

# SOP to upgrade KNPA-U16 from Naples to ROME

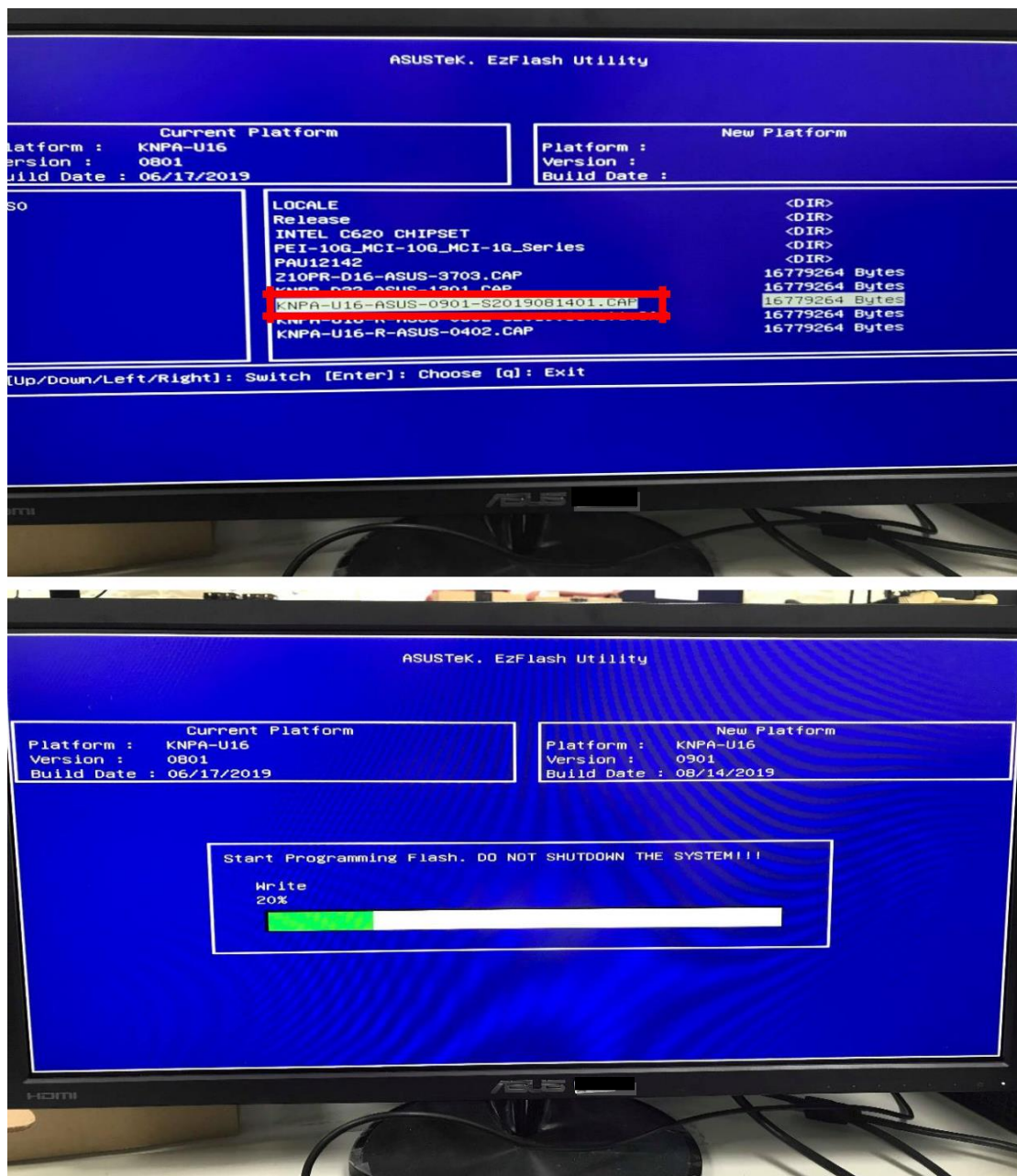
## Section 1: BIOS and CPU update



Requirement:

