

ASUSTeK COMPUTER INC.	RX5600 Standard Operation Procedure	Doc. No:	
		Date: Jun.4.2020	
		Revision:1.08	
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Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First Release	GRTD	Maico_Zhang	Jun.15.2019
1.01		Add new PN(YV0EB0-A01)	GRTD	Maico_Zhang	Mar.9.2020
1.02		Add new PCBA(YV0EB1-A02)	GRTD	Maico_Zhang	Mar.9.2020
1.03		Add new PN(YV0EB2-A01)	GRTD	Maico_Zhang	Mar.9.2020
1.04		Add new PCBA(YV0EB2-A11)	GRTD	Maico_Zhang	Mar.9.2020
1.05		Add new PN(YV0EA1-A01)	GRTD	Maico_Zhang	Apr.29.2020
1.06		Add new PN(YV0EB3-A01)	GRTD	Maico_Zhang	Apr.29.2020
1.07		Add new PCBA(YV0EB3-A11)	GRTD	Maico_Zhang	Apr.29.2020
1.08		Add new PN(YV0EJ1-A02)	GRTD	Maico_Zhang	Jun.4.2020

Authorize by		Review by		Originator By	Maico
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1.Objectives

Create test procedure.

2.Scope

Model: RX5600

PN: YV0EA0(A03) YV0EB0(A01) YV0EB1(A02) YV0EB2(A01/A11) YV0EB3(A01/A11)
YV0EA1(A01) YV0EJ1(A02)

3.Test Item

3.1 Diagnostic test in Ubuntu18.04_64-bit Linux

4.Relevant Document

None.

5.Definition :

1. System Memory: 8GB for a single GPU test station.
2. Test Program in 64-bit Linux system.

6. Operation Procedures:

6.1 Attention

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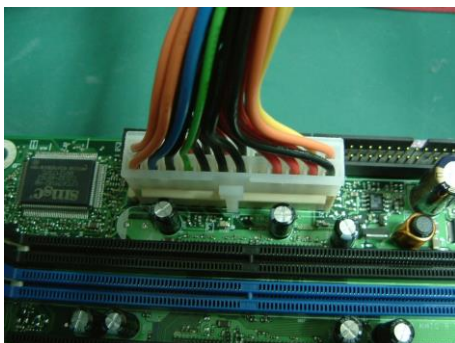
- 6.1.1 To avoid damaging devices or M/B, please turn off A/C power then unplug VGA card.
- 6.1.2 While unplugging the card, do it in upright direction to avoid damaging slot & golden finger.
- 6.1.3 If any problem happens, please inform test supervisor. Base on ATX power specification, +5V standby voltage is existed while AC power is connecting. For safety reason, please turn off main power during break time or idling test.
- 6.1.4 Some test items should be tested under Windows environment. **(Please install windows test environment by yourself).**

6.2 Fixture connect

- 6.2.1 Install **AMD Matisse (3rd Ryzen)** CPU & CPU Fan.
- 6.2.2 Install DDR4 Memory to DIMM. **(This model needs 8GB memory)**
- 6.2.3 Plug USB Mouse and Keyboard into MB.
- 6.2.4 Plug VGA Card into PCIEX16_1.
- 6.2.5 If this card has 6 PIN or 8 PIN of Power supply, please connect power con of VGA card & Power supply via bundled power cable.
(6 PIN of Power supply to 6 PIN of VGA card)
(8 PIN of Power supply to 8 PIN of VGA card)
- 6.2.6 Connect SATA HDD & SATA con via SATA cable



- 6.2.7 Plug 4PIN 12V power cable into CON12V.
- 6.2.8 Plug ATX Power on Power Connector.

