

ASM1051 Series MP Tool User Manual

Rev: 1.0

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Environmentally hazardous materials are not used in this product.

Revision History

Rev.	Date	Description
1.0	Mar 12,2010	Formal release
0.4	Mar 11,2010	Update description
0.3	Mar 9,2010	Feature description update.
0.2	Mar 8, 2010	Revision Update
0.1	Feb 11, 2010	Initial Release

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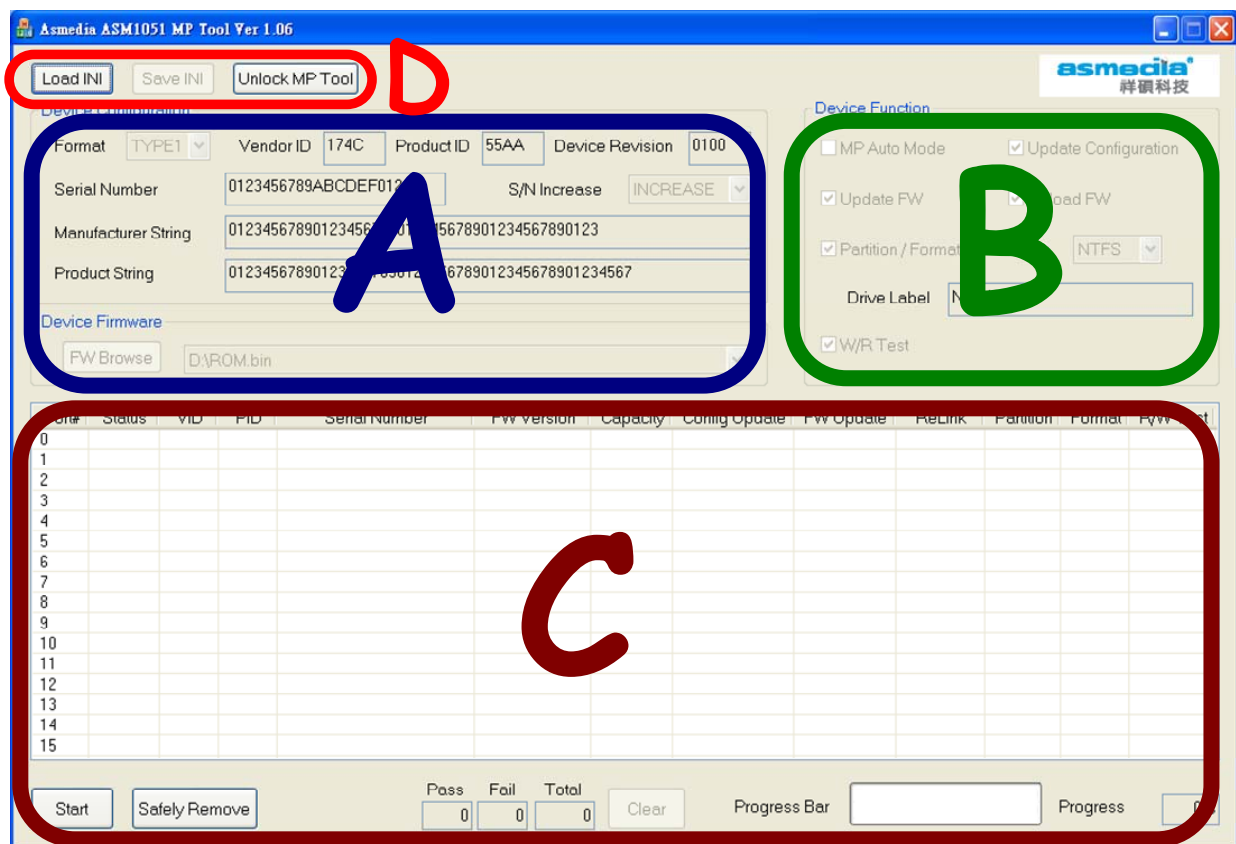
Scope:

Customers can easily manufacture Asmedia's ASM1051 related products.

Operation environment:

WinXP 32bit/64bit and Win7 32bit/64bit. You need to run MPTool-32Bit on Windows 32-Bit platform and MPTool-64Bit on Windows 64-Bit platform.

MP Tool Interface Overview



MP tool have 4 major function areas.

Area A can configure device information.

Area **B** select device function test items.

Area **C** will show test status and results.

Area **D** can switch configure mode or un-configure mode.

Area A: Device Configuration and Device Firmware

Device Configuration

Format

TYPE1

Vendor ID

174C

Product ID

55AA

Device Revision

0100

Serial Number

0123456789ABCDEF0124

S/N Increase

INCREASE

Manufacturer String

01234567890123456789012345678901234567890123

Product String

012345678901234567890123456789012345678901234567

Device Firmware

FW Browse

D:\ROM.bin

1. Vendor ID, Product ID and Device Revision:

You can type 4 characters. (“0”~”9” and “A”~”F”)

2. Serial Number :

You can type 20 characters ("0"~"9" and "A"~"F")

MP tool can select auto increase serial number or remain as the same.