<b>CPU: Naples</b>
KNPA-U16 PCB Version: has to be above <b>v1.02</b>
BIOS Version: has to be above <b>v0801</b>

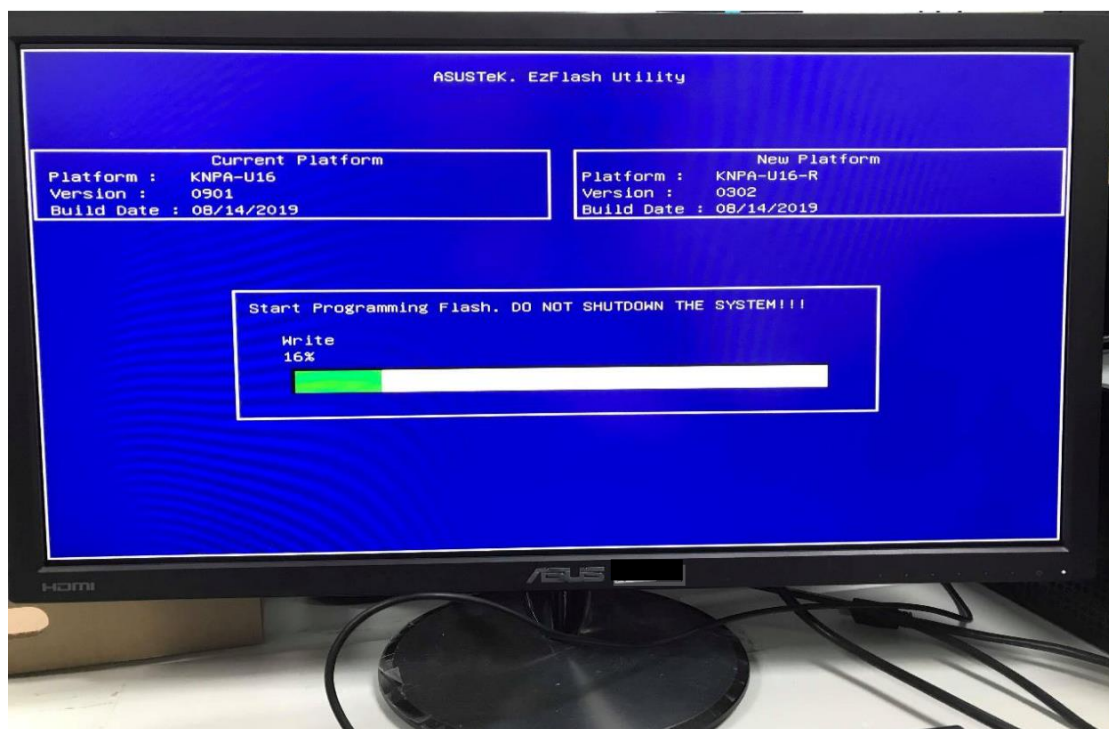
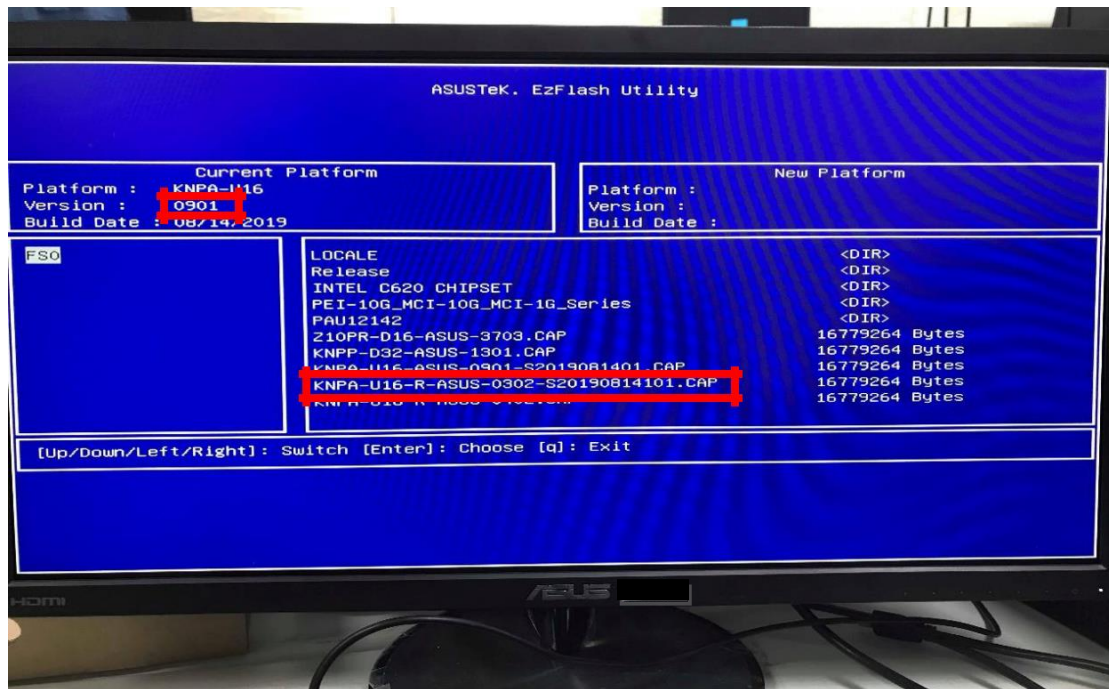
1. Use KNPA-U16 MB v1.02 w/Naples CPU, then flash Naples Bridge BIOS”  
**KNPA-U16-ASUS-0901-S2019081401**” via EzFlash utility.



