

# ASM105x Series MP Tool User Manual

**Rev: 1.4**

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**Environmentally hazardous materials are not used in this product.**

## Revision History

Rev.	Date	Description
1.5	Aug 31, 2016	Update UI and configurations with MP Tool v3.6.0.0
1.4	Nov 27, 2014	Update UI and configurations with MP Tool v2.1.22.1
1.3	June 11, 2012	Add HDDSN/WHCK/HDDPC description.
1.2	May 02, 2012	Update UI and configurations with MP Tool v2.01.
1.1	June 02, 2011	Add more configurations and preload file.
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 ASM105x related products.

## Operation environment:

Win XP / Win7 / Win8.

## MP Tool Interface Overview

The screenshot displays the Asmedia 105x MP Tool interface, which is divided into several functional areas. Area A (red box) contains the 'Device Configuration' section, including fields for Format (UnChanged), Vendor ID (174C), Product ID (55AA), Device Revision (0100), and a Serial Number (00000000009C). It also has options for input methods (Barcode, HDDSN, Hex, Dec) and fields for Manufacturer String (ASMT) and Product String (USB 3.0 Desktop HD EP0 Product string). Area B (yellow box) shows the 'Device Function' section with radio buttons for USB Status (USB 3.0), MP Auto Mode, Update FW, and Partition / Format. The Partition Type is set to MBR and Format Type to FAT32. Area C (green box) is the 'USB Searching' section, which includes a table of detected devices and a progress bar at the bottom.

Port#	Status	VID	PID	Serial Number	FW Version	Capacity	Update	ReLink	Partition	R/W Test	Preload
0	SUPER	174C	55AA	00000000009C	141126a10000	931 GB					
1											
2											
3											
4											
5											
6											
7											
8											
9											

At the bottom of the interface, there is a progress bar showing 0% completion, along with buttons for Play, Stop, and a summary of Pass (0), Fail (0), and Total (0) tests.

MP tool have 4 major function areas.

Area A: Configure device information.

Area B: Select device function test items.

Area C: Show the test status and results.

Area D: Switch configures mode or un-configures mode and save/load ini file.

## Area A: Device Configuration and Device Firmware


Format  Vendor ID  Product ID  Device Revision

**Device Configuration**

Serial Number  ☐ Input From Barcode ☐ S/N CHK HEX ☐ Input From HDD SN ☐ S/N Increase ☒ Hex ☐ Dec

Manufacturer String

Product String

Idle Timer   More Config

FW Browser  Preload Browser

### 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")

#### 2-1. S/N Increase Hex or Dec:

You can select auto increase serial number or remain by Hex or Dec .

#### 2-2. Input from Barcode:

The radio is a function that you can input serial number by barcode scanner. There is a limitation is that it is only support one device operation.

#### 2-3. Input from HDD SN:

the radio is a function that the S/N number will use HDD's serial number.

#### 2-4. S/N CHK HEX:

The radio is a function that MPTool will check S/N number is valid or not.

**3. Manufacturer String and Product String:**

All characters are allowed.

**4. Device Firmware:**

The FW directory must be selected if update FW in area B is checked.

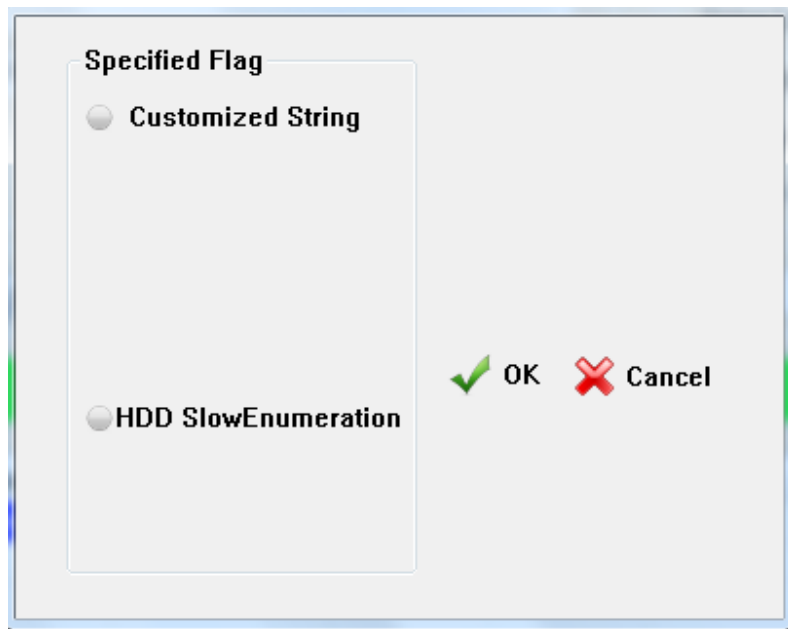
The Preload path must be selected if preload file in area B is checked.

