

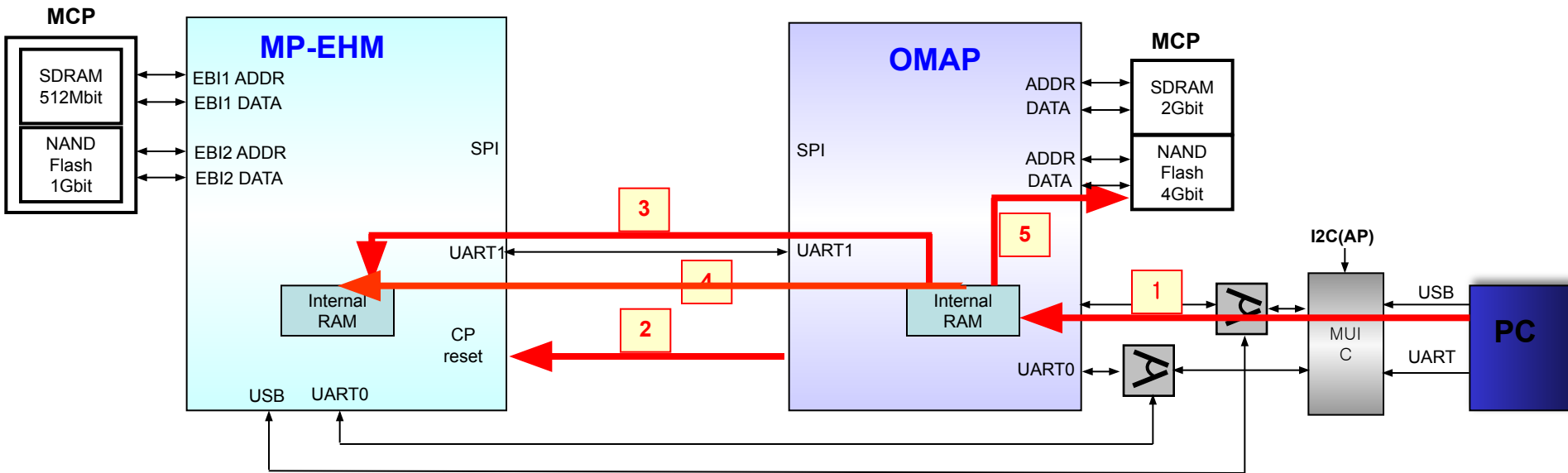


[P970] Introduction of download tool

Dec.22th, 2010 by Woon Rae
Cho

1. Download procedure
2. Installation of download usb driver
3. USB driver recognition
4. Download Start
5. Download End
6. Download rom copy binary
7. Troubleshooting
8. Tool tip

Download Procedure



• Down Load Procedure

1. AP Boot Loader communicate with PC Tool using USB
2. CP Reset
3. CP Boot Loader D/L as using AP-CP UART
4. CP Program Data D/L as using UART
5. AP Program Data D/L

[abbreviation]

- CP : Call Processor
- AP : Application Processor
- D/L : Down Load
- I/F : Interface

Step 1 Installation of download USB driver

1. Execute 'LG USB Driver 4.9.7 WHQL Release for Windows 7 .exe' (refer under picture)



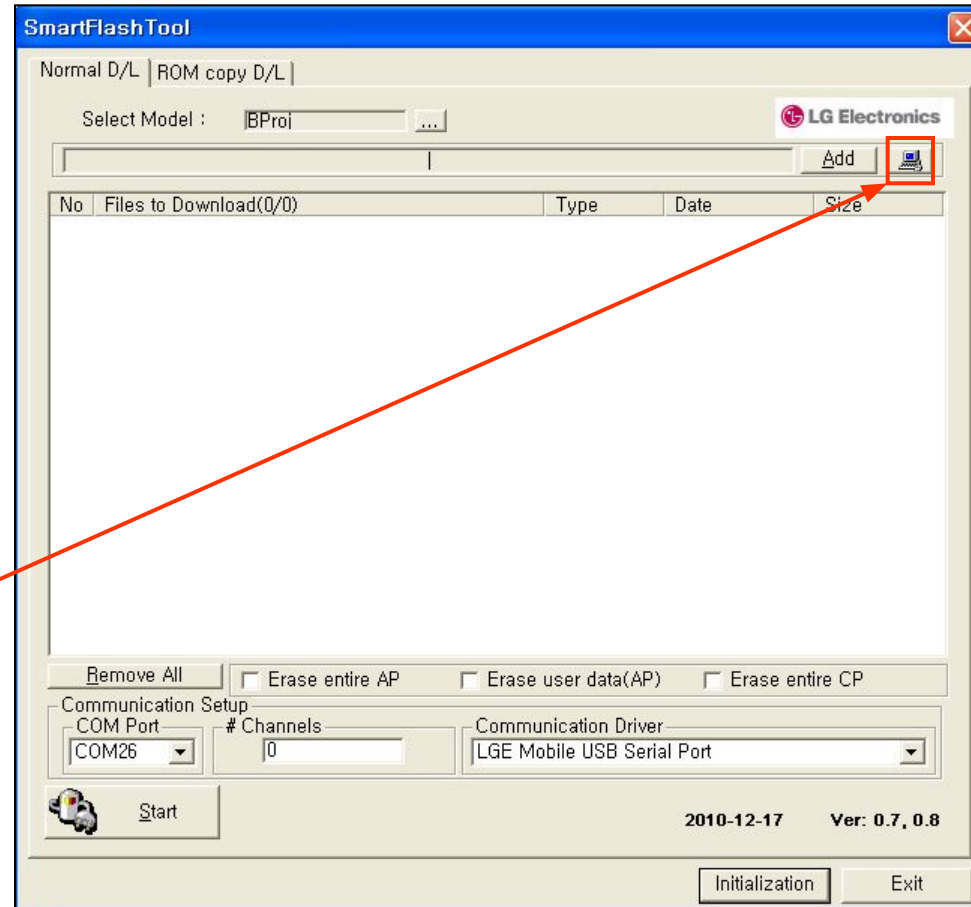
Step 2 USB driver recognition

1. Execute smartflash tool

2. Separate battery from phone

3. Connect USB cable to phone after pressing volume down key.
 ※ You should press volume UP Key until PC recognize the USB driver