After the 1<sup>st</sup> flash, system will be at below state:

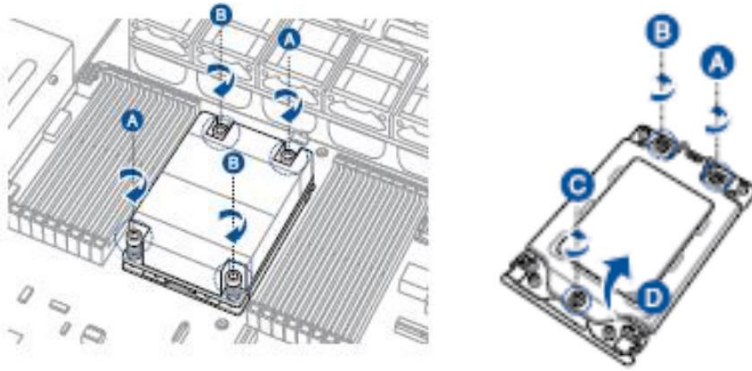
<b>CPU: Naples</b>
KNPA-U16 Version: has to be above <b>v1.02</b>
BIOS Version: <b>KNPA-U16-ASUS-0901</b>

2. After finished flashing Naples Bridge BIOS, then reboot the system. Boot up the system and enter BIOS EZFlash utility and flash the ROME Bridge BIOS **KNPA-U16-R-ASUS-0302-S20190814101** " via EzFlash utility. After update, **power off and change to ROME CPU**. (DMI information will be restored.)