**5. Idle Timer:**

It allows user to select idle timer to trigger the function of HDD standby.

Please refer to

**6. More Config:**



There are 2 function you can select:

**6-1. Customized String:**

The radio is a function that the T10 Manufactory string and Product string will the same as EP0 Manufactory string and Product string

**6-2. HDD SlowEnumeration:**

The radio is a function that it is will link USB after SATA device detected.

## Area B: Device Function

### 1. MP Auto Mode:

In MP Auto Mode, only one ASM105x device is supported.

### 2. USB Status

Check device status.

### 3. Update FW:

Update new firmware and configuration setting.

### 4. Reload FW:

Reload new firmware and new configuration

### 5. Format Type:

You can select format type **NTFS** 、 **FAT32** or **EXFAT**

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

### 6. Partition Type

You can select MBR or GPR.

### 7. 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 "rwtest.bin".

### 8. Speed Test:

Test for device read/write speed.

### 9. Preload Files:

MP tool will copy the files to the HDD.

**10. Auto Safe remove after ?? second:**



this function will auto safely remove after a few second after MP operation success.

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## Area C: Status and Results

Port#	Status	VID	PID	Serial Number	FW Version	Capacity	Update	ReLink	Partition	R/W Test	Preload
0	SUPER	174C	55AA	00000000009C	141126a10000	931 GB					
1											
2											
3											
4											
5											
6											
7											
8											
9											

Pass	Fail	Total
0	0	0



Progress Bar

0%

ASM105xMPTool 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, ASM105xMPTool work in Lock Mode. It will load INI file and 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:

ASM105xMPTool 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.

The standard Operation Procedure is described as followed.

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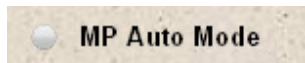
Step1. Please open ASM105xMPTool and press Unlock button to modify setting.

Step2. ASM105xMPTool will show Login Dialog. Please key in "asmedia".

Step3. You can modify configuration or clean test result.

Step4. Check test configuration items when you begin to test.

## Manual Mode

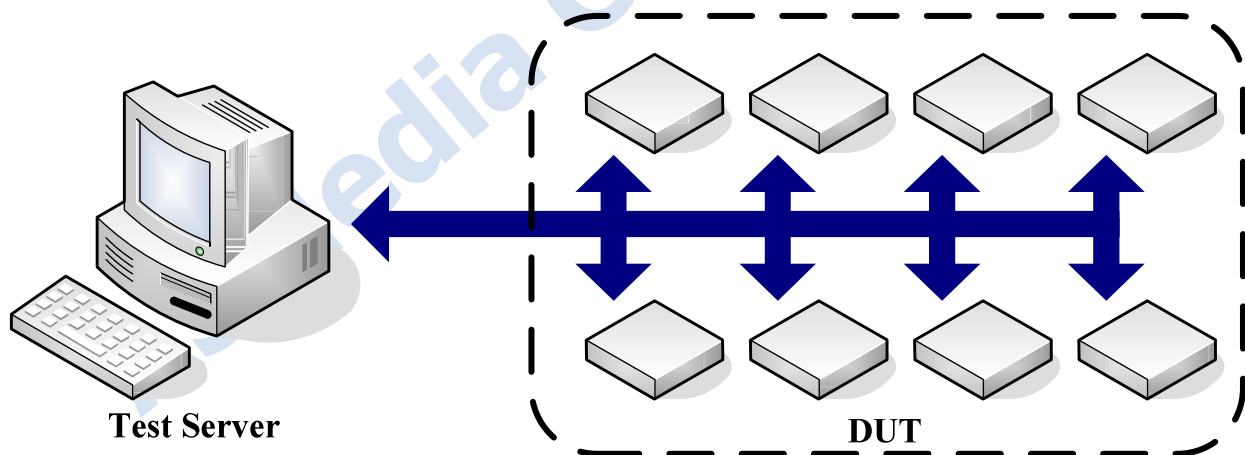


If MP Auto Mode item is not selected, ASM105xMPTool will run in Manual Mode.

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

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

### 1.1 Connect DUT to platform.




1.2 Press **start** in bottom left.

1.3 The progress can be monitored from Progress Bar or % in bottom right.

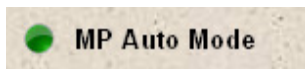
1.4 When the test is finished, users can see pass count, fail count and total count in the screen.

