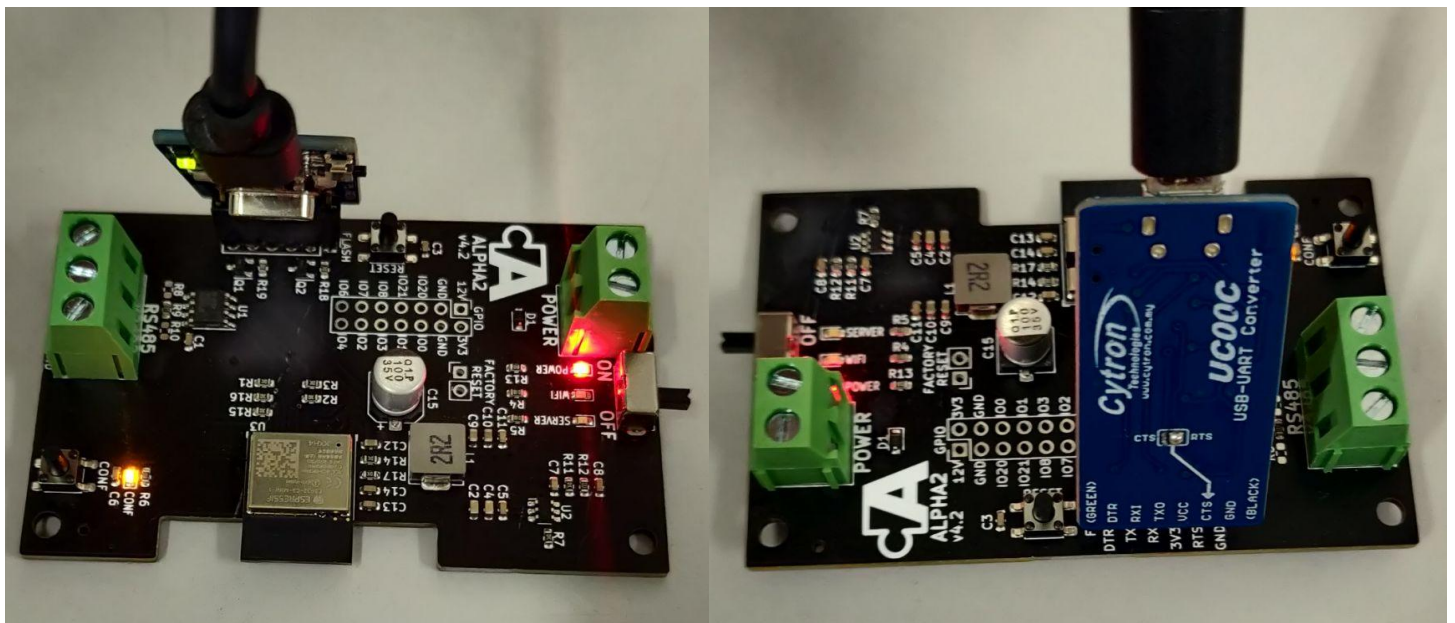


Hardware requirement

1. Our programmer is a standard USB - UART programmer. (CH340 or similar)
2. The pins of the programmer need to be exposed using male headers at a pitch of 2.54mm in the following order:
 - a. DTR
 - b. RX
 - c. TX
 - d. 3.3V
 - e. RTS
 - f. GND



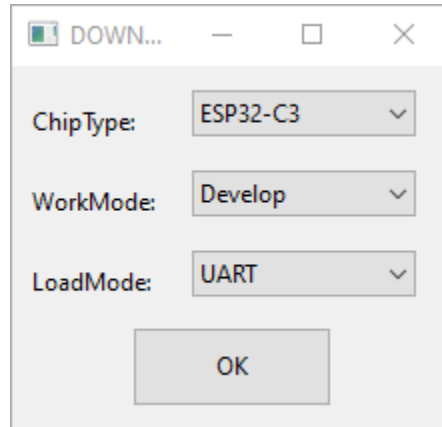
3. The programmer is inserted into the flashing female port of both boards with the pin's name matching. (Except for TX and RX)
4. The programmer is tilted at an angle to make good contact with the port.



Software Requirement

Single board flashing

1. Open flashing software. (flash_download_tool_3.9.3.exe)
2. Select the following:
 - a. ChipType: ESP32-C3
 - b. WorkMode: Develop
 - c. LoadMode: UART



3. Set the file paths at the following addresses:
 - a. 0x0000 @ bootloader.bin
 - b. 0x8000 @ partitions.bin
 - c. 0xe000 @ boot_app0.bin
 - d. 0x10000 @ :
 - i. Alpha1 - Alpha1_BASE_x.x.x.bin
 - ii. Alpha2 - Alpha2_BASE_x.x.x.bin
4. Set the SPI Flash Config:
 - a. SPI SPEED: 80MHz
 - b. SPI MODE: DIO
5. Select the appropriate COM port that the programmer is attached to.
6. Set the baud rate to 921600.
7. Click "START" to begin the flashing process.
8. The progress bar will begin moving to show the upload process.
9. Once the upload is done, the blue, green, and yellow LED on the board will flash twice indicating a successful firmware upload.