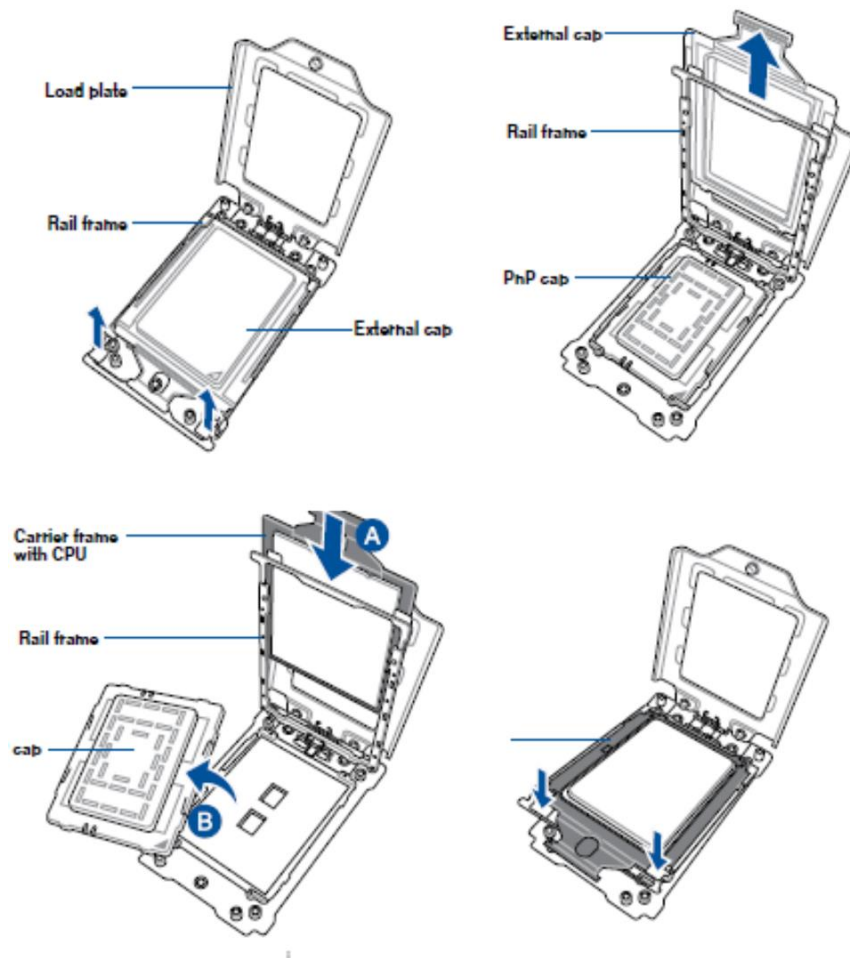


4. Twist each of four screws with a screwdriver, loosen them one by one in a diagonal sequence.

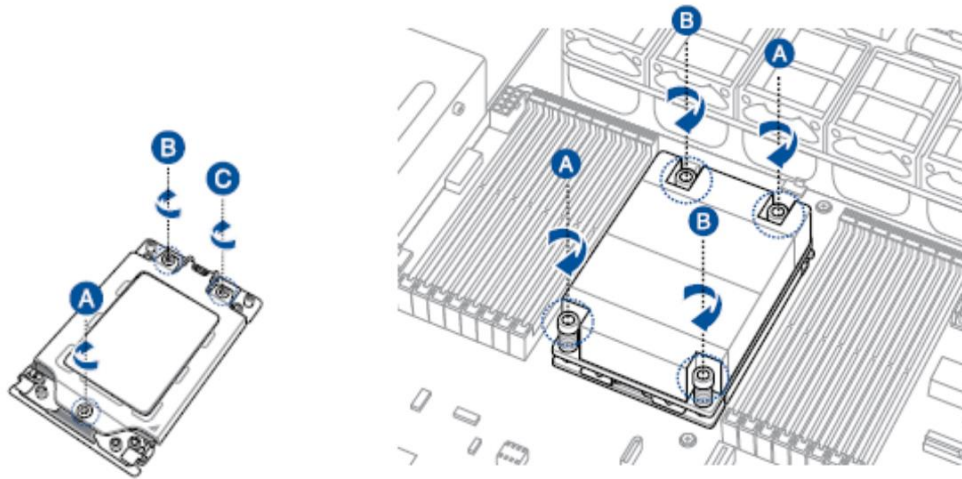




5. Slightly lift open the rail frame and change ROME CPU.



6. Tighten the screws one by one with a screwdriver.



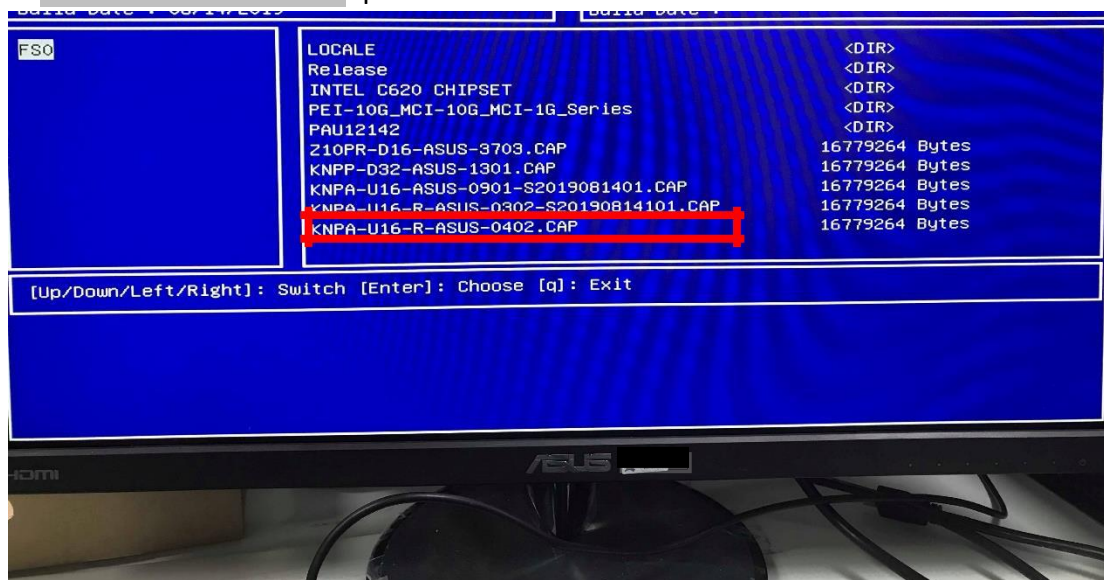
