



SP MultiPort Download Tool User Guide



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ACS7/ST

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Feature introduction

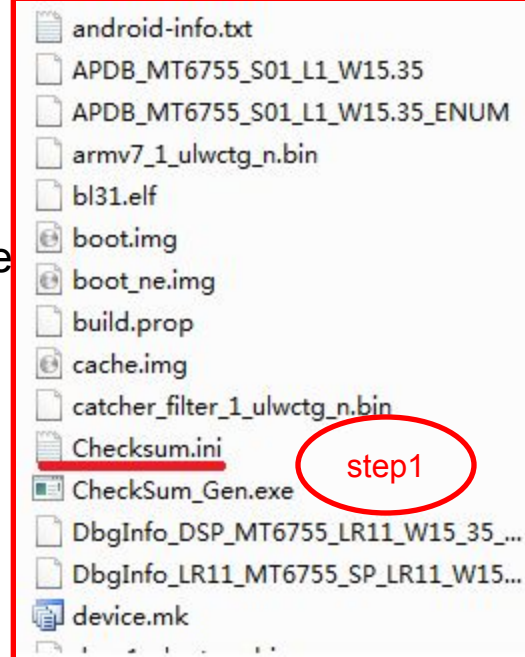


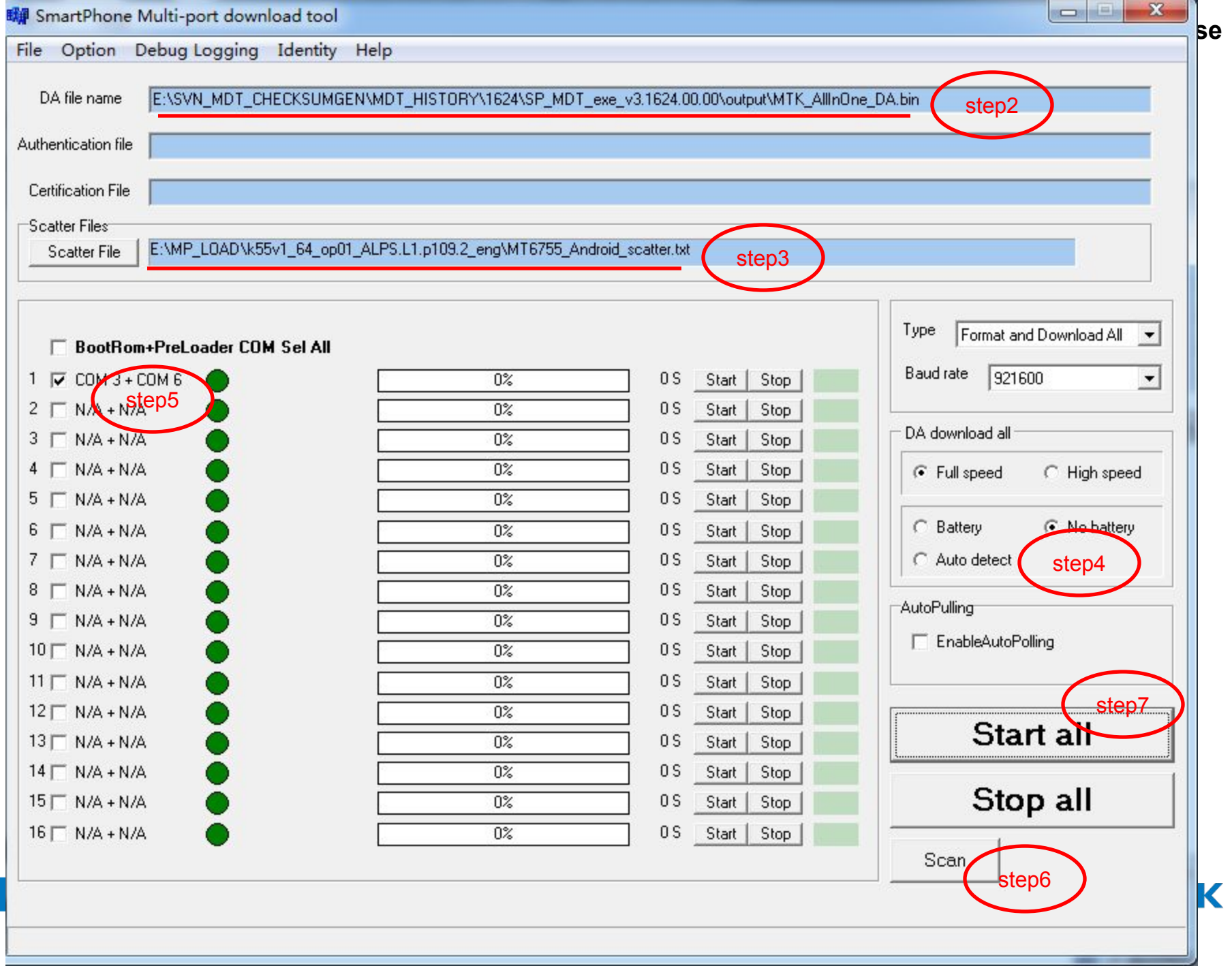
Feature introduction

- Get started
- Download Type
- Download speed
- Battery option
- Auto polling
- Checksum level

Get started

- Step1: make sure the checksum.ini of SW image has been generate
- Step2: select Download agent
- Step3: select scatter file
- Step4: configure the battery option
- Step5: select how many phones to download at the same time
- Step6: Scan com port
- Step7: click the start button to download
- Step8: plug in the phone which has been powered off





Download Type

- Format and Download All
 - Format whole flash and download all the image
- Format all
 - Format whole flash
- Firmware upgrade
 - Calibration data will be kept, other partition will be format and download all the image
- Format bootloader
 - format preloader only

Download speed

- Full speed(usb1.1)
 - Will do nothing
- High speed(usb2.0)
 - will check usb speed, if it's full speed, it will change to DA high speed port

Battery option

- Battery
 - The power support source is battery
- No battery
 - The power support source is usb, tool will enable charger to get power from usb