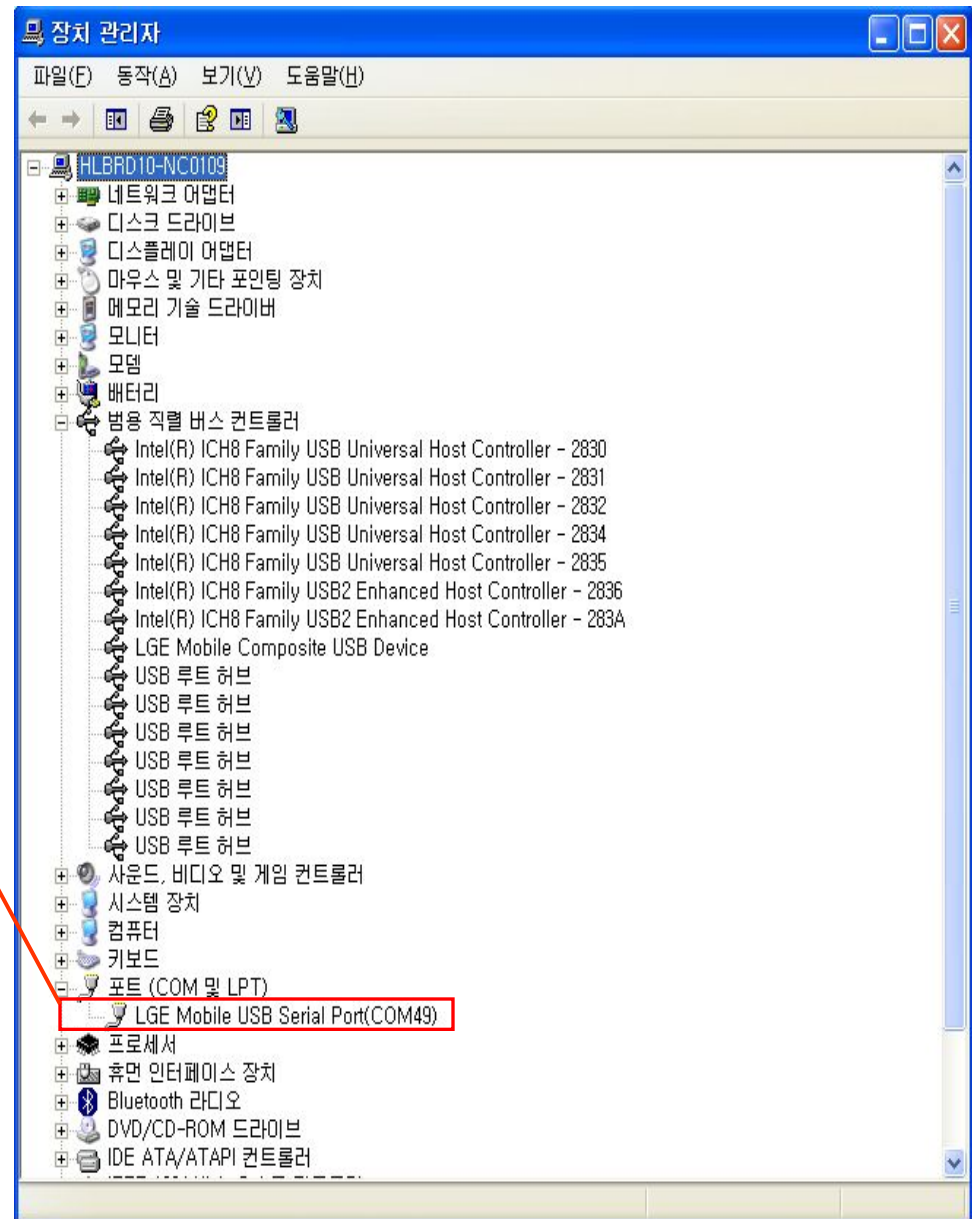
4. In smartflash tool, Press upper right Button



Step 2 USB driver recognition

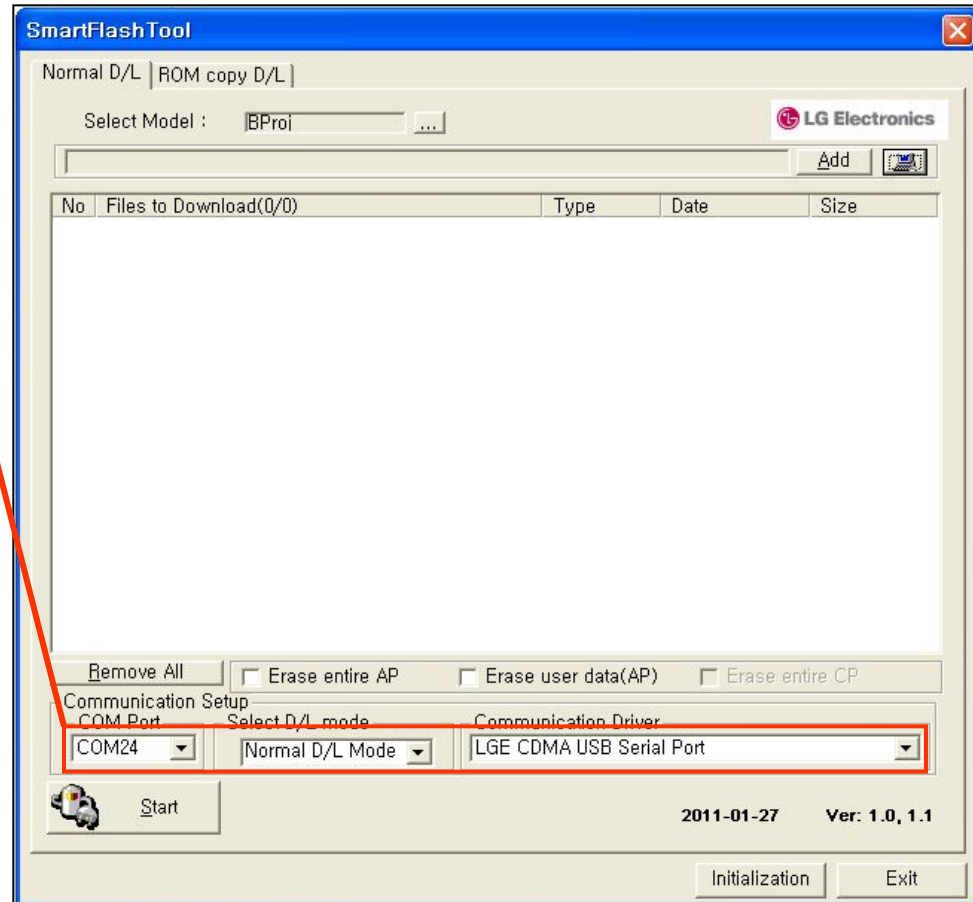
5. Install USB driver to specific COM port.
 Wait until detecting USB COM port
 'LGE Mobile USB Serial Port'

6. If PC detects USB Com port,
 You should disconnect USB cable
 from Phone



Step 3 Download Start

7. You should confirm whether COM port is detected. If COM port is not detected, you reconnect USB cable to phone with pressing volume UP key.



Step 3 Download Start cont...

9. Drag & Drop or Press 'Add' button for adding files

The SmartFlashTool interface displays a list of files to be downloaded. The 'Add' button is highlighted with a red box, and a red arrow points from the text box to it. Another red arrow points from the text box to the first row of the file list.

No	Files to Download(3/3)	Type	Date	Size
<input checked="" type="checkbox"/>	1. D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	cfg	2011-01-26 23...	0 KByte
<input checked="" type="checkbox"/>	2. D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	ift	2011-01-26 22...	8 KByte
<input checked="" type="checkbox"/>	3. D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	bin	2011-01-26 22...	280 KByte
<input checked="" type="checkbox"/>	4. D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23...	2048 KByte
<input checked="" type="checkbox"/>	5. D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23...	1 KByte
<input checked="" type="checkbox"/>	6. D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23...	4984 KByte
<input checked="" type="checkbox"/>	7. D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23...	2048 KByte
<input checked="" type="checkbox"/>	8. D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23...	387868 KByte
<input checked="" type="checkbox"/>	9. D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23...	5120 KByte
<input checked="" type="checkbox"/>	1. D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	pt1	2011-01-26 23...	128 KByte
<input checked="" type="checkbox"/>	1. D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23...	4456 KByte

Buttons: Remove All, Erase entire AP, Erase user data(AP), Erase entire CP

Communication Setup:
 COM Port: COM24
 Select D/L mode: Normal D/L Mode
 Communication Driver: LGE CDMA USB Serial Port

Start button, Date: 2011-01-27, Ver: 1.0, 1.1
 Initialization, Exit buttons

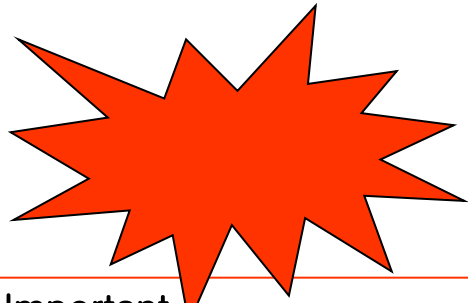
Step 3 Download Start cont..

