

Roma update spl / u-boot

Method 1

- ```
1 sudo apt-get update
2 sudo apt install tftpd-hpa
3 sudo systemctl status tftpd-hpa
```

```

yue@yue-virtual-machine:~/ing$ ^C
+ Other Lo yue@yue-virtual-machine:~/ing$ ^C
yue@yue-virtual-machine:~/ing$ sudo systemctl status tftpd-hpa
[sudo] password for yue:
● tftpd-hpa.service - LSB: HPA's tftp server
 Loaded: loaded (/etc/init.d/tftpd-hpa; generated)
 Active: active (running) since Mon 2023-04-24 11:25:17 CST; 5h 33min ago
 Docs: man:systemd-sysv-generator(8)
 Tasks: 1 (limit: 14379)
 Memory: 760.0K
 CPU: 2.061s
 CGroup: /system.slice/tftpd-hpa.service
 └─1181 /usr/sbin/in.tftpd --listen --user tftp --address :69 --secure /home/yue/ing

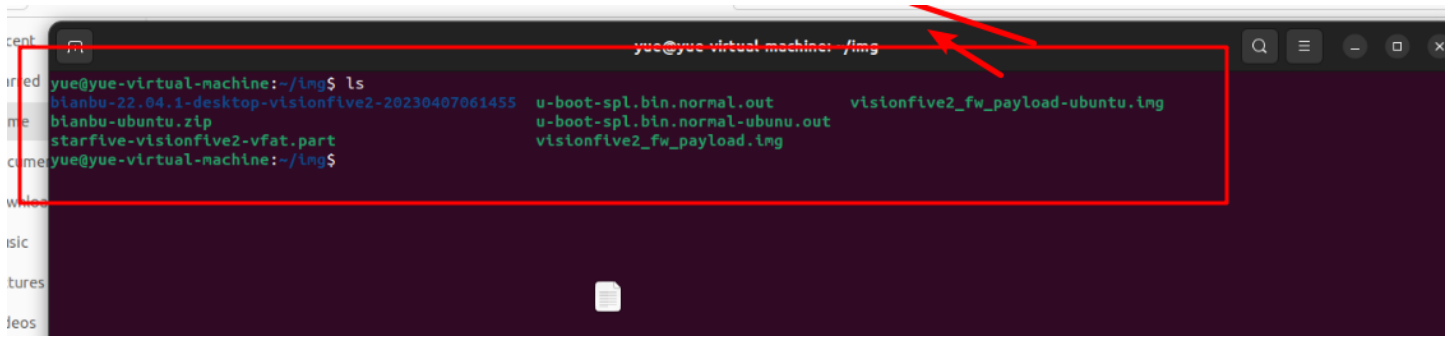
4月 24 11:25:17 yue-virtual-machine systemd[1]: Starting LSB: HPA's tftp server...
4月 24 11:25:17 yue-virtual-machine tftpd-hpa[1133]: * Starting HPA's tftpd in.tftpd
4月 24 11:25:17 yue-virtual-machine tftpd-hpa[1133]: ...done.
4月 24 11:25:17 yue-virtual-machine systemd[1]: Started LSB: HPA's tftp server.
yue@yue-virtual-machine:~/ing$

```

- ```
1 # Modify Configuration
2 vim /etc/default/tftpd-hpa
```

```
yue@yue-v /etc/default/tftpd-hpa
```

```
TFTP_USERNAME="tftp"  
TFTP_DIRECTORY="/home/yue/img"  
TFTP_ADDRESS=".05"  
TFTP_OPTIONS="--secure"
```



A terminal window titled 'yue@yue-virtual-machine: /img'. The prompt is 'yue@yue-virtual-machine:~/img\$'. The command 'ls' has been executed, showing the following files: 'bianbu-22.04.1-desktop-visionfive2-20230407061455', 'u-boot-spl.bin.normal.out', 'visionfive2_fw_payload-ubuntu.img', 'bianbu-ubuntu.zip', 'u-boot-spl.bin.normal-ubuntu.out', and 'starfive-visionfive2-vfat.part', 'visionfive2_fw_payload.img'. A red box highlights the terminal output, and a red arrow points to the window title bar.

```
yue@yue-virtual-machine: /img
yue@yue-virtual-machine:~/img$ ls
bianbu-22.04.1-desktop-visionfive2-20230407061455  u-boot-spl.bin.normal.out      visionfive2_fw_payload-ubuntu.img
bianbu-ubuntu.zip                                u-boot-spl.bin.normal-ubuntu.out
starfive-visionfive2-vfat.part                    visionfive2_fw_payload.img
yue@yue-virtual-machine:~/img$
```

```
1 sudo systemctl restart tftpd-hpa #reboot
```