- Auto detect
 - Tool will detect if battery exists, then choose which power source
 - if yes, choose battery
 - if not, choose usb

Auto polling

- If enable, the tool will start the download again automaticly each time finishing the download.

Checksum level

- Disable checksum
 - Will not do checksum when download
- Enable usb+dram checksum
 - Keep the data's integrity, the progress from pc dram to phone dram
- Enable flash checksum
 - Keep the data's integrity, the progress from phone dram to phone flash
- Enable checksum all
 - Do the both usb+ dram and flash checksum, keep the data's integrity, the progress from pc dram to phone flash
 - Note:the checksum will takes more time when download



Scan com port



Scan com port

- Before the download, you should scan the com port
- Why scan com port?
- After that there is no need to scan com port each download, which can make download more stable and a little quicker

自动扫口—介绍(before MT6737)

■ 扫口原理:

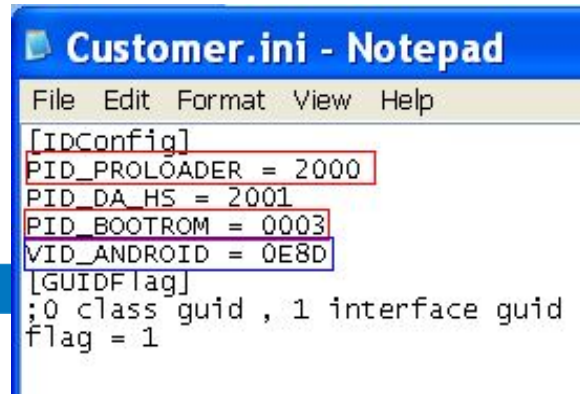
- 插入设备时, 先扫Bootrom com, 然后通过bootrom下载DA到手机, 接着DA run起来后枚举出Preloader Com, 以便达到同时扫出Bootrom com和Preloader Com的目的

■ 扫口前准备:

- 使用W1308版本或者之后的MDT tool
- [MUST]选择与MDT对应版本的DA和设备对应的Scatter file
- 准备一只没有下载过的USB设备, 即空机, 插入USB即可触发进入扫口。
注: 如果没有空机并且设备有接出Kcol0下载触发按键, 则也可以通过压下Kcol0来触发进入扫口。

