FAQ-UPD-007: How to upgrade OS and firmware for the NAND Flash 512MB UA-2200/ UA-5200 series to V.1.4.0.0 or later version? (Upgrade via USB)

ICP DAS UA series provides new functions! Please upgrade the OS to provide more complete services.

When does the OS need to upgrade?

When the UA-2200 or UA-5200 NAND Flash 512MB version update the Firmware to a version above 1.4.0.0, but the current version is lower than 1.4.0.0, it needs to upgrade the OS and the Firmware.

The following table shows the UA series firmware update methods according to the UA's hardware specifications and existing firmware versions.

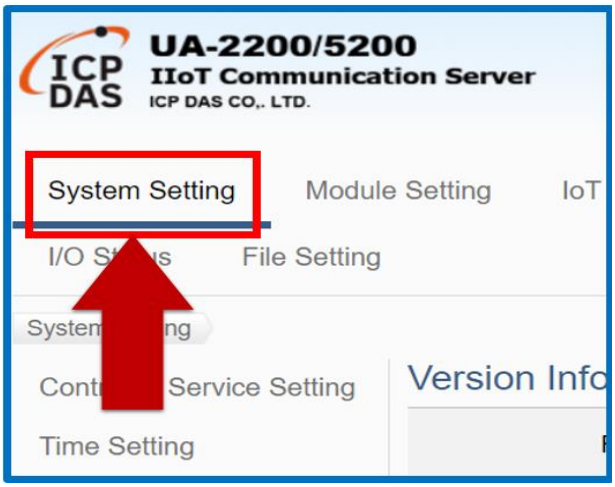
Model	Hardware Specifications	Casing Mark	Firmware Versions	Update OS	Firmware Update Method
UA-5231	NAND Flash 512MB	With Rev B	**< v1.4.0.0**	**Need**	Need to update the OS first before you can update to version v1.4.0.0 or later.
UA-5231	NAND Flash 512MB	With Rev B	**≥ v1.4.0.0**	**No**	Can update the firmware directly via the webpage
UA-5231	8GB eMMC Flash	No Rev B	**< v1.4.0.0**	**Need**	Need to update the OS first before you can update to version v1.4.0.0 or later.
UA-5231	8GB eMMC Flash	No Rev B	**≥ v1.4.0.0**	**No**	Can update the firmware directly via the webpage
UA-2241M	NAND Flash 512MB	—	**< v1.4.0.0**	**Need**	Need to update the OS first before you can update to version v1.4.0.0 or later.
UA-2241M	NAND Flash 512MB	—	**≥ v1.4.0.0**	**No**	Can update the firmware directly via the webpage

Notes:

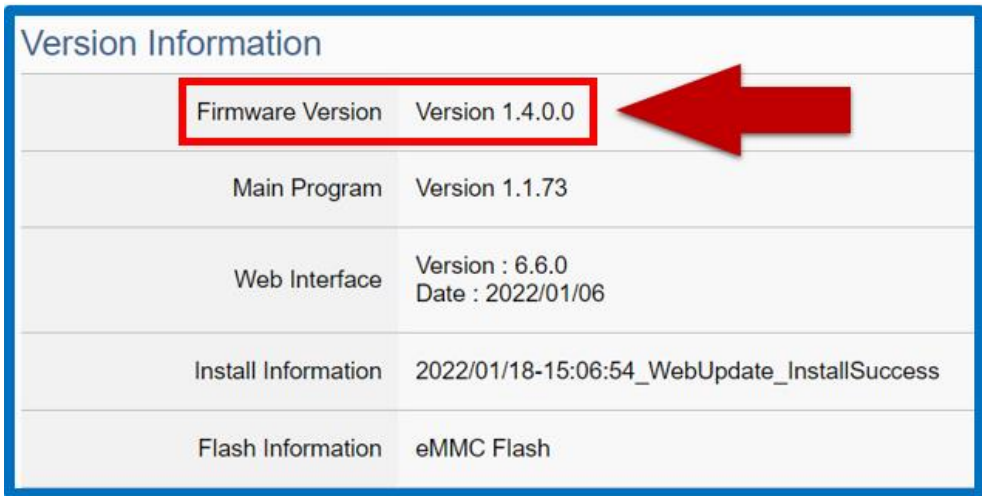
- Whether the UA-5231 casing is marked with Rev B can be used as a hardware identification indicator (with Rev B = 8GB eMMC; without Rev B = 512MB NAND).
- This FAQ is only for UA-2200 and UA-5200 series NAND Flash 512MB hardware.

