

Steps

1.1 . Burn a firmware with OTA function to dash button

Below is source code link

https://github.com/RAKWireless/CREATOR-Arduino-SDK/blob/master/hardware/libraries/OTA/examples/ota_basic/ota_basic.ino

(1) Change the ssid and pass using your router's ssid and pass.

```
char ssid[] = "yourNetwork"; // your network SSID (name)
```

```
char pass[] = "secretPassword"; // your network password
```

(2) Take a look at the version.

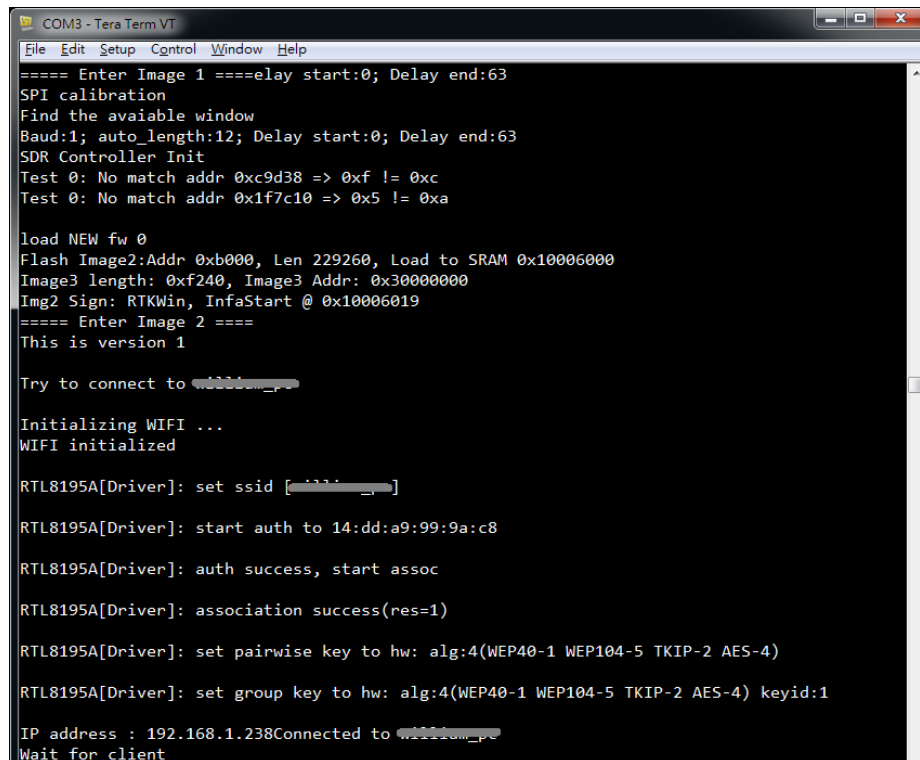
```
#define MY_VERSION_NUMBER 1
```

(3) Compile and upload the firmware to dash button using Arduino IDE.

(4) Reset dash button and take a look at the dash button's log, like below:

In the log message:

After “Enter Image 2 =====”, you can find “This is version 1”. This is the log message we add in sketch. After Ameba is connected to AP and gets IP address “192.168.1.238”, it activates mDNS and waits for client.



```
COM3 - Tera Term VT
File Edit Setup Control Window Help
===== Enter Image 1 =====delay start:0; Delay end:63
SPI calibration
Find the available window
Baud:1; auto_length:12; Delay start:0; Delay end:63
SDR Controller Init
Test 0: No match addr 0xc9d38 => 0xf != 0xc
Test 0: No match addr 0x1f7c10 => 0x5 != 0xa

load NEW fw 0
Flash Image2:Addr 0xb000, Len 229260, Load to SRAM 0x10006000
Image3 length: 0xf240, Image3 Addr: 0x30000000
Img2 Sign: RTKWin, InfaStart @ 0x10006019
===== Enter Image 2 =====
This is version 1

Try to connect to *****

Initializing WIFI ...
WIFI initialized

RTL8195A[Driver]: set ssid [*****]
RTL8195A[Driver]: start auth to 14:dd:a9:99:9a:c8
RTL8195A[Driver]: auth success, start assoc
RTL8195A[Driver]: association success(res=1)
RTL8195A[Driver]: set pairwise key to hw: alg:4(WEP40-1 WEP104-5 TKIP-2 AES-4)
RTL8195A[Driver]: set group key to hw: alg:4(WEP40-1 WEP104-5 TKIP-2 AES-4) keyid:1
IP address : 192.168.1.238Connected to *****
Wait for client
```