Pass	Fail	Total
0	0	0



- 1.5 Press safely Remove and change next DUT
- 1.6 ASM105xMPTool will save the test result in file named "YYYYMMDD.log"

## Auto Mode

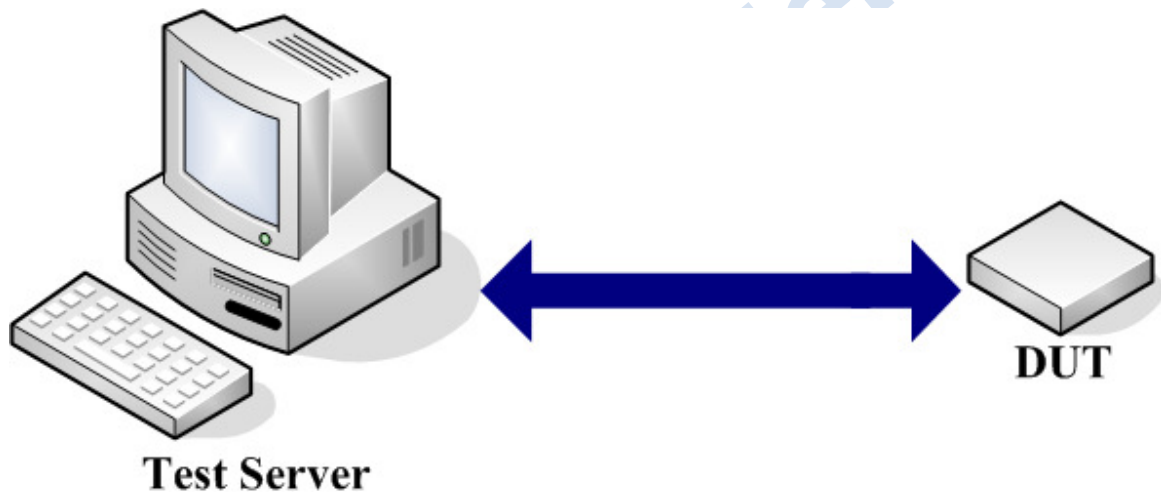


If MP Auto Mode is selected, ASM105xMPTool will run in Auto Mode.

In Auto Mode, it only supports one DUT to test at the same time.


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

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



- 2.2 ASM105xMPTool will automatically test when the usb device is plugged into test server.
- 2.3 You can monitor the progress through Progress Bar or % in bottom right.
- 2.4 When the test is finished, users can see pass count, fail count and total count in the screen.

Pass	Fail	Total
0	0	0



- 2.5 Press safely remove and change next DUT
- 2.6 ASM105xMPTool will save the test result in file named "YYYYMMDD.log"

## Appendix A:

### INI file Description:

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

### INI file Description:

#### [usb\_func]

format_enable=0	//0: Format disk disable ; 1: Format disk enable
format_drive_type=0	//0: NTFS ; 1:FAT32
drive_label_name=NEW DISK	//Setup Disk label name
wr_test_enable=0	//0: Read/Write test disable ; 1: Read/Write test enable
wr_test_binary_name=rwtest.bin	//File name for read/write test
wr_test_count=1	//Loop count for read/write test
auto_mp=0	//0: Auto MP mode disable ; 1: Auto MP mode enable
preload_enable=0	//0: Preload load file disable ; 1: Preload load file enable
preload_folder_path=C:\test	//File folder path for preload

#### [usb\_fw]

fw_enable=1	//0: Firmware update disable ; 1: Firmware update enable
fw_binary_name=E:\lichao\Asmedia\AS1053\ASMT_MPTool_v2.1.12.2\ASMT_MPTool_v2.1.12.2\120416_11_11_06.bin	// Firmware file path for Firmware update
fw_reload=1	//0: Device relink disable ; 1: Device relink enable
rescan_after_relink=0	//Delay time for device rescan after relink(ms)

#### [usb\_config]

config_enable=1	//0: Config update disable ; 1: Config update enable
config_format=1	//Always set to format 1
vendor_id=0480	// Setup for vender ID
product_id=D000	// Setup for product ID
device_revision=0100	// Setup for revision
manufacturer_string=TOSHIBA	// Setup for manufacturer string

```
product_string=External USB 3.0 // Setup for product string
serial_number=201310100001 // Setup for serial number
serial_number_increase=1 // 0: Device serial number increase disable ;
                          1: serial number increase enable
standby_timer=0 //Only for Asmedia internal test always set to 0
hdd_standby=0 //Only for Asmedia internal test always set to 0
customized_string=0 // function opened
eup_enable=0 //Only for Asmedia internal test always set to 0
two_leds=0 //Only for Asmedia internal test always set to 0
U1U2=0 //Only for Asmedia internal test always set to 0
low_power_mode=0 //Only for Asmedia internal test always set to 0
2TB=0 //Only for Asmedia internal test always set to 0
image0=1 //Only for Asmedia internal test always set to 1
image1=0 //Only for Asmedia internal test always set to 0
crc32=0 //Only for Asmedia internal test always set to 0
slow_enumeration=0 // function opened
Win8WTG=0 //Only for Asmedia internal test always set to 0
HDDPC=0 //Only for Asmedia internal test always set to 0
QD32=0 //Only for Asmedia internal test always set to 0

[usb_mode]
cd_rom_mode=1 //0: ODD device disable ; 1: ODD device enable
```

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