3. Manufacturer String and Product String:

You can type 48 characters (ASCII code 20~7F)

ASCII Code Table

Hex	Character	Hex	Character	Hex	Character	Hex	Character	Hex	Character
20	Space	33	3	46	F	59	Y	6C	l
21	!	34	4	47	G	5A	Z	6D	m
22	"	35	5	48	H	5B	[	6E	n
23	#	36	6	49	I	5C	\	6F	o
24	\$	37	7	4A	J	5D	]	70	p
25	%	38	8	4B	K	5E	^	71	q
26	&	39	9	4C	L	5F	_	72	r
27	'	3A	:	4D	M	60	`	73	s
28	(	3B	;	4E	N	61	a	74	t
29	)	3C	<	4F	O	62	b	75	u
2A	*	3D	=	50	P	63	c	76	v
2B	+	3E	>	51	Q	64	d	77	w
2C	,	3F	?	52	R	65	e	78	x
2D	-	40	@	53	S	66	f	79	y

2E	.	41	A	54	T	67	g	7A	z
2F	/	42	B	55	U	68	h	7B	{
30	0	43	C	56	V	69	i	7C	|
31	1	44	D	57	W	6A	j	7D	}
32	2	45	E	58	X	6B	k	7E	~

4. Device Firmware:

You must set FW location , when you set Update FW item on Device Function.

Area B: Device Function

1. MP Auto Mode:

In MP Auto Mode, only one ASM1051 device is supported.

Update Configuration:

Update Device Configuration to update device descriptors (**Update Configuration must update FW too**).

2. Update FW:

Update new firmware.

Reload FW:

Reload new firmware

Partition/Format:

MP tool will make one partition and format HDD.

You can select **NTFS** or **FAT32**.

Drive Label support **11** characters in FAT32 type, **32** characters in NTFS type.

3. W/R Test:

MP tool will Write, Read and compare test file on HDD.

The limit size of test pattern file is 180MB.

The file name of test pattern is “fwv.bin”.

Area C: Status and Results

Port#	Status	VID	PID	Serial Number	FW Version	Capacity	Config Update	FW Update	ReLink	Partition	Format	R/W Test
0	SUPER	174C	55AA	0123456789ABCDEF0124	100210000000	465 GB	PASS	PASS	PASS	PASS	PASS	PASS
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												

Pass

Fail

Total

1

0

1

Progress Bar

Progress

100 %

MPTool will show basic information such as Port Number, Status, PID, VID, Serial Number, FW Version and Capacity and test results.

Area D: Mode select



Lock Mode:

Initially, MPTool works in Lock Mode. And MPTool will load INI file and be ready to run.

Unlock Mode:

If you want to enter into Unlock Mode, you must key in password. Password is "asmedia". When you are in Unlock Mode, you can modify Device Configuration, Device Function, Device Firmware, clean test result and save INI.

Password is **"asmedia"**

Operation Procedure:

MPTool will auto load configuration from "as_mp_tool v0.3.ini".

You can edit "as_mp_tool v0.3.ini" by notepad or other edit tool.

Please refer to **Appendix A**.

As the following is the standard Operation Procedure.

Step1. Please open MPTool and press Unlock MPTool button to modify setting.

Step2. MPTool will show Login Dialog. Please key in "asmedia".

Step3. You can modify configuration or clean test result.

MPTool have two kinds of test mode, one is Manual Mode and the other is Auto Mode.



Step 5. Check test configuration items when you begin to test.

Manual Mode

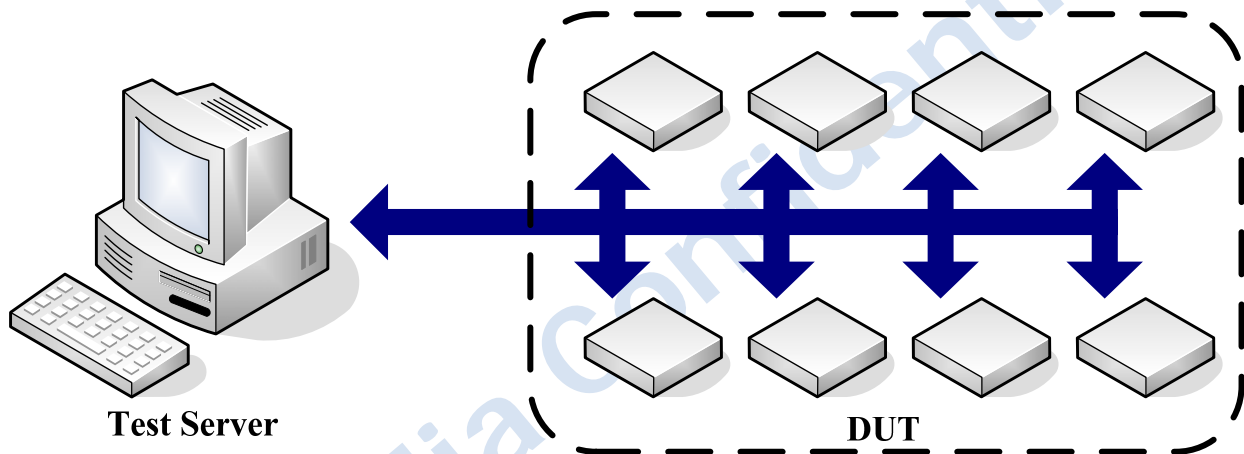
☐ MP Auto Mode

If you don't select MP Auto Mode item, MPTool run in Manual Mode.