9. Drag & Drop or Press 'Add' button for adding files

The screenshot shows the SmartFlashTool interface with the following details:

- Model:** BProI
- Buttons:** Add, Remove All, Erase entire AP, Erase user data(AP), Erase entire CP, Start, Initialization, Exit.
- Communication Setup:**
 - COM Port: COM24
 - Select D/L mode: Normal D/L Mode
 - Communication Driver: LGE CDMA USB Serial Port
- File List (Files to Download(3/3)):**

No	Files to Download(3/3)	Type	Date	Size
<input checked="" type="checkbox"/>	D:\W00000_LGE_B_Project\W03_SW Release\W85,L...	cfg	2011-01-26 23,...	0 KByte
<input checked="" type="checkbox"/>	D:\W00000_LGE_B_Project\W03_SW Release\W85,L...	itt	2011-01-26 22,...	8 KByte
<input checked="" type="checkbox"/>	D:\W00000_LGE_B_Project\W03_SW Release\W85,L...	bin	2011-01-26 23,...	280 KByte
<input checked="" type="checkbox"/>	D:\W00000_LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23,...	2048 KByte
<input checked="" type="checkbox"/>	D:\W00000_LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23,...	1 KByte
<input checked="" type="checkbox"/>	D:\W00000_LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23,...	4984 KByte
<input checked="" type="checkbox"/>	D:\W00000_LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23,...	2048 KByte
<input checked="" type="checkbox"/>	D:\W00000_LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23,...	387868 KByte
<input checked="" type="checkbox"/>	D:\W00000_LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23,...	5120 KByte
<input checked="" type="checkbox"/>	D:\W00000_LGE_B_Project\W03_SW Release\W85,L...	pt1	2011-01-26 23,...	128 KByte
<input checked="" type="checkbox"/>	D:\W00000_LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23,...	4456 KByte



◆ **Important**
 In OMAP, specific files (**"*.cfg"**)
 Must be included in download lists.
 However, If you only want to download CP
 binary,
 You don't need to download *.cfg "

Step 3 Download Start cont...

[AP]

- 1. Erase entire AP**
You can erase all memory area of AP
- 2. Erase user data**
You can erase USER and MISC partition

SmartFlash Tool

Normal D/L | ROM copy D/L

Select Model : BProi

No	Files to Download(3/3)	Type	Date	Size
<input checked="" type="checkbox"/>	D:\W00000.LGE.B.ProjectW03_SW ReleaseW85,L...	cfg	2011-01-26 23...	0 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE.B.ProjectW03_SW ReleaseW85,L...	ift	2011-01-26 22...	8 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE.B.ProjectW03_SW ReleaseW85,L...	bin	2011-01-26 22...	280 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE.B.ProjectW03_SW ReleaseW85,L...	img	2011-01-26 23...	2048 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE.B.ProjectW03_SW ReleaseW85,L...	img	2011-01-26 23...	1 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE.B.ProjectW03_SW ReleaseW85,L...	img	2011-01-26 23...	4984 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE.B.ProjectW03_SW ReleaseW85,L...	img	2011-01-26 23...	2048 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE.B.ProjectW03_SW ReleaseW85,L...	img	2011-01-26 23...	387868 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE.B.ProjectW03_SW ReleaseW85,L...	img	2011-01-26 23...	5120 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE.B.ProjectW03_SW ReleaseW85,L...	pt1	2011-01-26 23...	128 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE.B.ProjectW03_SW ReleaseW85,L...	img	2011-01-26 23...	4456 KByte

Remove All Erase entire AP Erase user data(AP) Erase entire CP

Communication Setup

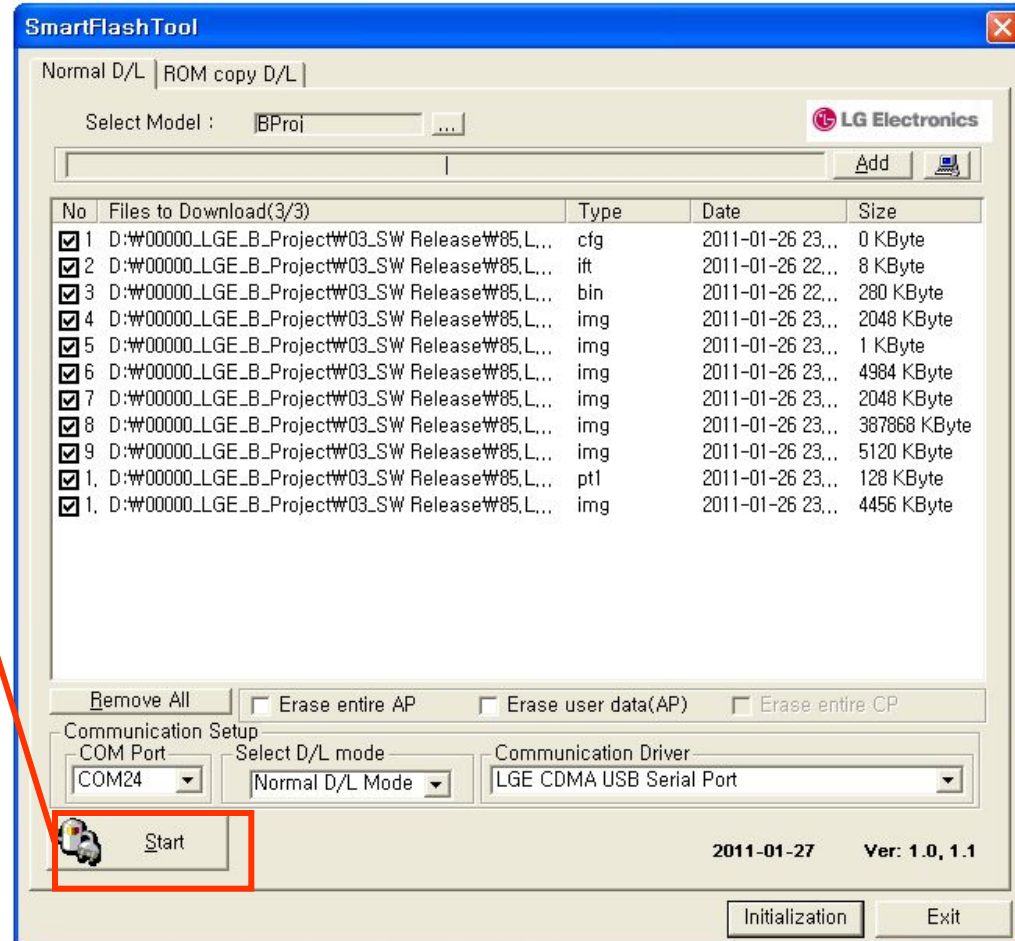
COM Port: COM24 | Select D/L mode: Normal D/L Mode | Communication Driver: LGE CDMA USB Serial Port

Start

2011-01-27 Ver: 1.0, 1.1

Initialization Exit

10. Press 'Start' button for flashing.



11. You can find file lists for downloading.

Download Window

Processing completed 100%

Download progress status

00:01.0 Sec :Download Start...