■ MDT Tool如何识别Bootrom口和Preloader口

- 工具根目录的配置文件Customer.ini
- Vid&Pid如右图:
 - Bootrom为0E8D&0003
 - Preloader为0E8D&2000



自动扫口—介绍(MT6737&After)

■ 扫口原理:

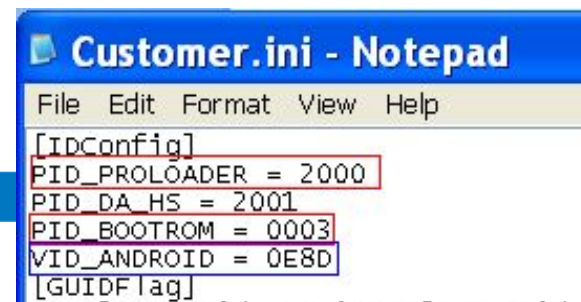
- 从MT6737开始, 支持自动识别口进行扫口功能, 即不局限于空板或者按download key进行扫口。插入设备时, 会根据枚举出来的口自动识别进行扫口。
 - 如果插入设备出来为preloader com, 工具会先扫preloader com, 然后通过preloader将DA下载到手机, 接着DA run起来后枚举出bootrom com, 以便同时扫出bootrom com和preloader com的目的。
 - 如果插入设备出来为bootrom com, 工具会先扫bootrom com, 然后通过bootrom下载DA到手机, 接着DA run起来后枚举出preloader Com, 以便达到同时扫出bootrom com和preloader Com的目的。

■ 扫口前准备:

- 使用W1728版本或者之后的MDT tool
- [MUST]选择与MDT对应版本的DA和设备对应的Scattere file

■ MDT Tool如何识别Bootrom口和Preloader口

- 工具根目录的配置文件Customer.ini
- Vid&Pid如右图:
 - Bootrom为0E8D&0003
 - Preloader为0E8D&2000



自动扫口—步骤(1)

Data source file: MTK_DATABASE.mdb

DA file name: E:\SP_Tool\MDT\OfficialModify\SVN_MDT\output\MTK_AllInOne_DA.bin

Authentication file:

Certification File:

Scatter Files:

Scatter File: D:\Official\SP_Bin\athens15v2_ALPS.MP.V1.11_eng_sub_bin_ate_fact\MT6575_Android_scatter_emmc.txt

步骤1：选择MDT对应的DA 版本和设备对应的Scatter file。

步骤2：对需要扫口的选项进行勾选。

BootRom+PreLoader COM				
<input checked="" type="checkbox"/> COM56 + COM 9	0%	0 S	Start	Stop
<input checked="" type="checkbox"/> COM57 + COM24	0%	0 S	Start	Stop
<input checked="" type="checkbox"/> COM84 + COM85	0%	0 S	Start	Stop
<input type="checkbox"/> COM86 + COM87	0%	0 S	Start	Stop
<input type="checkbox"/> COM89 + COM90	0%	0 S	Start	Stop
<input type="checkbox"/> COM91 + COM92	0%	0 S	Start	Stop
<input type="checkbox"/> COM93 + COM94	0%	0 S	Start	Stop
<input type="checkbox"/> COM95 + COM96	0%	0 S	Start	Stop
<input type="checkbox"/> COM97 + COM98	0%	0 S	Start	Stop
<input type="checkbox"/> COM99 + COM100	0%	0 S	Start	Stop
<input type="checkbox"/> COM101 + COM102	0%	0 S	Start	Stop
<input type="checkbox"/> COM103 + COM104	0%	0 S	Start	Stop
<input type="checkbox"/> COM105 + COM106	0%	0 S	Start	Stop
<input type="checkbox"/> COM103 + COM104	0%	0 S	Start	Stop
<input type="checkbox"/> COM101 + COM102	0%	0 S	Start	Stop
<input type="checkbox"/> COM93 + COM94	0%	0 S	Start	Stop

Type: Format and Download All

Baud rate: 921600

Format FAT Option:

Manual ☐ Auto ☒

Two-site download:

First-site (UART) ☒ Second-site (USB) ☐

DA download all:

Full speed ☐ High speed ☒

Battery ☐ No battery ☒

Auto detect ☐

AutoPulling:

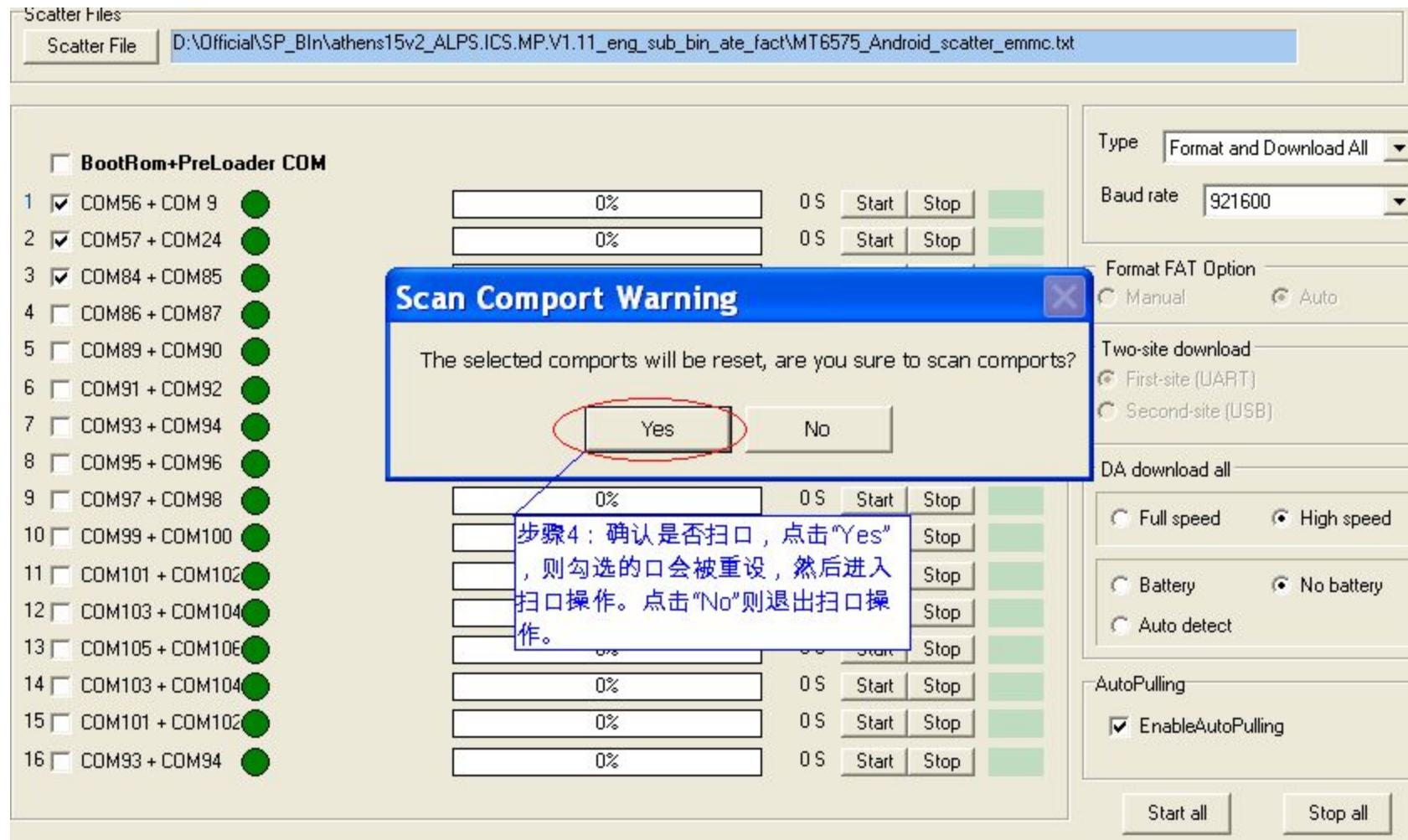
EnableAutoPulling ☒

Start all Stop all

Scan

步骤3：点击Scan按钮。

自动扫口一步骤(2)