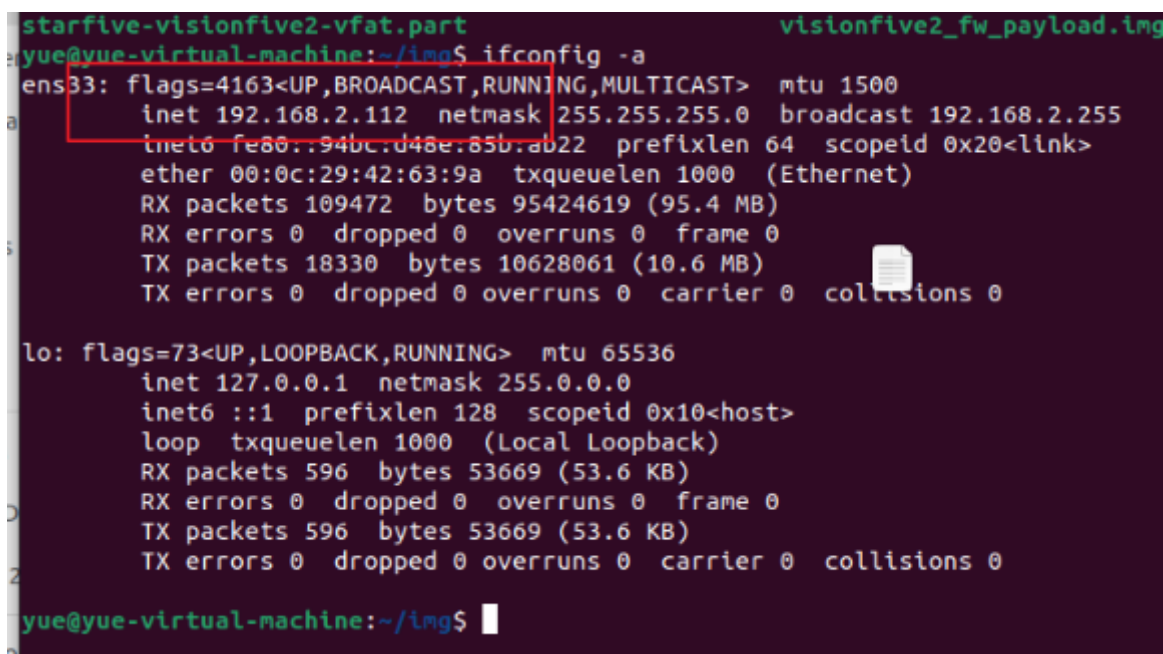
Enter the u-boot mode through the serial port and update the settings (remember to connect the network cable during this process)



A serial terminal window titled 'COM3 - Iera term V1'. The menu bar includes 'File', 'Edit', 'Setup', 'Control', 'Window', and 'Help'. The prompt is '1) StarFive #'. The terminal is currently empty.

```
COM3 - Iera term V1
File Edit Setup Control Window Help
1) StarFive #
```

Tftp server address



A terminal window showing the output of the 'ifconfig -a' command. The prompt is 'yue@yue-virtual-machine:~/img\$'. The output shows the configuration for the 'ens33' and 'lo' interfaces. A red box highlights the 'ens33' interface configuration. A red arrow points to the 'inet' line of the 'ens33' configuration.

```
starfive-visionfive2-vfat.part visionfive2_fw_payload.img
yue@yue-virtual-machine:~/img$ ifconfig -a
ens33: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.2.112 netmask 255.255.255.0 broadcast 192.168.2.255
    inet6 fe80::94bc:d48e:85b:ab22 prefixlen 64 scopeid 0x20<link>
    ether 00:0c:29:42:63:9a txqueuelen 1000 (Ethernet)
    RX packets 109472 bytes 95424619 (95.4 MB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 18330 bytes 10628061 (10.6 MB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 596 bytes 53669 (53.6 KB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 596 bytes 53669 (53.6 KB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
yue@yue-virtual-machine:~/img$
```

Set the local IP and server IP on the serial port

```
1 setenv ipaddr 192.168.2.123
```

```
Unknown command 'setenv' - try 'help'
StarFive # setenv ipaddr 192.168.2.123
StarFive # saveenv
Saving Environment to SPIFlash... Erasing SPI flash...Writing to SPI flash...done
OK
StarFive #
```

```
1 setenv serverip 192.168.2.112
```

```
StarFive # setenv serverip 192.168.2.112
StarFive # saveenv
Saving Environment to SPIFlash... Erasing SPI flash...Writing to SPI flash...done
OK
```

```
1 sf probe
2 tftpboot 0xa0000000 192.168.2.112:u-boot-spl.bin.normal.out
3 sf update 0xa0000000 0x0 $filesize
4 tftpboot 0xa0000000 192.168.2.112:visionfive2_fw_payload.img
5 sf update 0xa0000000 0x100000 $filesize
6
```

Method 2

Enter UBOOT

```
COM3 - Iera term V1
File Edit Setup Control Window Help
1) StarFive #
```

Parody

```
1 #If using EMMC copy, use mmc dev 0
```

```
2 #If using SD copy, please ensure that the SD card is inserted
3 Mmc dev 1
4 #Read mmc u boot spl
5 #0x300 represents 768 sectors, depending on the size of the u-boot spl file, whi
6 Mmc read 0xa000000 0x1000 0x300
7 Sf probe
8 #Write u-boot spl to SPI Flash
9 #0x6000=0x300 * 512
10 Sf update 0xa000000 0x0 0x60000
11 #Read mmc visionfive2_ Fw_ Payload
12 #0x2000 represents 8192 sectors, depending on visionfive2_ Fw_ The payload file
13 Mmc read 0xa000000 0x2000 0x2000
14 #Write visionfive2_ Fw_ Payload to SPI Flash
15 #0x400000=0x2000 * 512
16 Sf update 0xa000000 0x100000 0x400000
17 #Clear spi uboot
18 Sf probe
19 Sf erase 0 0x1000000
```

Notes on updating SPI and UBoot

```
1 env default -a -f
2 saveenv
3 boot
```

Spl / u-boot Download address

<http://120.92.155.32:8082/ui/native/riscv/JH7110/SDK3.6.1/>