After 2<sup>nd</sup> flash, system will be below state:

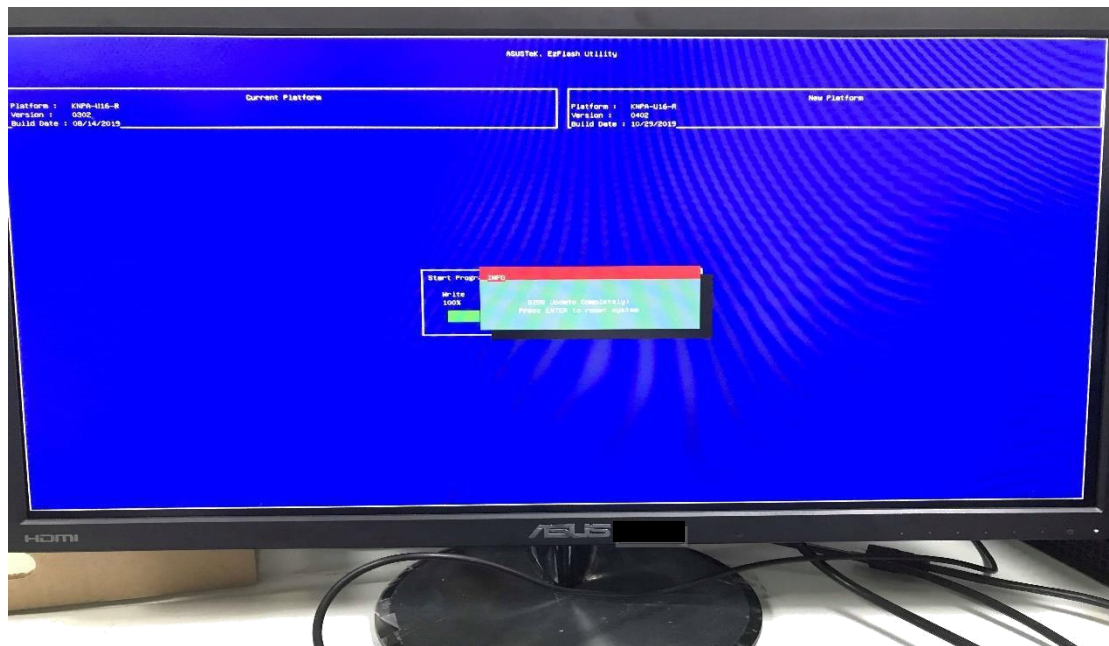
**CPU: Rome**

KNPA-U16 Version: must above **v1.02**

BIOS Version: **KNPA-U16-R-ASUS-0302**

7. After CPU installation, once again enter BIOS EzFlash utility and select **KNPA-U16-R-ASUS-0402.CAP** update the KNPA-U16-R to 0402 formal BIOS.