In Manual Mode, MPTool support Max eight DUT to test at the same time.

All of USB2.0/3.0 Port **can't** connect any **Mass Storage Device** on test server.

1.1 Connect DUT to platform.



1.2 Press **start** in bottom left.

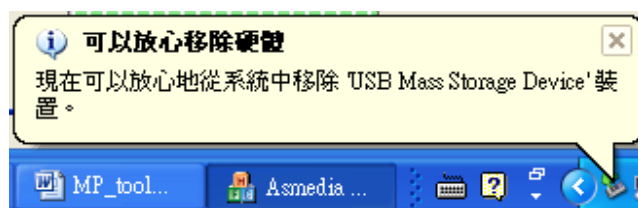
1.3 You can monitor the progress through Progress Bar or % in bottom right.

1.4 When test is finished, users can see pass count, fail count and total count in the screen.

Pass	Fail	Total	
1	0	1	Clear

1.5 Press safely Remove

1.6 Change next DUT after system pop-out safe removed information.



Auto Mode

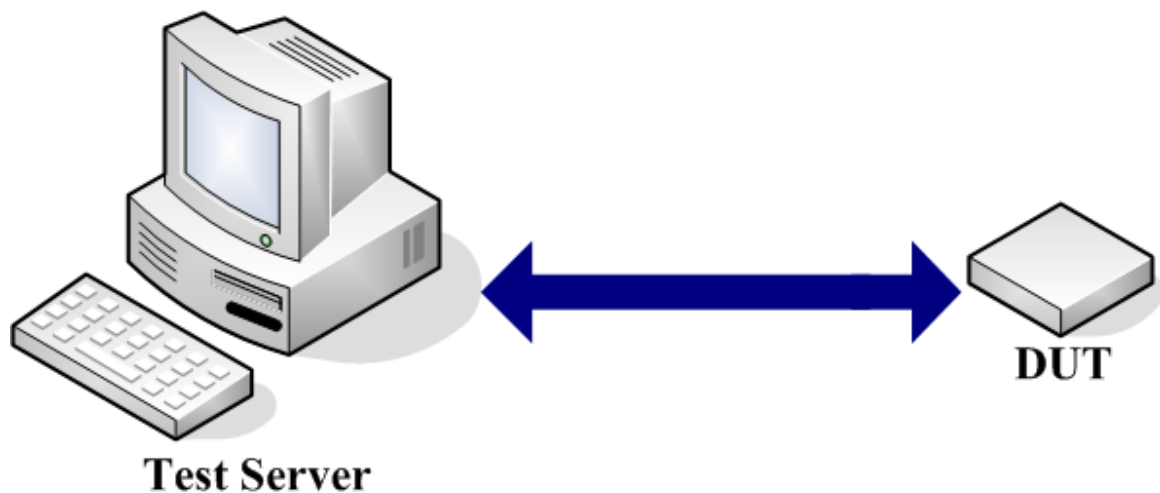
☒ MP Auto Mode

If you select MP Auto Mode item, MPTool run in Auto Mode.

In Auto Mode, MPTool only support one DUT to test at the same time.

All of USB2.0/3.0 Port **can't** connect any **Mass Storage Device** on test server.

2.1 Plug DUT to USB port, after entered MPtool window.



2.2 MPTool will automatically test when DOT is plugged into test server.

2.3 You can monitor the progress through Progress Bar or % in bottom right.

2.4 When test is finished, users can see pass count, fail count and total count in the screen.

Pass	Fail	Total	
1	0	1	Clear

2.5 Refer to 1.5 and 1.6

2.6 MPTool will save test result in file named "YYYYMMDD.log"

Appendix A:

INI file Description:

```
=====INI file Start=====

[usb_func]
format_enable=1                /* Partition format "1" Enable "0" Disable */
format_drive_type=0            /* format type "0" NTFS "1" FAT32 */
drive_label_name=NEW DISK      /* Drive Label String */
wr_test_enable=1               /* R/W test */
wr_test_binary_name=fwv.bin    /* R/W test pattern */
wr_test_count=1                /* R/W test loop */
auto_mp=0                      /* MP auto mode "1" enable "0" disable */

[usb_fw]
fw_enable=1                    /* Update FW "1" enable "0"disable */
fw_binary_name=D:\ROM.bin      /* FW file location */
fw_reload=1                    /* Reload FW "1" enable "0" disable */

[usb_config]
config_enable=1                /* Update Configuration "1" enable "0" disable */
config_format=1
vendor_id=174C
product_id=55AA
device_revision=0100
manufacturer_string=01234567890123456789012345678901234567890123
product_string=012345678901234567890123456789012345678901234567
serial_number=0123456789ABCDEF0124
serial_number_increase=1       /* S/N Increase "1" enable "0" disable */

=====INI file End=====
```