1. Check the Firmware Version

Log in the UA-2200 or UA-5200 UI webpage, and click [System Setting].



Check the [Firmware Version] in [Version Information]. If it is lower than V.1.4.0.0 and you want to upgrade to V.1.4.0.0 or above, please go to the next step. If it is V. 1.4.0.0 or above, you can directly update the firmware without upgrading the OS.



2. Check If the UA-2200 or UA-5200 Can Upgrade the OS?

[UA-2200 Series] All models are NAND Flash. If it is lower than V.1.4.0.0, upgrade the OS Firmware via this package.
[UA-5200 Series] Follow the steps below to check if to upgrade via this OS Firmware package.

(1) Check the casing mark to confirm if it is the UA-5200 8GB eMMC Flash hardware version.

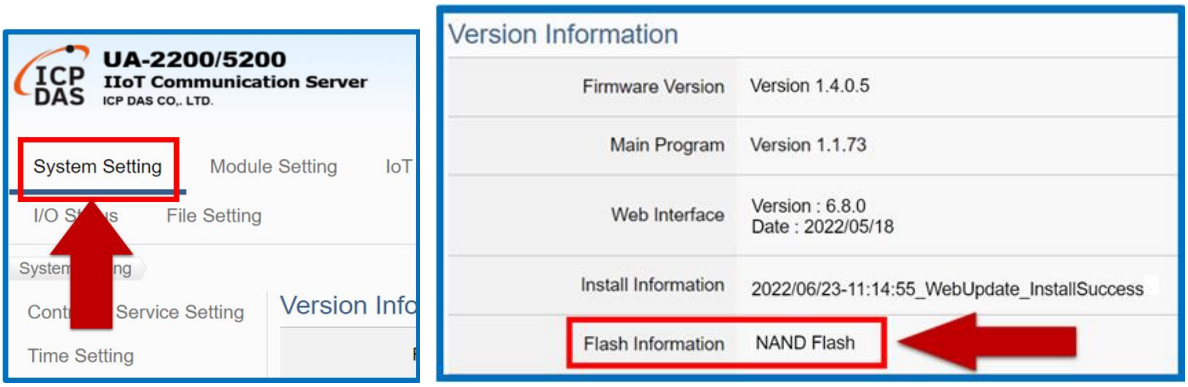
Check if the front casing of the UA-5200 series with the mark "**Rev B**"?

If there is, its Hardware version is 8GB eMMC Flash, firmware version 1.4.0.0 or later.

=> Firmware can be updated directly

(2) If there is no mark, check the UI Webpage to see the firmware and Flash information.

After entering the UA series UI webpage, click 【System Setting】. Check the [Flash Information] in [Version Information].



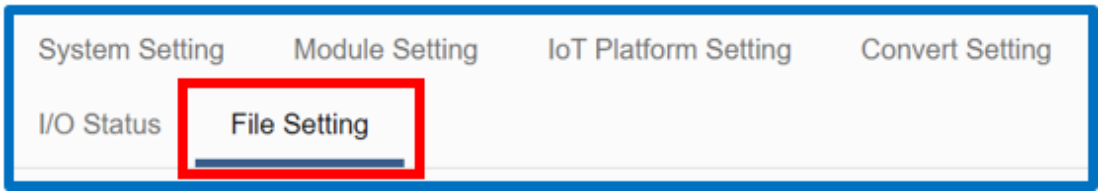
If the [Flash Information] is NAND Flash (512MB), you can upgrade this OS and Firmware to the v1.4.0.0 or later version by this burning package.