自动扫口—步骤(3)

Scatter Files

Scatter File: D:\Official\SP_Bin\athens15v2_ALPS.ICS.MP.V1.11_eng_sub_bin_ate_fact\MT6575_Android_scatter_emmc.txt

☐ BootRom + PreLoader COM

Item	Configuration	Status	Progress	Time	Start	Stop
1	<input checked="" type="checkbox"/> N/A + N/A	●	0%	0 S	Start	Stop
2	<input checked="" type="checkbox"/> N/A + N/A	●	0%	0 S	Start	Stop
3	<input checked="" type="checkbox"/> N/A + N/A	●	0%	0 S	Start	Stop
4	<input type="checkbox"/> COM86 + COM87	●	0%	0 S	Start	Stop
5	<input type="checkbox"/> COM89 + COM90	●	0%	0 S	Start	Stop
6	<input type="checkbox"/> COM91 + COM92	●	0%	0 S	Start	Stop
7	<input type="checkbox"/> COM93 + COM94	●	0%	0 S	Start	Stop
8	<input type="checkbox"/> COM95 + COM96	●	0%	0 S	Start	Stop
9	<input type="checkbox"/> COM97 + COM98	●	0%	0 S	Start	Stop
10	<input type="checkbox"/> COM99 + COM100	●	0%	0 S	Start	Stop
11	<input type="checkbox"/> COM101 + COM102	●	0%	0 S	Start	Stop
12	<input type="checkbox"/> COM103 + COM104	●	0%	0 S	Start	Stop
13	<input type="checkbox"/> COM105 + COM106	●	0%	0 S	Start	Stop
14	<input type="checkbox"/> COM103 + COM104	●	0%	0 S	Start	Stop
15	<input type="checkbox"/> COM101 + COM102	●	0%	0 S	Start	Stop
16	<input type="checkbox"/> COM93 + COM94	●	0%	0 S	Start	Stop

Step 5: 状态灰显表示等待插入USB设备, 请插入没有下载过的USB设备即插入空机。请不要一次插入多个USB设备, 扫口只能扫完一路之后再进行下一路扫口。

Note: 针对MT6737以及之后的平台, 使用的手机不局限于空板, 也可以使用有软件的手机进行扫口。

Type: Format and Download All

aud rate: 921600

Format FAT Option: ☐ Manual ☒ Auto

Two-site download: ☒ First-site (UART) ☐ Second-site (USB)

DA download all: ☐ Full speed ☒ High speed

☐ Battery ☒ No battery

☐ Auto detect

AutoPulling: ☒ EnableAutoPulling

Start all Stop all Scan

自动扫口—步骤(4)

Scatter Files

Scatter File: D:\Official\SP_Bln\athens15v2_ALPS.MP.V1.11_eng_sub_bin_ate_fact\MT6575_Android_scatter_emmc.txt

说明：插入USB设备后，Com57表示扫出Bootrom为Com57，然后下载DA，下载完之后，DA会枚举出Preloader口。

BootRom+PreLoader COM		DA	Progress	Time	Start	Stop
<input checked="" type="checkbox"/>	COM57 + N/A	DA	100%	0 S	Start	Stop
<input checked="" type="checkbox"/>	N/A + N/A		0%	0 S	Start	Stop
<input checked="" type="checkbox"/>	N/A + N/A		0%	0 S	Start	Stop
<input type="checkbox"/>	COM86 + COM87		0%	0 S	Start	Stop
<input type="checkbox"/>	COM89 + COM90		0%	0 S	Start	Stop
<input type="checkbox"/>	COM91 + COM92		0%	0 S	Start	Stop
<input type="checkbox"/>	COM93 + COM94		0%	0 S	Start	Stop
<input type="checkbox"/>	COM95 + COM96		0%	0 S	Start	Stop
<input type="checkbox"/>	COM97 + COM98		0%	0 S	Start	Stop
<input type="checkbox"/>	COM99 + COM100		0%	0 S	Start	Stop
<input type="checkbox"/>	COM101 + COM102		0%	0 S	Start	Stop
<input type="checkbox"/>	COM103 + COM104		0%	0 S	Start	Stop
<input type="checkbox"/>	COM105 + COM106		0%	0 S	Start	Stop
<input type="checkbox"/>	COM103 + COM104		0%	0 S	Start	Stop
<input type="checkbox"/>	COM101 + COM102		0%	0 S	Start	Stop
<input type="checkbox"/>	COM93 + COM94		0%	0 S	Start	Stop