ESP32C3 FLASH DOWNLOAD TOOL V3.9.3

SPIDownload

<input checked="" type="checkbox"/>	../Firmware/bootloader.bin	...	@	0x0000
<input checked="" type="checkbox"/>	../Firmware/partitions.bin	...	@	0x8000
<input checked="" type="checkbox"/>	../Firmware/boot_app0.bin	...	@	0xe000
<input checked="" type="checkbox"/>	../Firmware/Alpha1_BASE_4.2.2.bin	...	@	0x10000
<input type="checkbox"/>		...	@	
<input type="checkbox"/>		...	@	
<input type="checkbox"/>		...	@	
<input type="checkbox"/>		...	@	

SPIFlashConfig

SPI SPEED

☐ 40MHz

☐ 26.7MHz

☐ 20MHz

☒ 80MHz

SPI MODE

☐ QIO

☐ QOUT

☒ DIO

☐ DOUT

☐ FASTRD

☒ DoNotChgBin

☐ LockSettings

CombineBin

Default

DetectedInfo

DownloadPanel 1

IDLE
等待

START

STOP

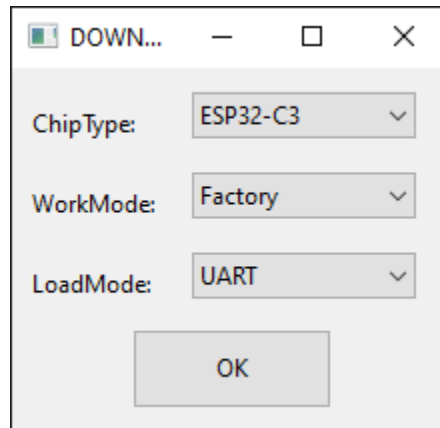
ERASE

COM: COM4

BAUD: 921600

Multiple board flashing

1. Open flashing software. (flash_download_tool_3.9.3.exe)
2. Select the following:
 - a. ChipType: ESP32-C3
 - b. WorkMode: Factory
 - c. LoadMode: UART



3. Uncheck the "LockSettings" to allow the settings to be modified.
4. Set the file paths at the following addresses:
 - a. 0x0000 @ bootloader.bin
 - b. 0x8000 @ partitions.bin
 - c. 0xe000 @ boot_app0.bin
 - d. 0x10000 @ :
 - i. Alpha1 - Alpha1_BASE_x.x.x.bin
 - ii. Alpha2 - Alpha2_BASE_x.x.x.bin
5. Set the SPI Flash Config:
 - a. SPI SPEED: 80MHz
 - b. SPI MODE: DIO
6. Check the "LockSettings" to lock in the settings.
7. Select the appropriate COM port for each programmer that is attached.
8. Set all the baud rates to 921600.
9. Click "START ALL" to begin the flashing process.
10. The progress bar will begin moving for each programmer to show the upload process.
11. Once the upload is done, the blue, green, and yellow LED on each board will flash twice indicating a successful firmware upload.

FactoryMultiDownload			
Download Path Config			
<input checked="" type="checkbox"/>	firmware_loader.bin	@ ...	Ba1000
<input checked="" type="checkbox"/>	firmware_partitions.bin	@ ...	Ba0000
<input checked="" type="checkbox"/>	firmware_boot_app.bin	@ ...	Ba0000
<input checked="" type="checkbox"/>	firmware_alpha1_beta1_*.bin	@ ...	Ba10000
<input type="checkbox"/>		@ ...	
<input type="checkbox"/>		@ ...	
<input type="checkbox"/>		@ ...	
<input type="checkbox"/>		@ ...	
SPIFlashConfig			
SPI SPEED	DetectedInfo		
<input type="radio"/> 40MHz <input type="radio"/> 26.7MHz <input type="radio"/> 20MHz <input checked="" type="radio"/> 80MHz <input type="radio"/> FASTRD	DoNotChgBin <input checked="" type="checkbox"/> LockSettings <input checked="" type="checkbox"/> CombineBin Default		
DownloadPanel 1			
IDLE 等待			
START	STOP	ERASE	COM: COM4 BAUD: 921600
DownloadPanel 2			
IDLE 等待			
START	STOP	ERASE	COM: BAUD: 921600
DownloadPanel 3			
IDLE 等待			
START	STOP	ERASE	COM: BAUD: 921600
DownloadPanel 4			
IDLE 等待			
START	STOP	ERASE	COM: BAUD: 921600
DownloadPanel 5			
IDLE 等待			
START	STOP	ERASE	COM: BAUD: 921600
DownloadPanel 6			
IDLE 等待			
START	STOP	ERASE	COM: BAUD: 921600
DownloadPanel 7			
IDLE 等待			
START	STOP	ERASE	COM: BAUD: 921600
DownloadPanel 8			
IDLE 等待			
START	STOP	ERASE	COM: BAUD: 921600
<div>START ALL</div> <div>STOP ALL</div> <div>ERASE ALL</div>			