00:01.0 Sec :Start AP only download

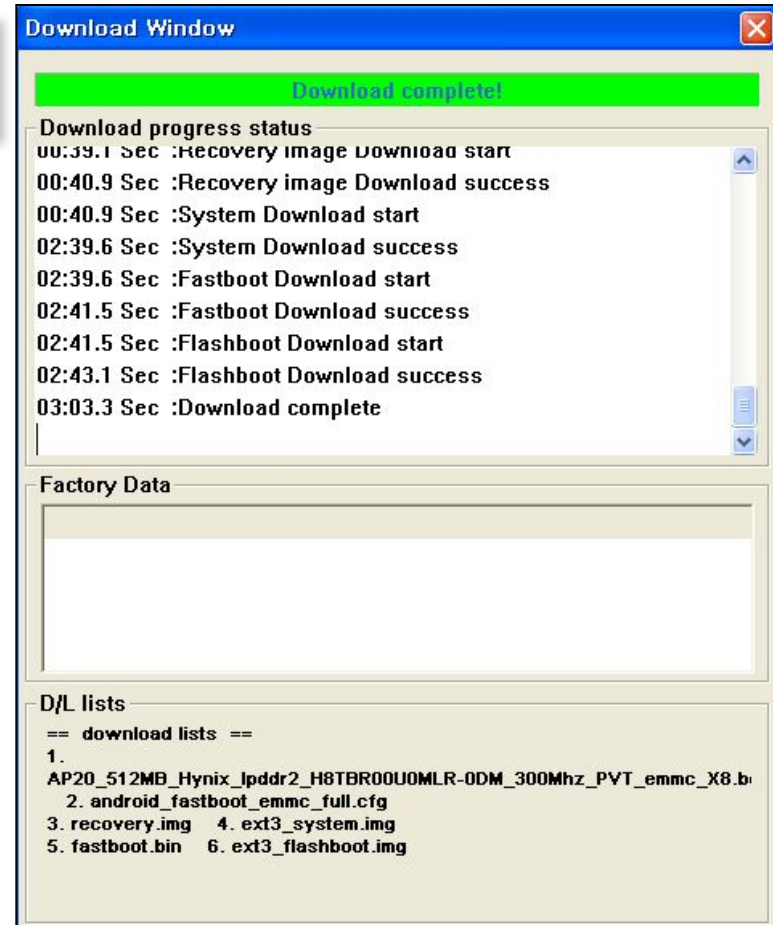
00:01.0 Sec :We try to communicate with phone

Factory Data

D/L lists

```
== download lists ==
1. AP20_512MB_Hynix_lpddr2_H8TBR00U0MLR-ODM_300Mhz_PVT_emmc_X8.b
2. android_fastboot_emmc_full.cfg
3. recovery.img 4. ext3_system.img
5. fastboot.bin 6. ext3_flashboot.img
```

12. You can see picture like right after finishing download.



Step 5 Multi Download

SmartFlash Tool

Normal D/L | ROM copy D/L

Select Model : IBProi

No	Files to Download(3/3)	Type	Date	Size
<input checked="" type="checkbox"/>	D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	cfg	2011-01-26 23...	0 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	ift	2011-01-26 22...	8 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	bin	2011-01-26 22...	280 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23...	2048 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23...	1 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23...	4984 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23...	2048 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23...	387868 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23...	5120 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	pt1	2011-01-26 23...	128 KByte
<input checked="" type="checkbox"/>	D:\W00000.LGE_B_Project\W03_SW Release\W85,L...	img	2011-01-26 23...	4456 KByte

Remove All | Erase entire AP | Erase user data(AP) | Erase entire CP

Communication Setup

COM Port: COM24 | Select D/L mode: **Multi D/L Mode** | Communication Driver: LGE CDMA USB Serial Port

Start | 2011-01-27 | Ver: 1.0, 1.1

Initialization | Exit



Multi download

PORT X	PORT X	PORT X	PORT X	PORT X	PORT X	PORT X	PORT X
Ready...	Ready...	Ready...	Ready...	Ready...	Ready...	Ready...	Ready...



Multi download

Port : 18	Port : 26
Start : 00:07,5 Sec	Start : 00:06,5 Sec
Stop : 00:07,5 Sec	Stop : 00:06,5 Sec
Current: 0%	Current: 100%
File : We try to	File : Change DLOAD
Current Status: We try to	Current Status: Change DLOAD

PORT X	PORT X	PORT X	PORT X	PORT X	PORT X	PORT X	PORT X
PORT (18) Progress	PORT (26) Progress	PORT X Ready...	PORT X Ready...	PORT X Ready...	PORT X Ready...	PORT X Ready...	PORT X Ready...

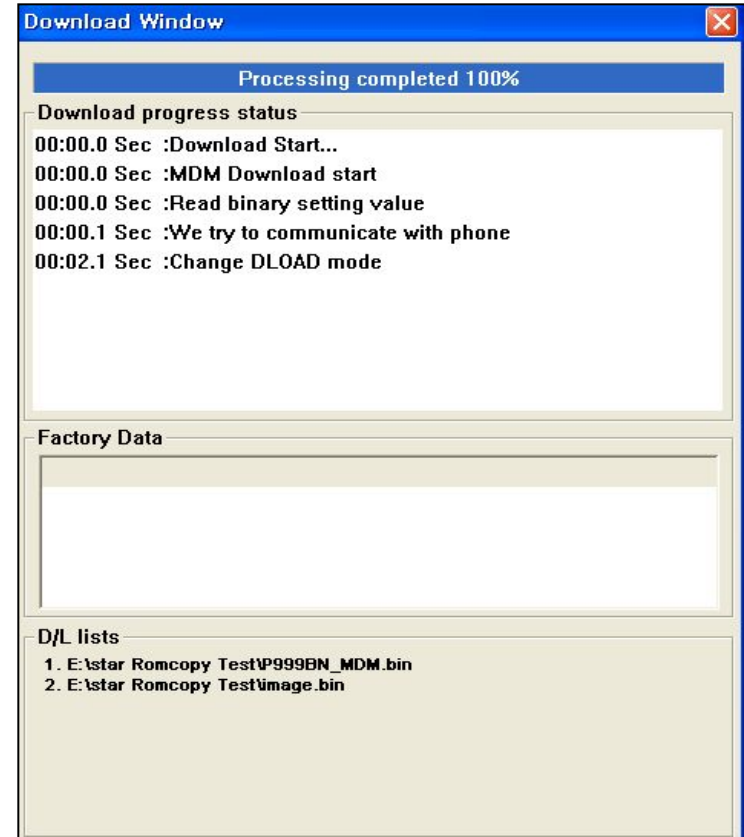
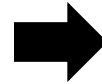
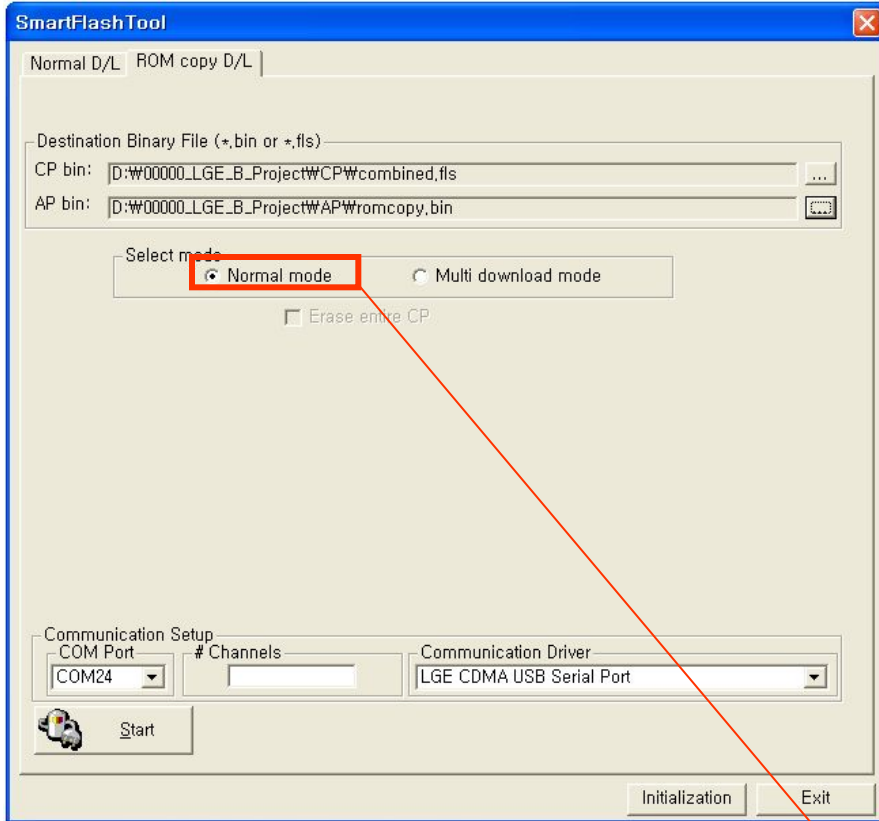
1. Add Files (AP binary)