Type: Format and Download All

Baud rate: 921600

Format FAT Option

☐ Manual ☒ Auto

Two-site download

☒ First-site (UART) ☐ Second-site (USB)

DA download all

☐ Full speed ☒ High speed

☐ Battery ☒ No battery

☐ Auto detect

AutoPulling

☒ EnableAutoPulling

自动扫口—步骤(5)

Scatter Files
Scatter File: D:\Official\android_scatter_emmc.txt

步骤6: "Scan Success"表示当前这路扫口成功, 请把USB设备 (空机) 拔出后插入到下一路USB线进行扫口。重复操作直到全部口扫完。

BootRom+PreLoader COM	COM	Scan Status	Progress	OS	Start	Stop
<input checked="" type="checkbox"/> COM57 + COM24	COM57 + COM24	Scan Success!	100%	OS	Start	Stop
<input checked="" type="checkbox"/> N/A + N/A	N/A + N/A		0%	OS	Start	Stop
<input checked="" type="checkbox"/> N/A + N/A	N/A + N/A		0%	OS	Start	Stop
<input type="checkbox"/> COM86 + COM87	COM86 + COM87		0%	OS	Start	Stop
<input type="checkbox"/> COM89 + COM90	COM89 + COM90		0%	OS	Start	Stop
<input type="checkbox"/> COM91 + COM92	COM91 + COM92		0%	OS	Start	Stop
<input type="checkbox"/> COM93 + COM94	COM93 + COM94		0%	OS	Start	Stop
<input type="checkbox"/> COM95 + COM96	COM95 + COM96		0%	OS	Start	Stop
<input type="checkbox"/> COM97 + COM98	COM97 + COM98		0%	OS	Start	Stop
<input type="checkbox"/> COM99 + COM100	COM99 + COM100		0%	OS	Start	Stop
<input type="checkbox"/> COM101 + COM102	COM101 + COM102		0%	OS	Start	Stop
<input type="checkbox"/> COM103 + COM104	COM103 + COM104		0%	OS	Start	Stop
<input type="checkbox"/> COM105 + COM106	COM105 + COM106		0%	OS	Start	Stop
<input type="checkbox"/> COM103 + COM104	COM103 + COM104		0%	OS	Start	Stop
<input type="checkbox"/> COM101 + COM102	COM101 + COM102		0%	OS	Start	Stop
<input type="checkbox"/> COM93 + COM94	COM93 + COM94		0%	OS	Start	Stop

Type: Format and Download All
Baud rate: 921600

Format FAT Option
☐ Manual ☒ Auto

Two-site download
☒ First-site (UART) ☐ Second-site (USB)

DA download all
☐ Full speed ☒ High speed

☐ Battery ☒ No battery
☐ Auto detect

AutoPulling
☒ EnableAutoPulling

说明: 点击"Stop All"则退扫口。

Start all Stop all Scan



Image checksum verify



Image checksum verify

- In order to keep the image in pc disk is correct, the tool will verify the image after click the start button.
- Pls make sure that the checksum.ini is together with the SW load under the same directory.

How to generate checksum.ini?

- **Step 1:** get the checksum_gen.exe
 - -the checksum_gen.exe is released with SP Multiport Download Tool from MTK online
- **Step 2:** generate checksum.ini
 - -put the checksum_gen.exe together with SW load, and start the checksum_gen.exe
- **Note1:** pls make sure that the version of checksum_gen tool is the same as SP Multiport Download Tool.
- **Note2:** it's better to generate the checksum.ini immediately after the SW load built, the src code of checksum_gen support linux os.



FAQ



FAQ

- 问:除了自动扫口,是否可以在SPMultiPortFlashDownloadProject.ini对comport口进行配置?

答:可以。



Thanks