8. The final complete state of the system in ROME will be as follow:

**CPU: Rome**

KNPA-U16 Version: must above **v1.02**

BIOS Version: **KNPA-U16-R-ASUS-0402.CAP**

## Section 2: Upgrading the BMC FW to latest

1. Update BMC FW under Linux is to use Yafuflash.

Step1: Enable Virtual device (Activate AMI virtual USB. Input **ipmitool raw 0x32 0xaa 0x00** (Wait about 10sec for interface to be active)

```

gtsd@localhost:~/Desktop/KNPA-U16-R
File Edit View Search Terminal Help

[gtsd@localhost KNPA-U16-R]$ sudo ipmitool raw 0x32 0xaa 0x00

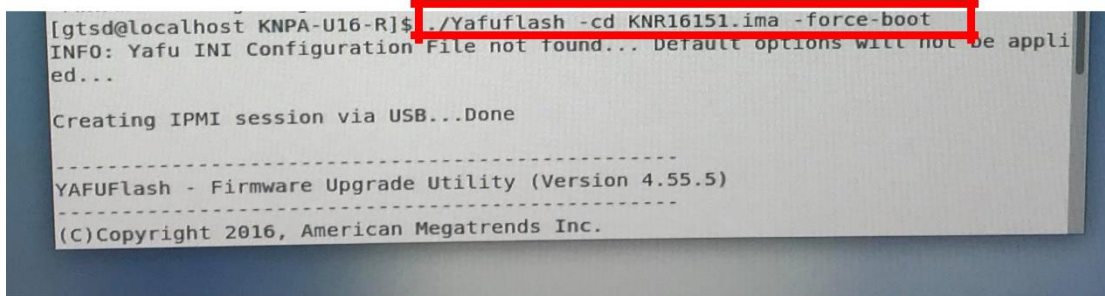
[gtsd@localhost KNPA-U16-R]$ sudo chmod 777 Yafuflash
[gtsd@localhost KNPA-U16-R]$ ll
total 34452
-rwxr-xr-x. 1 gtsd gtsd 31365 Dec 11 2008 ASMB_MAC.EXE
-rwxr-xr-x. 1 gtsd gtsd 514465 Apr 24 2014 ASMC8.exe
-rwxr-xr-x. 1 gtsd gtsd 419 Dec 28 01:13 FLASH1.BAT
-rwxr-xr-x. 1 gtsd gtsd 416 Dec 28 01:13 FLASH2.BAT
-rw-r--r--. 1 gtsd gtsd 33554432 Dec 27 23:05 KNR16151.ima
-rw-r--r--. 1 gtsd gtsd 155 Dec 28 01:17 KNR16151.md5
-rwxr-xr-x. 1 gtsd gtsd 428298 Mar 21 2018 Yafuflash.exe
-rwxrwxrwx. 1 gtsd gtsd 732476 Nov 26 2018 Yafuflash
[gtsd@localhost KNPA-U16-R]$ /Yafuflash -cd KNR16151.ima -force-boot