(5) Change the MY_VERSION_NUMBER to 2 and compile out a OTA bin file, prepare for next step

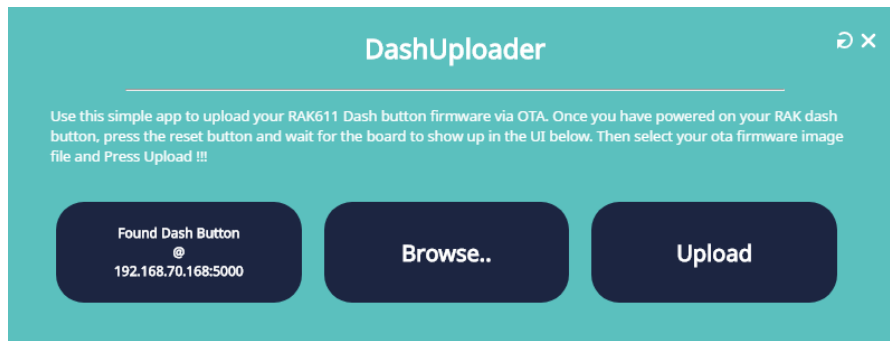
1.2 . using DashUploader tool to upgrade the dash button

Below is the tool link:

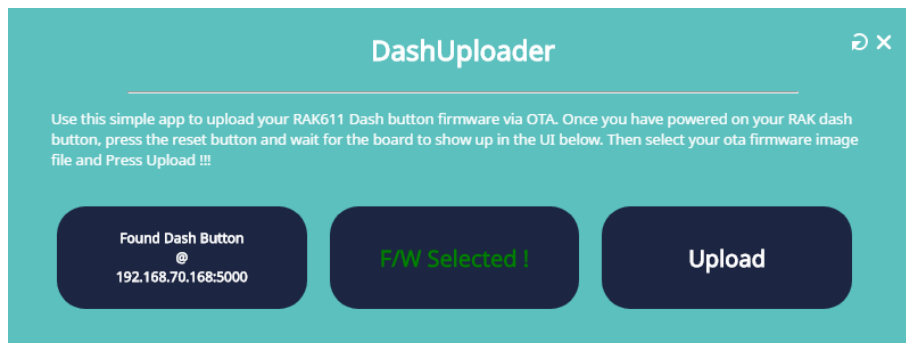
<https://github.com/narioinc/DashUploader-app>

chose [DashUploader-win32-x64.zip](#)

- (1) Double Click DashUploader.exe to open the interface, wait the first box display Found Dash Button@192.168.xxx.xxx:5000



- (2) Then click the browse box to choose the OTA firmware you want to upgrade, make sure The OTA firmware include OTA function, so you can upgrade again next time.



- (3) Click Upload.
- (4) When OTA image is downloaded successfully, dash button will reboot and following log will be shown in log terminal. After “Enter Image 2 =====”, the log “This is version 2” is the message we add in sketch.

```
COM3 - Tera Term VT
File Edit Setup Control Window Help

IP address : 192.168.1.238Connected to william_pc
Wait for client
Client connected. IP:192.168.1.226 port:54552

Read OTA info...
Start download
OTA success
=====

ROM Version: 0.2

Build ToolChain Version: gcc version 4.8.3 (Realtek ASDK-4.8.3p1 Build 2003)
=====

Check boot type form eFuse
SPI Initial
Image1 length: 0x36e4, Image Addr: 0x10000bc8
Image1 Validate OK, Going jump to Image1
===== Enter Image 1 =====
SDR Controller Init

load NEW fw 1
Flash Image2:Addr 0x80000, Len 228660, Load to SRAM 0x10006000
Image3 length: 0xf240, Image3 Addr: 0x30000000
Img2 Sign: RTKWin, InfoStart @ 0x10006019
===== Enter Image 2 =====
This is version 2

Try to connect to [redacted]

Initializing WIFI ...
WIFI initialized

RTL8195A[Driver]: set ssid [redacted]

RTL8195A[Driver]: start auth to 14:dd:a9:99:9a:c8

RTL8195A[Driver]: auth success, start assoc

RTL8195A[Driver]: association success(res=1)

RTL8195A[Driver]: set pairwise key to hw: alg:4(WEP40-1 WEP104-5 TKIP-2 AES-4)

RTL8195A[Driver]: set group key to hw: alg:4(WEP40-1 WEP104-5 TKIP-2 AES-4) keyid:1

IP address : 192.168.1.238Connected to [redacted]
Wait for client
```