multi download



[P970] Introduction of rom copy
bianry
download

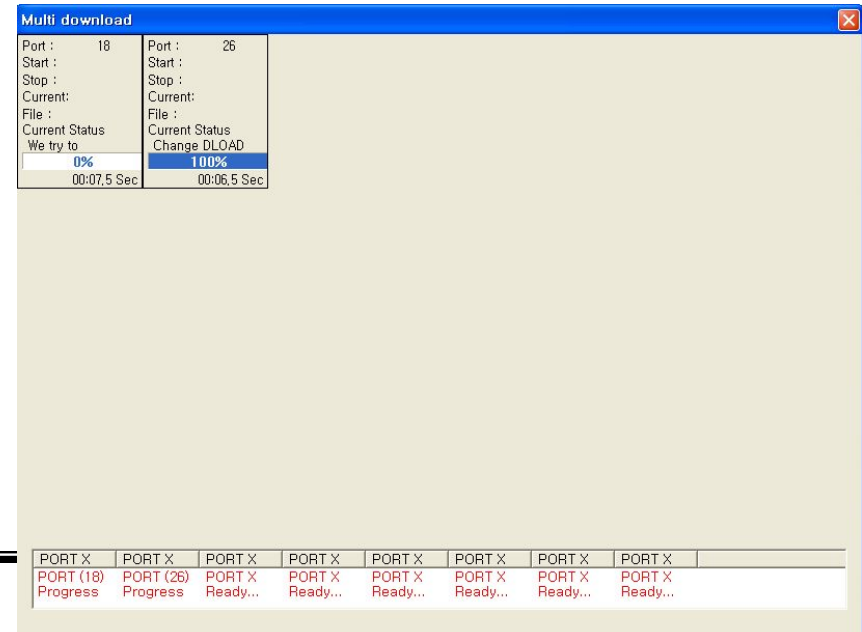
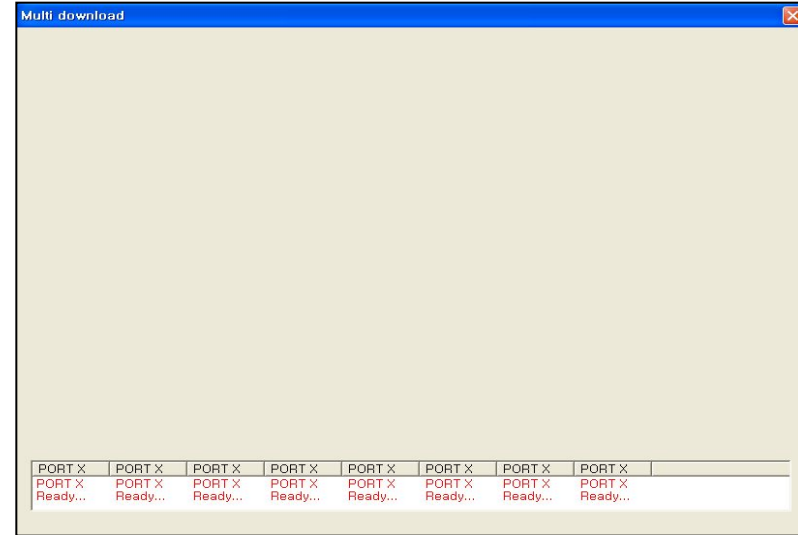
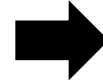
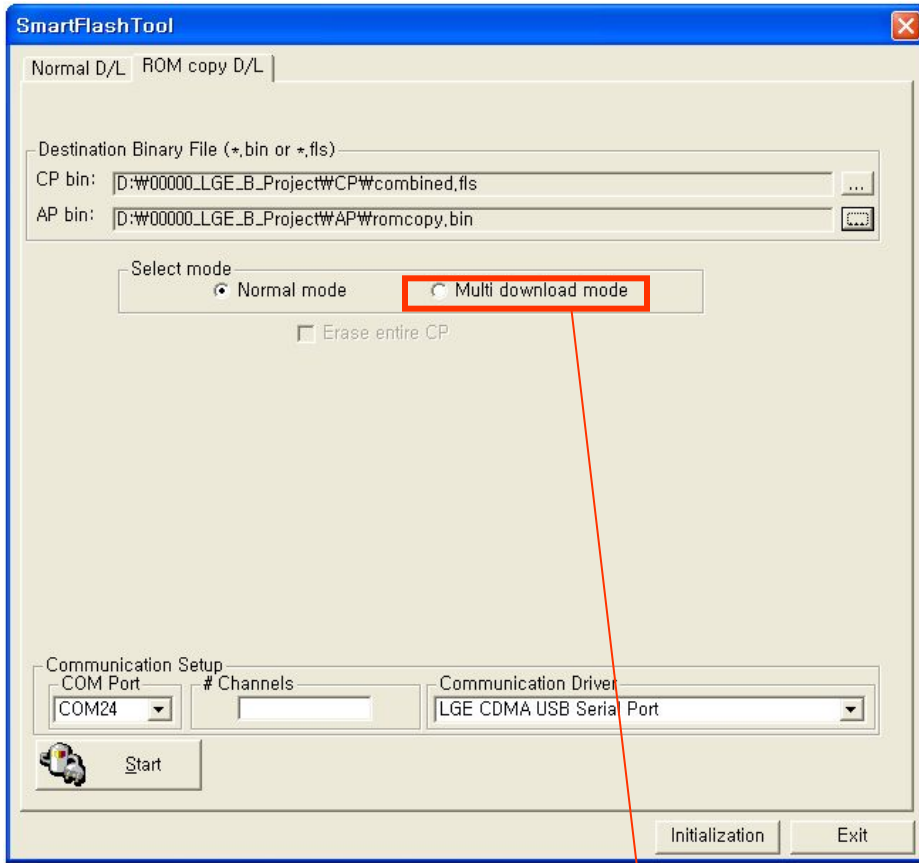
Download rom copy binary (Single download)



1. Add bin files (CP binary, AP binary)

single download

Download rom copy binary (multi download)