3. How to Update Firmware by Re-burning the OS?

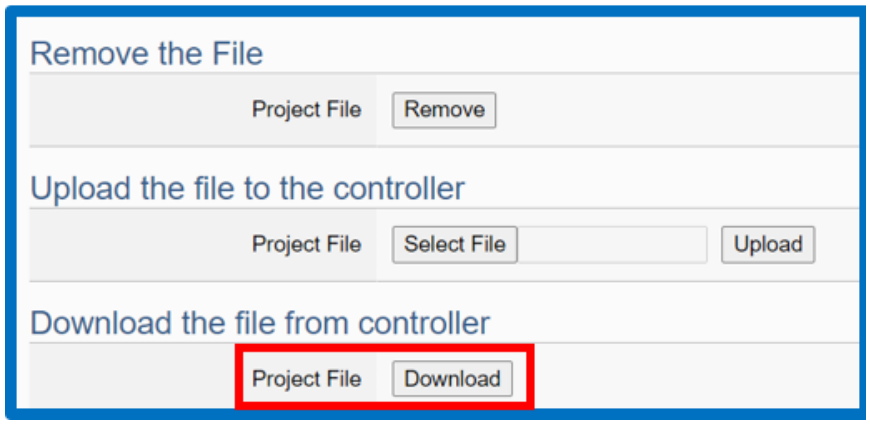
This method needs to update the bottom layer OS. If there is a project in the UA-2200 or UA-5200 controller, please **backup and save the project before re-burning the OS**.

3.1. How to Back-up the Project File?

After logging in the UA web UI, click the 【File Setting】 function.



Click the【Download】button as below, and save the project file to the folder you want.



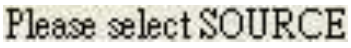
3.2. How to Create a USB burner

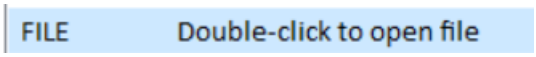
(1) Download the UA-5200/2200 series **".imgc"** image file from the following website:
https://www.icpdas.com/en/faq/index.php?kind=326#926

After extraction, the filename will be "**UA-XXXX-512MB-System-Update-USB.imgc**".

(2) Download the software **HDD-Raw-Copy-Tool** (Legacy v1 is recommended) from the following:
https://hddguru.com/software/HDD-Raw-Copy-Tool/

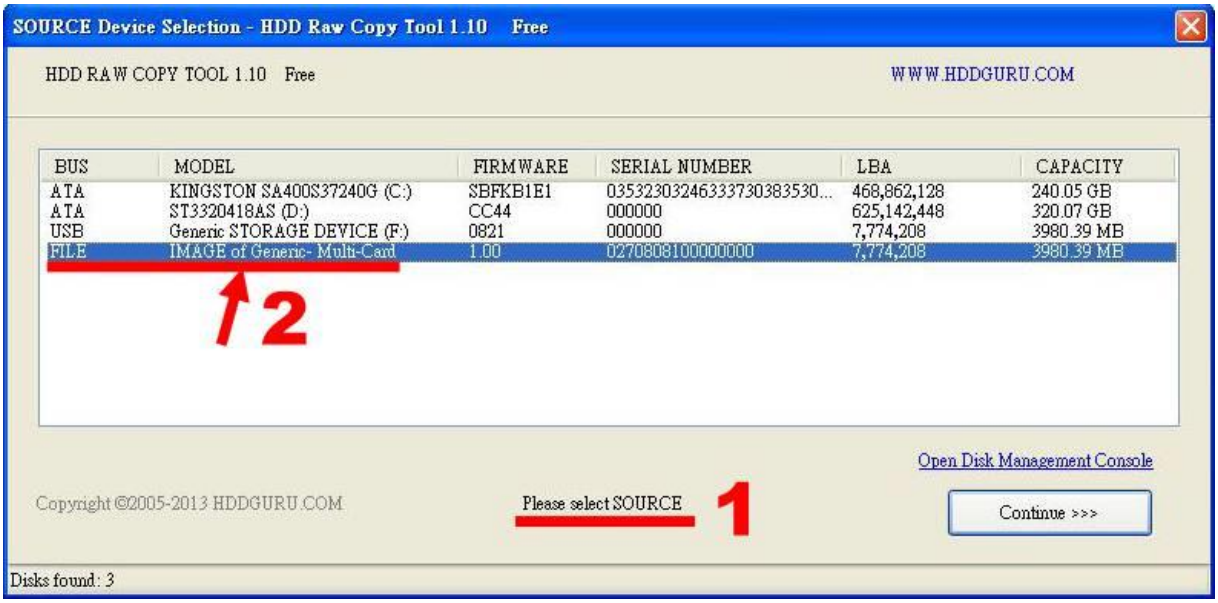
(3) Insert a USB drive into your PC (USB capacity must be 8 GB or larger).

