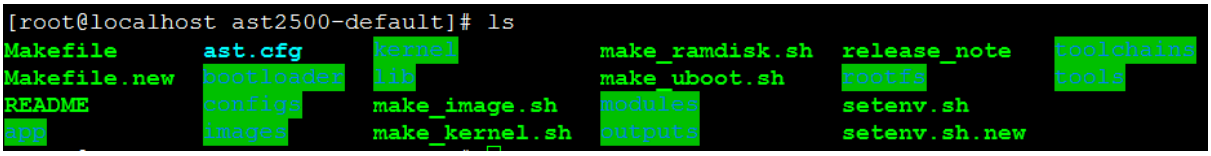
IPMI 이미지 생성 및 Fusing

1. 이미지 생성

   디렉토리: IPMI/20160819_SDK/ast2500-default




```
#source setenv.sh.new
#
#sh make_uboot.sh
#sh make_kernel.sh
#sh make_ramdisk.sh
#sh make_image.sh

[참고] kernel 의 make menuconfig 를 하려면 source 디렉토리에서 하면 안되고
ast2500-default/outputs/ast2500-default/kernel 디렉토리에서 해야 한다.
```

2. Fusing

   디렉토리: IPMI/Tool/lxflash

   Binary file응 복사해 온다.(IPMI/20160819_SDK/ast2500-default/images/ast2500-default/all.bin)

   ./socflash.sh all.bin**[new image]** all.bin.old**[backeup image]**

3. Update

   디렉토리: IPMI/application/ipmi_handler 에서 파일 수정 후 빌드

   Ipmid 와 sms-kcsd/sms-kcsd 를 IPMI/20160819_SDK/ast2500-default/rootfs/bin 에 복사

```
#sh make_ramdisk.sh
#sh make_image.sh
```

   새로운 이미지 생성 후 다시 Fusing

4. ftp를 이용한 코드 디버깅

   AST2500 콘솔(minicom)에서 ipmid과 sms-kcsd 제거

```
[AST /bin]$ killall -9 ipmid
[AST /bin]$ killall -9 sms-kcsd
```

ftp 서버에서 ipmid과 sms-kcsd 가져와 실행

```
[AST /bin]$ ncftp -u ksh 192.168.20.100
NcFTP 3.2.5 (Feb 02, 2011) by Mike Gleason
(http://www.NcFTP.com/contact/).

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Connecting to 192.168.20.100...
(vsFTPd 3.0.2)
Logging in...
Password requested by 192.168.20.100 for user "ksh".

    Please specify the password.

Password: *******

Login successful.
Logged in to 192.168.20.100.
ncftp /home/ksh > ls
82599_DPDK_Perf.txt                  kernel-3.10.0-229.el7.src.rpm
```

5. IPMITOOL 사용

```
[root@localhost ~]# ipmitool user set name 3 admin
[root@localhost ~]# ipmitool user list
ID  Name             Callin  Link Auth  IPMI Msg  Channel Priv Limit
1                    true    false      true      ADMINISTRATOR
2   root             true    false      true      ADMINISTRATOR
3   admin            true    false      true      ADMINISTRATOR
4                    true    false      true      ADMINISTRATOR
5                    true    false      true      ADMINISTRATOR
6                    true    false      true      ADMINISTRATOR
7                    true    false      true      ADMINISTRATOR
8                    true    false      true      ADMINISTRATOR
9                    true    false      true      ADMINISTRATOR
10                   true    false      true      ADMINISTRATOR
11                   true    false      true      ADMINISTRATOR
12                   true    false      true      ADMINISTRATOR
13                   true    false      true      ADMINISTRATOR
14                   true    false      true      ADMINISTRATOR
15                   true    false      true      ADMINISTRATOR
```

```
16                      true    false   true    ADMINISTRATOR
[root@localhost ~]# ipmitool user set password 3 sys1403
[root@localhost ~]# ipmitool user test 3 16 sys1403
Success
[root@localhost ~]# ipmitool user test 3 16 sys140
Set User Password command failed (user 3): Unknown (0x80)
Failure: password incorrect
[root@localhost ~]#
```

원격 제어

```
[pooky@localhost Dev]$ ipmitool -H 192.168.20.33 -U root sdr
Password:
BB CPU0VRTmp      | 35 degrees C      | ok
BB CPU0mmVRTmp    | 34 degrees C      | ok
BB CPU1VRTmp      | 32 degrees C      | ok
BB CPU1mmVRTmp    | 32 degrees C      | ok
TP CPU2VRTmp      | 0 degrees C       | ok
TP CPU2mmVRTmp    | 0 degrees C       | ok
TP CPU3VRTmp      | 0 degrees C       | ok
TP CPU3mmVRTmp    | 0 degrees C       | ok
BB BMC Tmp        | 33 degrees C      | ok
BB PCH Tmp        | 30 degrees C      | ok
Top board Tmp     | 0 degrees C       | ok
TP PCIe EdgeTmp   | 0 degrees C       | ok
BB CPU0CoreMx2V   | 1.79 Volts        | ok
BB CPU0mmAB1.2V   | 1.20 Volts        | ok
BB CPU0mmCD1.2V   | 1.19 Volts        | ok
BB CPU1CoreMx2V   | 1.79 Volts        | ok
BB CPU1mmEF1.2V   | 1.20 Volts        | ok
BB CPU1mmGH1.2V   | 1.20 Volts        | ok
TP CPU2CoreMx2V   | 0 Volts           | ok
TP CPU2mmRT1.2V   | 0 Volts           | ok
TP CPU3mmJK1.2V   | 0 Volts           | ok
TP CPU3mmLM1.2V   | 0 Volts           | ok
TP CPU3CoreMx2V   | 0 Volts           | ok
TP CPU3mmNP1.2V   | 0 Volts           | ok
BB 1.05V          | 1.04 Volts        | ok
BB 3.3V           | 3.34 Volts        | ok
BB 5V             | 5.11 Volts        | ok
```

BB 12V	12.12 Volts	ok
TP +3.3V	0 Volts	ok
TP +5V	0 Volts	ok
BB CPU_FAN 0	5031 RPM	ok
BB CPU_FAN 1	4953 RPM	ok
TP CPU_FAN 2	0 RPM	ok
TP CPU_FAN 3	0 RPM	ok
BB SYS_FAN 0	0 RPM	ok
BB SYS_FAN 1	0 RPM	ok
BB SYS_FAN 2	0 RPM	ok
TP SYS_FAN 3	0 RPM	ok
TP SYS_FAN 4	0 RPM	ok
TP SYS_FAN 5	0 RPM	ok
Input current1	14.38 Amps	ok
Output current1	0 Amps	ok
Input voltage1	0 Volts	ok
Output voltage1	14.38 Volts	ok
Input power1	0 Watts	ok
Output power1	0 Watts	ok
Ambient temp1	99.45 degrees C	ok
Hotspot temp1	119.85 degrees	ok
Input current2	0.70 Amps	ok
Output current2	9.72 Amps	ok
Input voltage2	203.83 Volts	ok
Output voltage2	11.95 Volts	ok
Input power2	28 Watts	ok
Output power2	119 Watts	ok
Ambient temp2	25.35 degrees C	ok
Hotspot temp2	29.14 degrees C	ok