1. Add bin files (CP binary, AP binary)

multi download



[P970] Troubleshooting

1. After downloading binary, Phone can't boot.

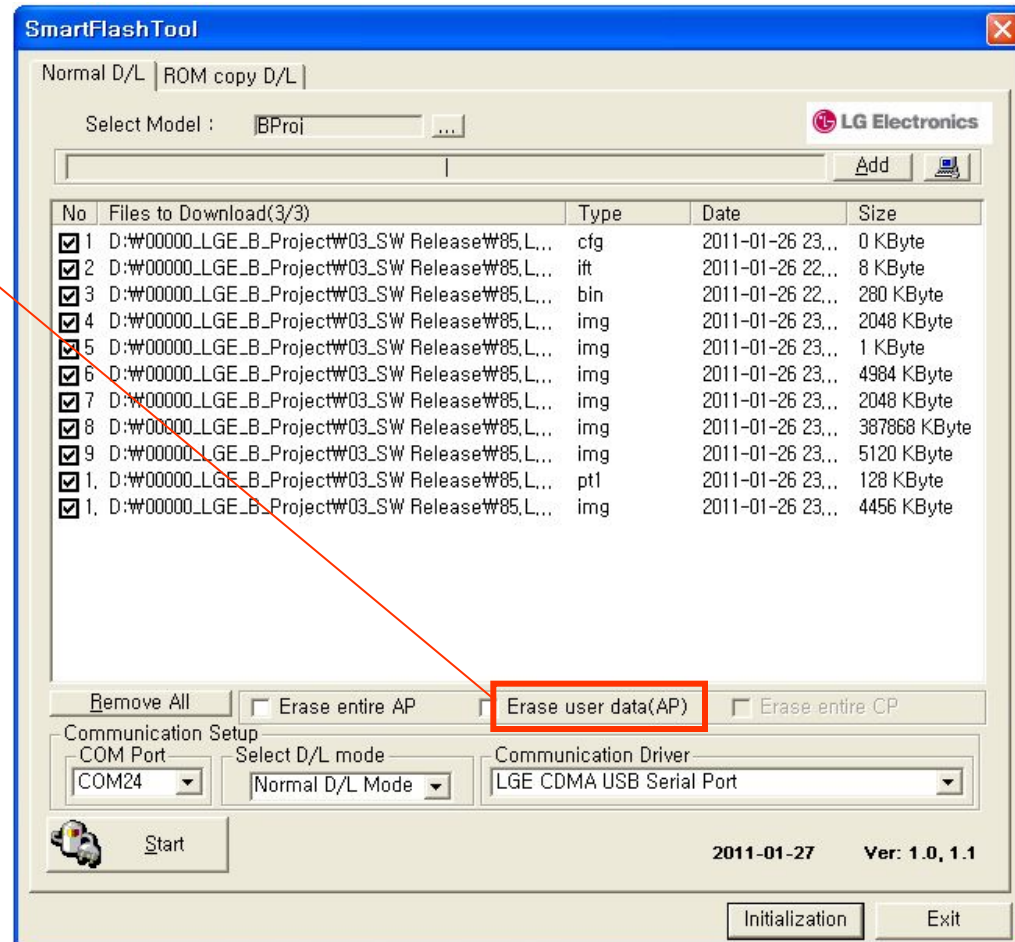
◆ Action1

⇒ When you download binary,
Check 'erase user data(AP)

※ If there are some garbage data in
User partition, phone can't boot.

◆ Action2

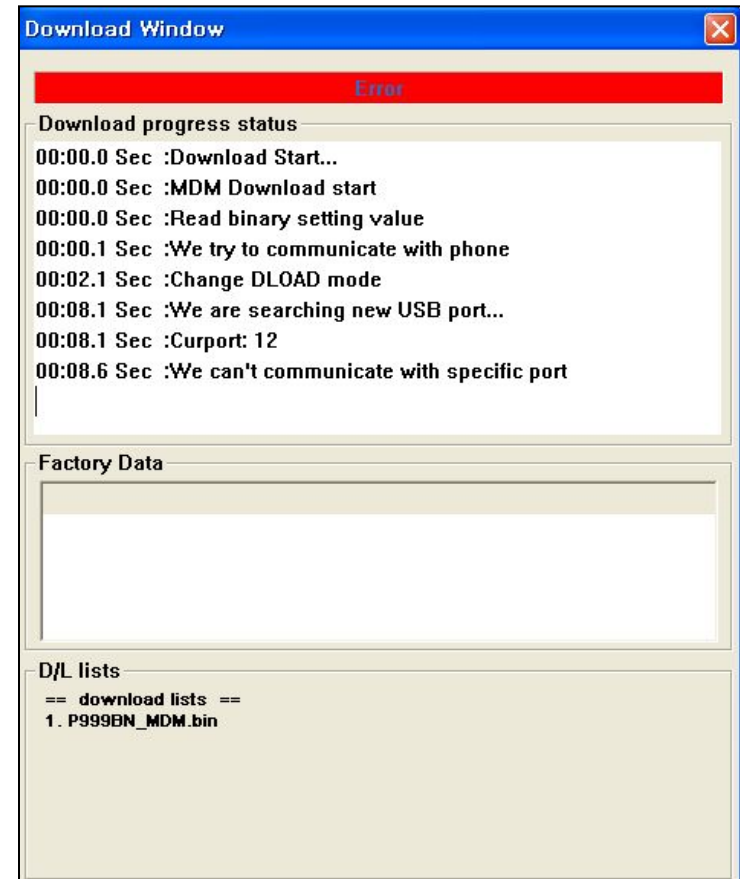
⇒ Check battery whether battery
Is discharged



2. During downloading, Color of progress bar turn into red color

◆ Action1

- (1) Disconnect USB cable from phone
- (2) Reconnect USB cable to phone
- (3) Restart download process.



4. If FlashTool is disappeared

◆ Action1

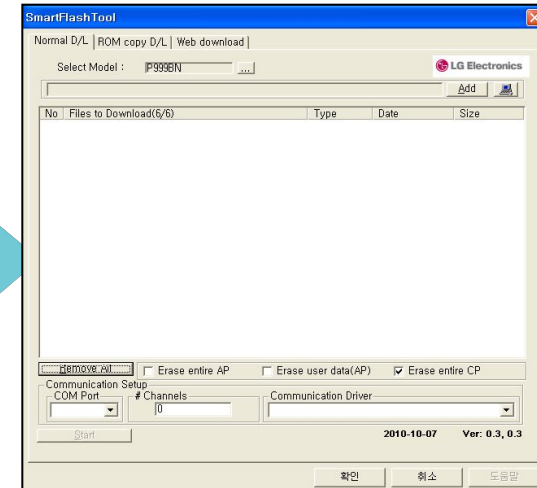
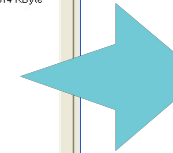
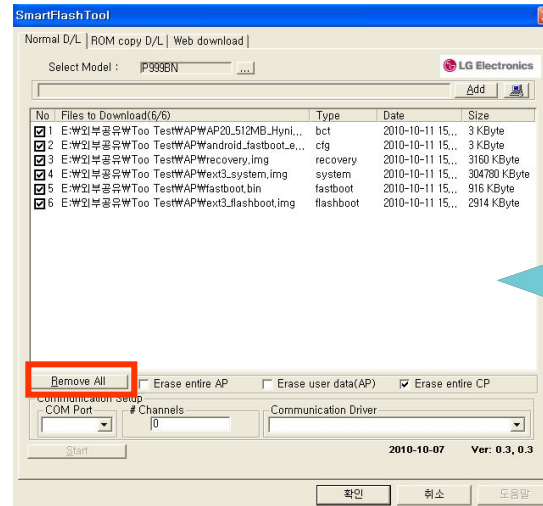
⇒ Click 'Remove All' button

◆ Action2

⇒ Erase "SmartFlash.ini" file

◆ Action3

⇒ Restart FlashTool



	genericdll, dll	68KB	응용 프로그램 확장	2010-10-16 오후 2:21
	Log, rtf	3KB	서식 있는 텍스트	2010-10-16 오후 5:30
	model, dll	184KB	응용 프로그램 확장	2010-10-16 오후 3:16
	SmartFlash, ini	1KB	구성 설정	2010-10-16 오후 5:32