- Launch the burning software HDDRawCopy1.10Portable
- Check the messages that appear at the bottom of the software. 

- Double click "FILE" (the last option) 

- Select the file to burn (select the ".imgc" file you just decompressed) and open it.

  See the image below for the operation.

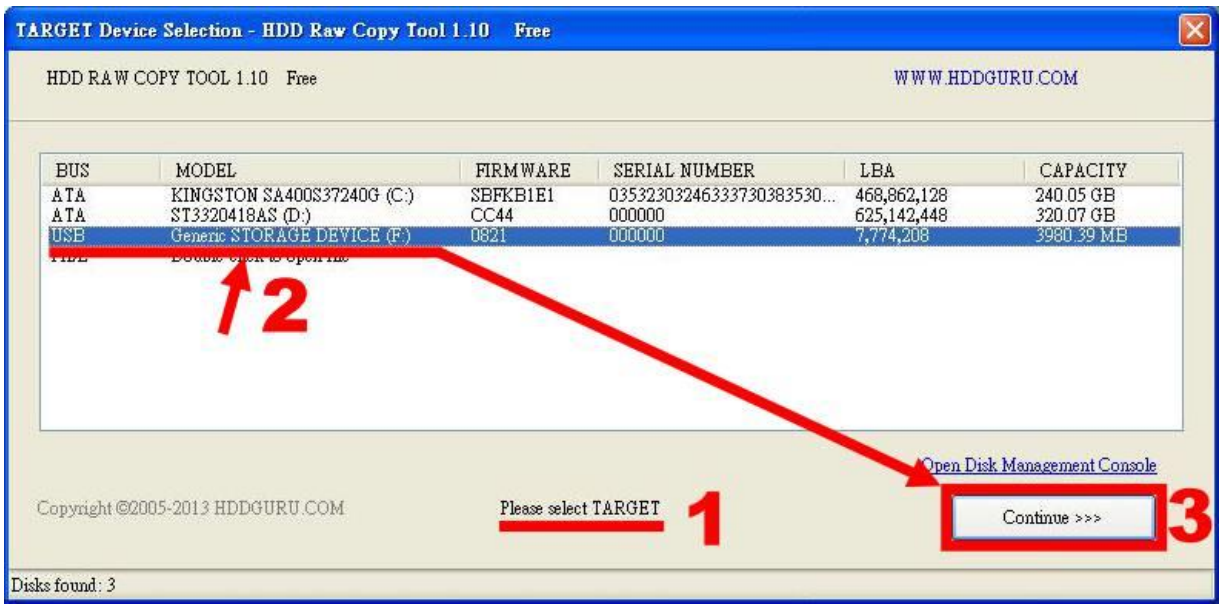


- Click “Continue”

