**1. How to refresh BMC under DOS:**

a ) Download the latest DOS upgrade tool package from the FTP directory where the version is located, such as socflash\_v11101 (if there is a newer version, please use the latest version);

b) Unzip the tool package and put it in the same path as the bin file, and rename the bin file to xxx.bin;

c ) Boot into DOS, enter the directory where the tool and bin files are located, and execute socflash if=xxx.bin to refresh the BMC

**2. How to refresh BMC under Linux (64 bit ):**

a ) Download the latest Linux upgrade tool package from the FTP directory where the version is located, such as lxflash\_v11101 (if there is a newer version, please use the latest version);

b) Unzip the tool package and put it in the same path as the bin file, and rename the bin file to xxx.bin;

c ) Boot into Linux , enter the directory where the tool and bin files are located, and execute ./socflash\_64.sh if=xxx.bin to refresh the BMC

**Note : The following is only used to illustrate the writing method. The specific writing content should be adjusted according to actual needs.**

**1. Write FRU under DOS**

Copy all files in the FRU\_tool/DOS folder to the DOS boot disk and boot into DOS;

execute the .bat batch script under DOS

(For general products, execute Standard.bat ; for Barebone products, execute Barebone.bat )

Method 2: Use the IPMICFG tool to manually modify the Board Manufacture, Board Product Name, Product Manufacture, Product Name, Product Version and other fields in the FRU

For example:

Board Manufacture is changed to Inspur or NULL

Board Product Name is changed to Zhenzhu or NULL

Product Manufacture is changed to Inspur or NULL

Change Product Name to NF5270 M4 or NULL

Product Version changed to 01

IPMICFG -fru BPN Zhenzhu or NULL

IPMICFG -fru BM Inspur or NULL

IPMICFG –fru PN NF5270M4 or NULL

IPMICFG –fru PM Inspur or NULL

IPMICFG -fru PV 01

**2. Write FRU under Linux**

Copy all files in the FRU\_tool/Linux folder to the Linux system;

Method 1: Directly execute the .sh script in Linux

(General products execute Standard.sh ; Barebone products execute Barebone.sh )

Method 2: Use the fru-change tool to manually modify the Board Manufacture, Board Product Name, Product Manufacture, Product Name, Product Version, and other fields in the FRU

For example:

Board Manufacture is changed to Inspur or NULL

Board Product Name is changed to Zhenzhu or NULL

Product Manufacture is changed to Inspur or NULL

Change Product Name to NF5270 M4 or NULL

Product Version changed to 01

./fru-change\_x64 -kcs BP Zhenzhu or NULL

./fru-change\_x64 -kcs BM Inspur or NULL

./fru-change\_x64 -kcs PN NF5270M4 or NULL

./fru-change\_x64 -kcs PM Inspur or NULL

./fru-change\_x64 -kcs PV 01

**Modify power configuration via ipmitool (Linux)**

Single power: ipmitool raw 0x3a 0x92 0x01 0x01

Dual power : ipmitool raw 0x3a 0x92 0x01 0x02

Get the number of configured power supplies: ipmitool raw 0x3a 0x92 0x00. The last digit of the return value is 1 for single power supply and 2 for dual power supply.

**Modify the cooling policy through ipmitool (Linux)**

**Note :**

1. **Select fan strategy based on different shipping configurations**
2. **(Special Strategy 2 is the on/off switch of Sangfor's fan control strategy. First run the "Special Strategy 2 On" command, then run the strategy you want to use. If you do not use Special Strategy 2, use the "Special Strategy 2 Off" command to turn it off.)**
3. **(The " Get current cooling strategy type " command takes effect : After refreshing the BMC for the first time, you need to execute the "Special strategy 2" command to write to eeprom to take effect )**
4. **Configuration description of heat dissipation strategy :**

Note: When there is a rear hard disk, the system adds a fan 0 ; the system no longer distinguishes the number of front hard disks .

Strategy 02: No rear hard disk configuration

Strategy 03: The rear hard disk is configured as SATA SSD (the system has a rear hard disk, and the rear hard disk type is SATA SSD)

Strategy 04: Special type of boards support PCIESSD and have no rear hard disk; if there are other application configurations, the requirements will be issued through review.

Strategy 05: Special type boards support PCIESSD, and the rear hard disk type is SATA SSD; if there are other application configurations, the requirements will be issued through review.

Strategy 0 8 : The rear hard disk is a mechanical hard disk configuration: The rear hard disk type is SATA or sas mechanical hard disk, and the board type is not limited

Strategy 06: Open Special Strategy 2 (Sangfor customized low CPU temperature version)

Strategy 07: Disable special strategy 2 (Sangfor customized low CPU temperature version)

~~Control configuration 1 (disabled) : ipmitool raw 0x3a 0x90 0x00~~

~~Control configuration 2 (not enabled): ipmitool raw 0x3a 0x90 0x0 1~~

Default control configuration ( no rear hard disk configuration ): ipmitool raw 0x3a 0x90 0x0 2

The rear hard disk is configured as SATA SSD : ipmitool raw 0x3a 0x90 0x0 3

Special strategy speed configuration -no rear hard disk : ipmitool raw 0x3a 0x90 0x04

Special strategy speed configuration -the rear hard disk is SATA SSD: ipmitool raw 0x3a 0x90 0x0 5

Special policy 2 is turned on: ipmitool raw 0x3a 0x90 0x0 6

Special policy 2 is disabled: ipmitool raw 0x3a 0x90 0x0 7

(Special Strategy 2 is the on/off switch of Sangfor's fan control strategy. First run the "Special Strategy 2 On" command, then run the strategy you want to use. If you do not use Special Strategy 2, use the "Special Strategy 2 Off" command to turn it off.)

The rear hard disk is a mechanical hard disk configuration: ipmitool raw 0x3a 0x90 0x08

Get the cooling configuration: ipmitool raw 0x3a 0x91

Get the current cooling policy type (return value 0-General 1- Sangfor ): ipmitool raw 0x3a 0x91 0x1

**BMC default username / password**

Username: admin Password : admin

Username: root Password : root