```

2. Grant Yafuflash access **sudo chmod 777 Yafuflash** and then run Yafuflash update



Input **./Yafuflash -cd KNR16151.ima -force-boot**

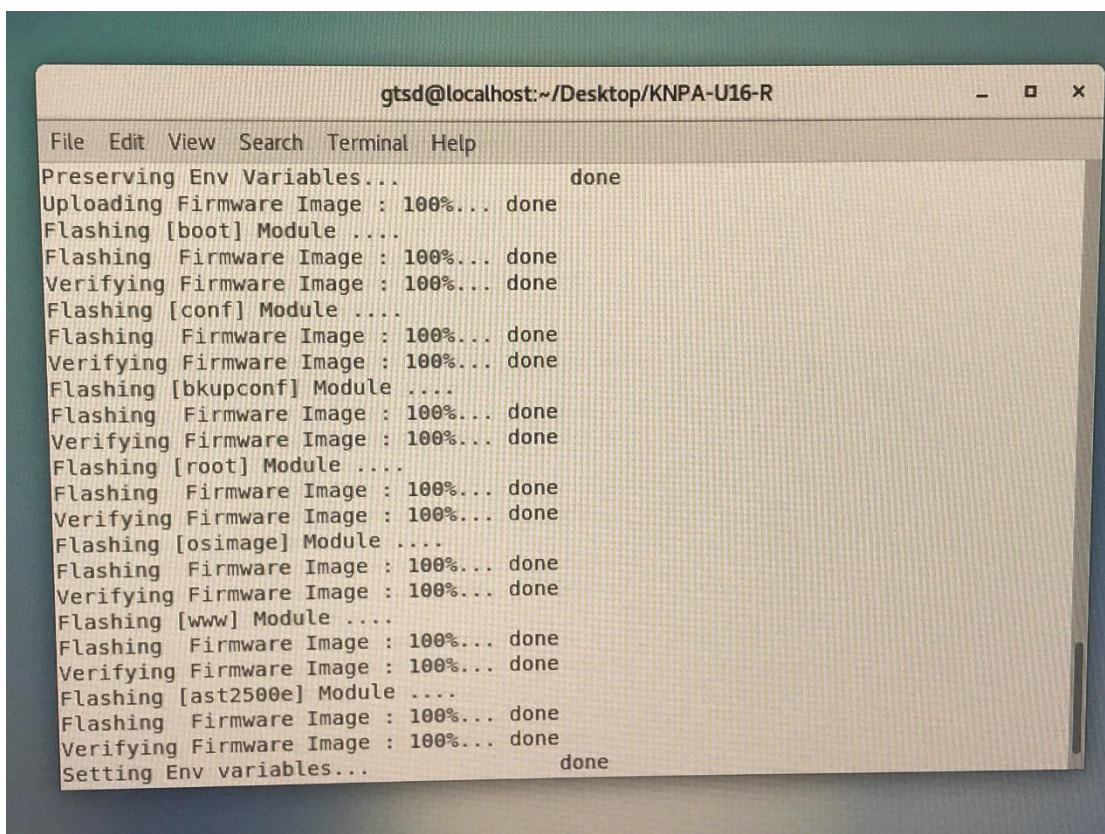


```
[gtsd@localhost KNPA-U16-R]$ ./Yafuflash -cd KNR16151.ima -force-boot
INFO: Yafu INI Configuration File not found... Default options will not be applied...

Creating IPMI session via USB...Done

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YAFUFlash - Firmware Upgrade Utility (Version 4.55.5)
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(C)Copyright 2016, American Megatrends Inc.
```

3. It will take less than 10 minutes for the update to finish. Once it is done, you could check from BIOS or BMC WEBUI if the update is successful. Pull of the power source, reconnect and reboot the system. The latest BMC firmware version is **1.15.1**



```
gtsd@localhost: ~/Desktop/KNPA-U16-R
File Edit View Search Terminal Help
Preserving Env Variables... done
Uploading Firmware Image : 100%... done
Flashing [boot] Module ....
Flashing Firmware Image : 100%... done
Verifying Firmware Image : 100%... done
Flashing [conf] Module ....
Flashing Firmware Image : 100%... done
Verifying Firmware Image : 100%... done
Flashing [bkupconf] Module ....
Flashing Firmware Image : 100%... done
Verifying Firmware Image : 100%... done
Flashing [root] Module ....
Flashing Firmware Image : 100%... done
Verifying Firmware Image : 100%... done
Flashing [osimage] Module ....
Flashing Firmware Image : 100%... done
Verifying Firmware Image : 100%... done
Flashing [www] Module ....
Flashing Firmware Image : 100%... done
Verifying Firmware Image : 100%... done
Flashing [ast2500e] Module ....
Flashing Firmware Image : 100%... done
Verifying Firmware Image : 100%... done
Setting Env variables... done
```