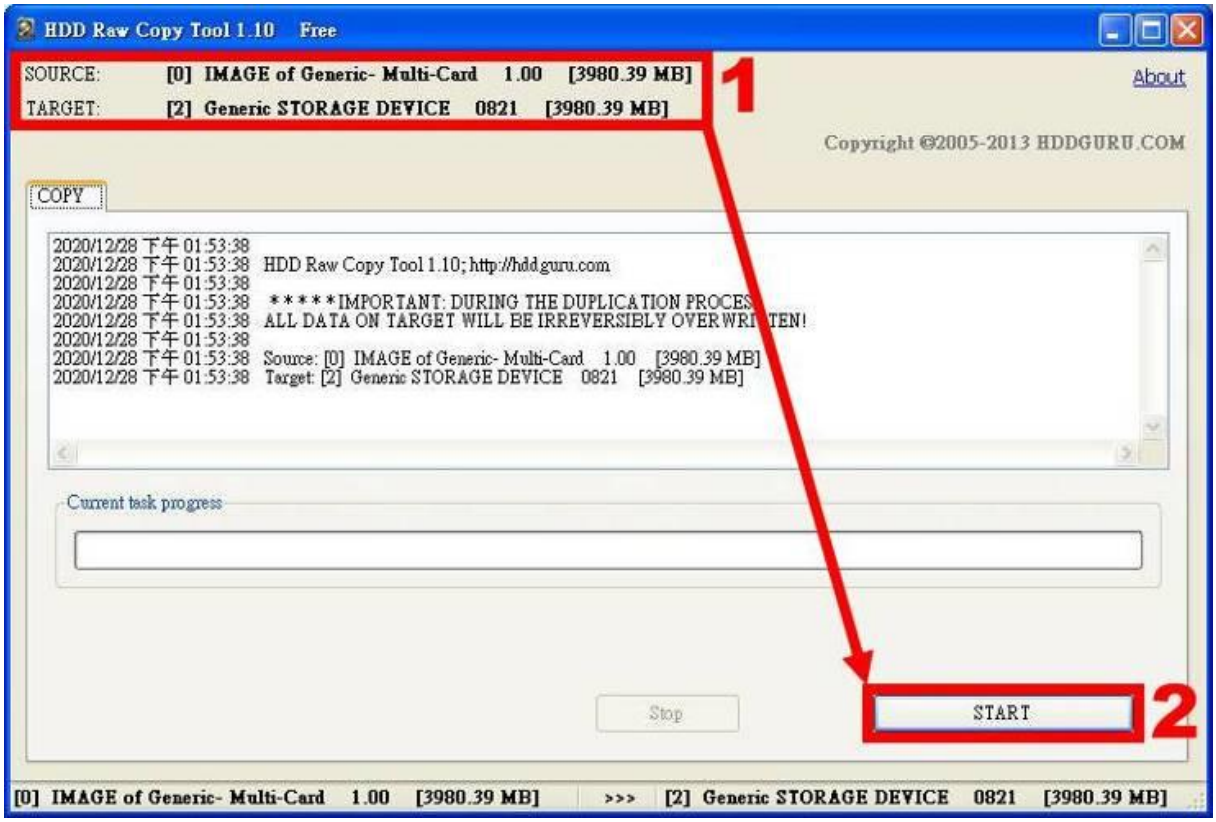
(4) Select the burning device

- Check the messages that appear at the bottom of the software. Please select TARGET
- Select “USB” USB Generic STORAGE DEVICE (F:)
- Click “Continue”

  See the image below for the operation.