1. You can select download items that you want to download using check.

SmartFlash Tool

Normal D/L | ROM copy D/L | Web download

Select Model : P999BN

No	Files to Download(4/6)	Type	Date	Size
<input checked="" type="checkbox"/>	E:\외부공유\Too Test\AP\AP20_512MB_Hyni...	bct	2010-10-11 15...	3 KByte
<input type="checkbox"/>	E:\외부공유\Too Test\AP\android_fastboot.e...	cfg	2010-10-11 15...	3 KByte
<input checked="" type="checkbox"/>	E:\외부공유\Too Test\AP\recovery.img	recovery	2010-10-11 15...	3160 KByte
<input checked="" type="checkbox"/>	E:\외부공유\Too Test\AP\ext3_system.img	system	2010-10-11 15...	304780 KByte
<input type="checkbox"/>	E:\외부공유\Too Test\AP\fastboot.bin	fastboot	2010-10-11 15...	916 KByte
<input checked="" type="checkbox"/>	E:\외부공유\Too Test\AP\ext3_flashboot.img	flashboot	2010-10-11 15...	2914 KByte

Remove All Erase entire AP Erase user data(AP) Erase entire CP

Communication Setup

COM Port: [] # Channels: [0] Communication Driver: []

Start

2010-10-07 Ver. 0.3, 0.3

확인 취소 도움말

2. You can delete specific download item using 'del' key (In window keyboard) after selecting specific item

SmartFlashTool

Normal D/L | ROM copy D/L | Web download |

Select Model : P9998N

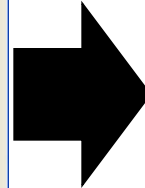
No	Files to Download(4/6)	Type	Date	Size
<input checked="" type="checkbox"/>	E:\외부공유\T00 Test\AP\AP20_512MB_Hyni...	bct	2010-10-11 15...	3 KByte
<input type="checkbox"/>	E:\외부공유\T00 Test\AP\android_fastboot_e...	cfg	2010-10-11 15...	3 KByte
<input checked="" type="checkbox"/>	E:\외부공유\T00 Test\AP\recovery.img	recovery	2010-10-11 15...	3160 KByte
<input checked="" type="checkbox"/>	E:\외부공유\T00 Test\AP\ext3_system.img	system	2010-10-11 15...	304780 KByte
<input checked="" type="checkbox"/>	E:\외부공유\T00 Test\AP\fastboot.bin	fastboot	2010-10-11 15...	916 KByte
<input checked="" type="checkbox"/>	E:\외부공유\T00 Test\AP\ext3_flashboot.img	flashboot	2010-10-11 15...	2914 KByte

Remove All Erase entire AP Erase user data(AP) Erase entire CP

Communication Setup
COM Port: [] # Channels: [0] Communication Driver: []

Start 2010-10-07 Ver: 0.3, 0.3

확인 취소 도움말



SmartFlashTool

Normal D/L | ROM copy D/L | Web download |

Select Model : P9998N

No	Files to Download(5/5)	Type	Date	Size
<input checked="" type="checkbox"/>	E:\외부공유\T00 Test\AP\AP20_512MB_Hyni...	bct	2010-10-11 15...	3 KByte
<input type="checkbox"/>	E:\외부공유\T00 Test\AP\android_fastboot_e...	cfg	2010-10-11 15...	3 KByte
<input checked="" type="checkbox"/>	E:\외부공유\T00 Test\AP\ext3_system.img	system	2010-10-11 15...	304780 KByte
<input type="checkbox"/>	E:\외부공유\T00 Test\AP\fastboot.bin	fastboot	2010-10-11 15...	916 KByte
<input checked="" type="checkbox"/>	E:\외부공유\T00 Test\AP\ext3_flashboot.img	flashboot	2010-10-11 15...	2914 KByte

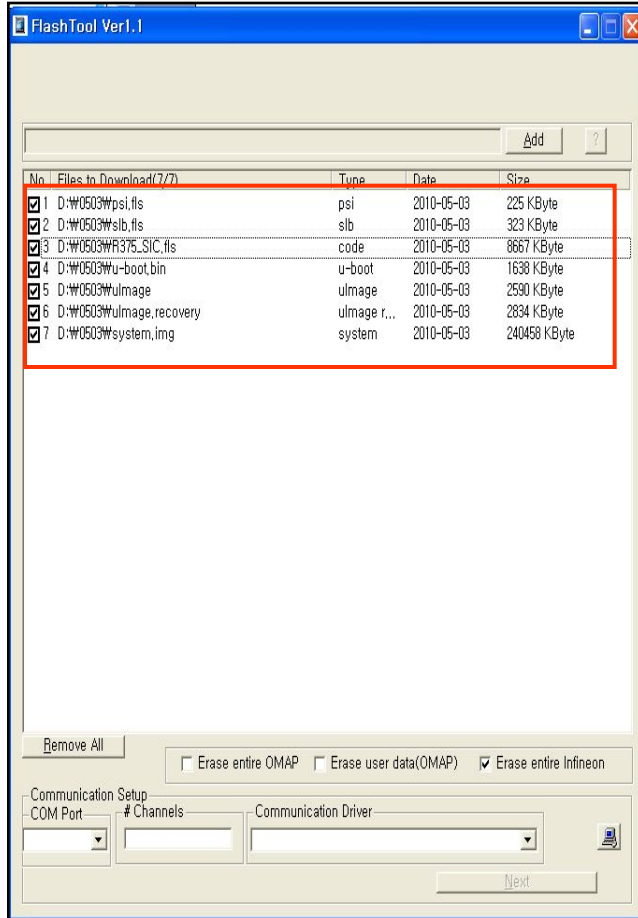
Remove All Erase entire AP Erase user data(AP) Erase entire CP

Communication Setup
COM Port: [] # Channels: [0] Communication Driver: []