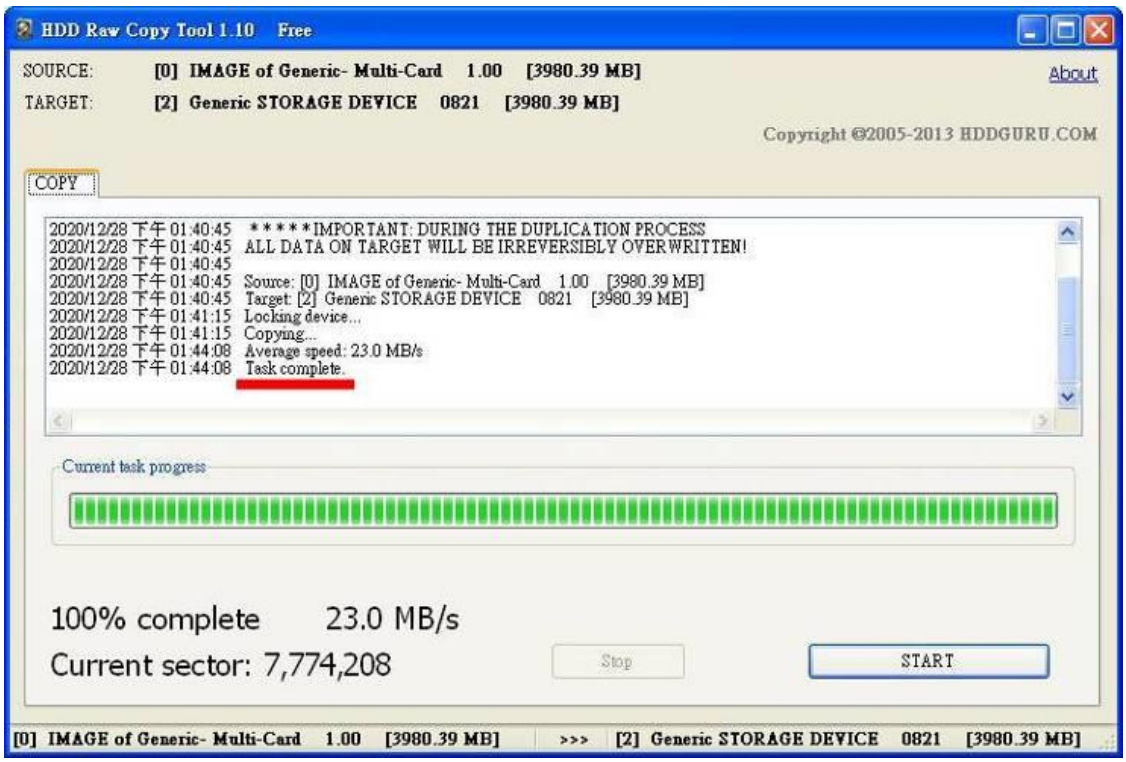
(5) Confirm the burning settings



- Box 1: SOURCE is the file size to be burned; TARGET is the burning destination and file size.
- After confirming everything is correct, click “START”.
- Click “Yes”.

(6) Burning complete

The appearance of the "Task complete" message indicates completion.

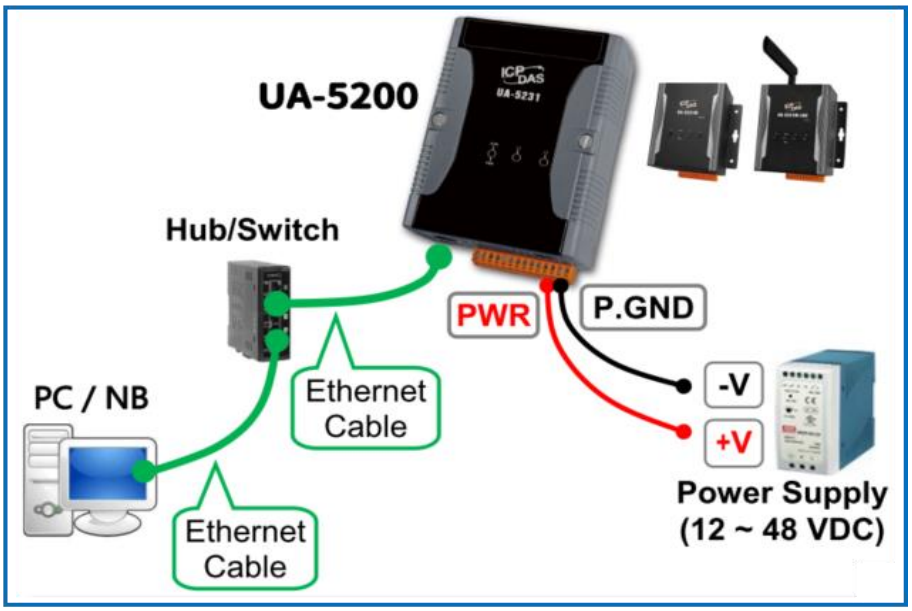


3.3. How to burn the OS into the UA product

(1) After powering off the UA product, insert the USB into the UA product.

(2) Turn the Rotary Switch on the front of the product to "9" (as shown in the picture below).

(3) The UA series is equipped with a standard RJ-45 network interface. Use the UA's LAN1 to connect to a network hub/switch (as shown in the picture below).



(4) Power on the UA product again.