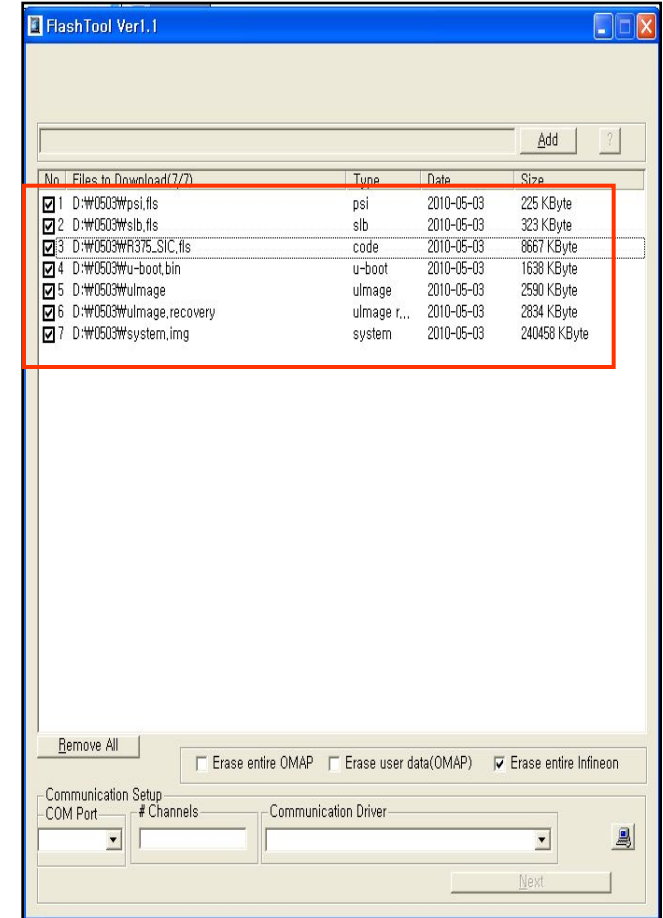
Start 2010-10-07 Ver: 0.3, 0.3

확인 취소 도움말

3. Flashtool provides history function



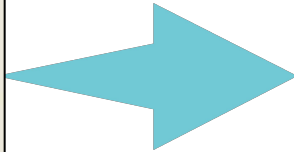
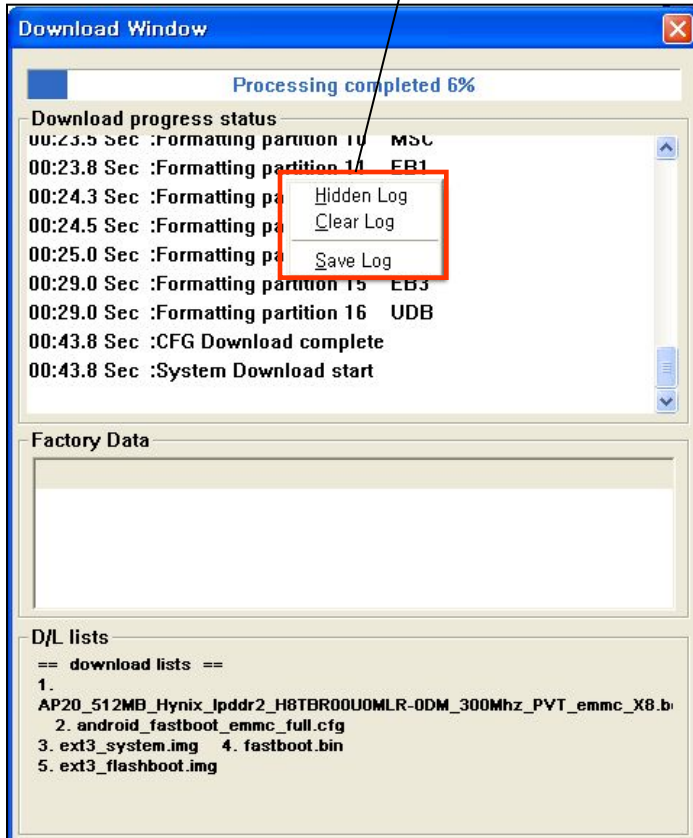
Restart FlashTool



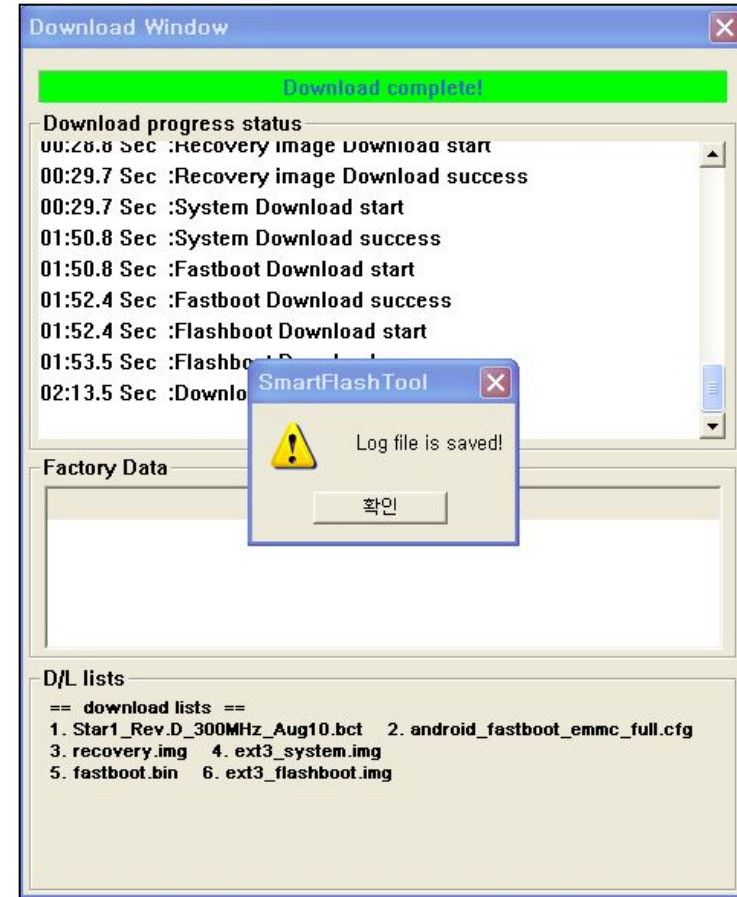
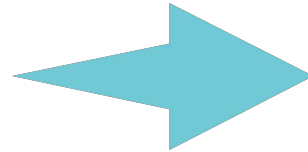
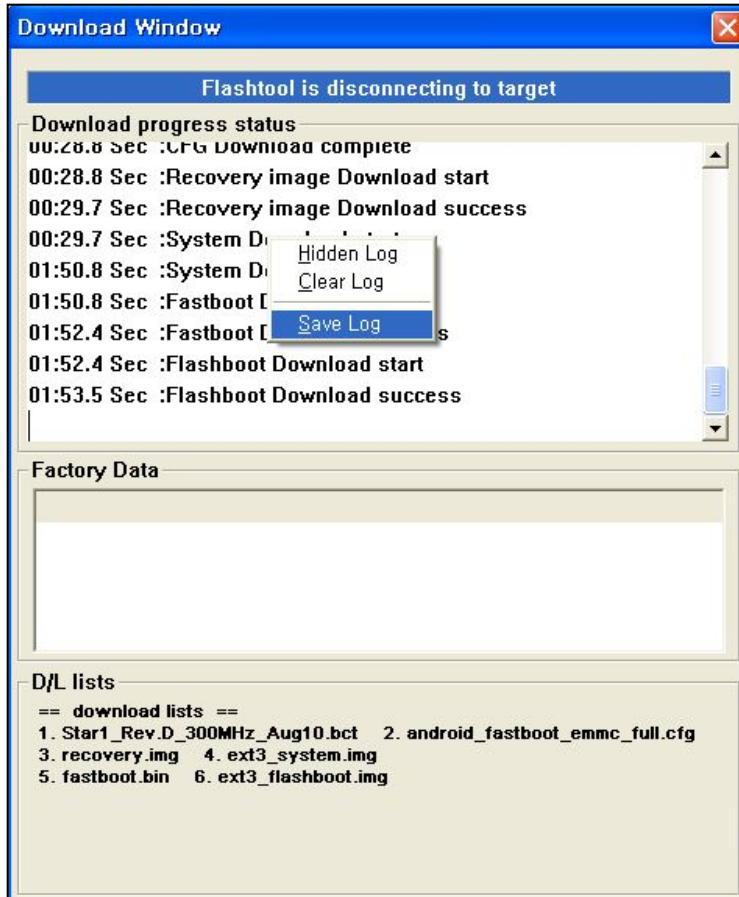
※ Flashtool always conserve download lists

Tool tip

5. If you want to hidden log message, You can select mouse right button.



6. If you want to save log message, You can select mouse right button.



Tool tip

이름	크기	종류	수정한 날짜
genericdll.dll	68KB	응용 프로그램 확장	2010-10-16 오후 2:20
model.dll	64KB	응용 프로그램 확장	2010-10-16 오후 2:20
SmartFlash.ini	1KB	구성 설정	2010-10-16 오후 2:20
SmartFlashTool.exe	92KB	응용 프로그램	2010-10-16 오후 2:20
Log.rtf	1KB	서식 있는 텍스트	2010-10-07 오후 1:32

Log.rtf is MS word format.
So you can see using MS
word