After powering on, it enters the burning stages, as shown in the table below:

Stage	Description	Buzzer	L1 LED	L2 LED
Stage1	Start updating	One long beep	Green light flashing	—
Stage2	Updating	—	—	Green light flashing
Stage3	Updating	—	Green light flashing	Green light flashing
Complete	Updating complete	One long beep per second	Off	Off

➔ Wait 1 minute. **(Warning: Do not disconnect the power during the burning process, otherwise the update will fail)**

➔ L1 green light flashing and emits one long beep.

➔ Wait approximately 7 minutes.

➔ L1 and L2 lights going off and continuously emitting long beeps indicates successful burning.

➔ After powering off the UA product, unplug the USB from the UA product.

➔ Turn the Rotary Switch on the front of the UA to "0". (as shown in the picture below)

➔ Reconnect the power to complete the OS burning process.

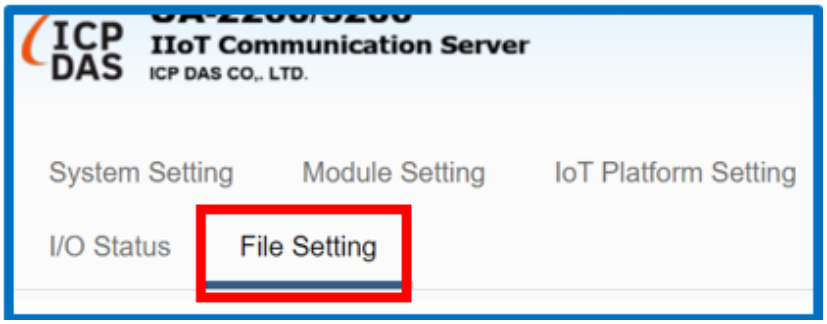
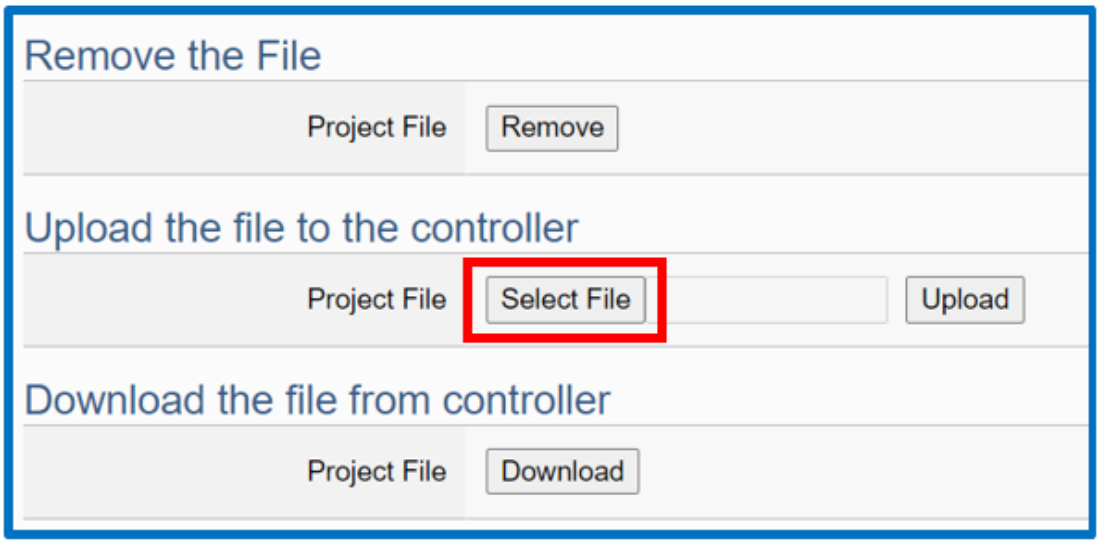
➔ It is recommended to use DiskGenius software on a computer to restore the USB drive.

3.4. How to know the UA-2241 or UA-5231 IP address after the OS burning?

After burning, Default IP is 192.168.255.1
Default webpage Account: root
Default webpage Password: root

3.5. How to Restore the Backup Project File?

After logging in to the UA-2200/5200 UI webpage, click the 【File Setting】 function.



Click 【Select File】, select the previously backed up project file, and click【Upload】.