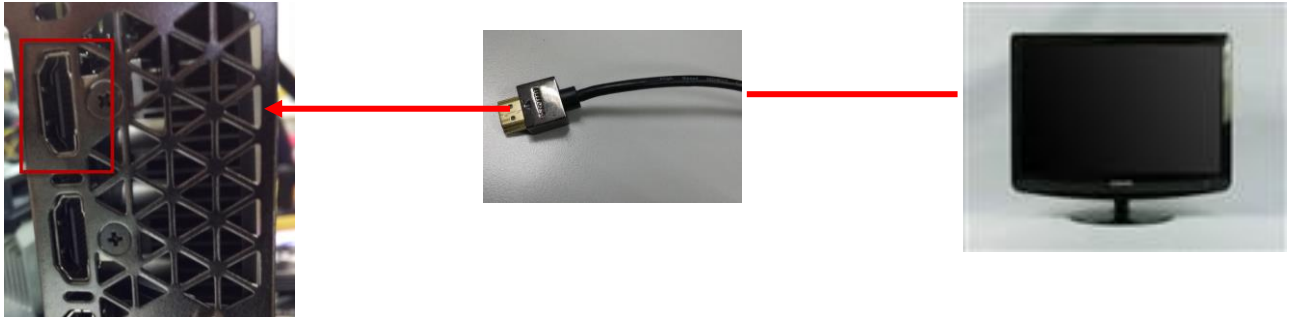


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6.3 Certain test.

6.3.1 Diagnostic test in **64-bit LINUX system**

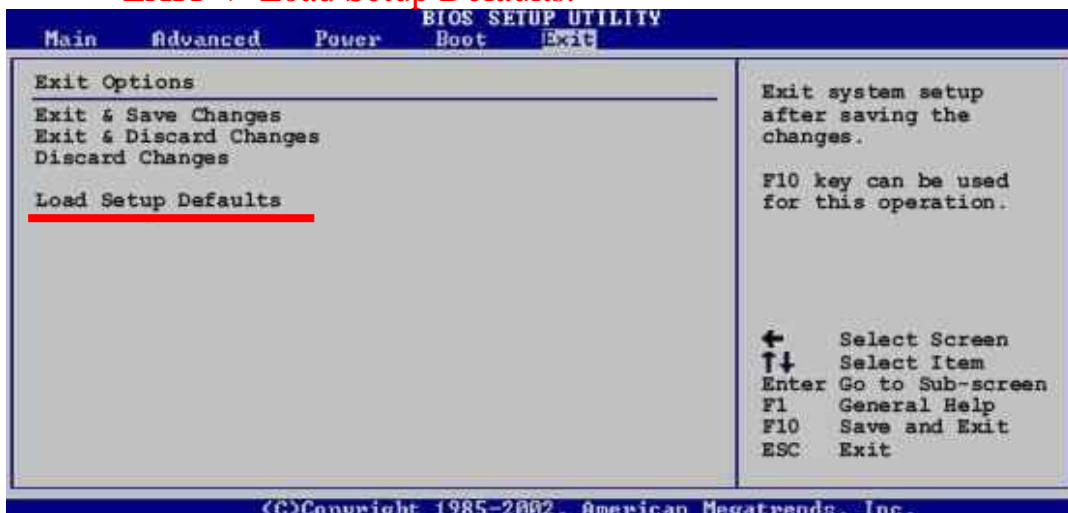
6.3.1.1 Please connect LCD monitor & card's HDMI CON via a HDMI cable.



6.3.1.2 Press Power Switch then turn on power button.

6.3.1.3 Press “Del” to enter CMOS setup menu while boot screen is displaying.

EXIT -> Load Setup Defaults.



6.3.1.4 Run test program in 64-bit linux system.

Path: rx5600\ yv0ea0a0

Path: rx56001\ yv0eb0a0 or yv0eb1a0

Path: rx56002\ yv0eb2a0 or yv0eb2a1

Path: rx56003\ yv0ea1a0

Path: rx56004\ yv0eb3a0 or yv0eb3a1

Path: rx56005\ yv0ej1a0

6.3.1.5 Memory test

If you want to test memory, please run `./tserver -boardtest=memfa`

Path: rx5600\

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6.3.1.6 BIOS Version

If you want to see the version of bios, please run `./amdvbflash -ai 0` or `./biosinfo`.
Path: rx5600\

6.3.1.7 BIOS flash

Please use the following command to flash bios and notice the size of character.
Path: rx5600\

Command: `./amdvbflash -p -f 0 xxx.rom` or `atiflash -p -f 0 xxx.rom`

Notice:

If you can not flash bios because of the bios locked, please use `./atiflash -unlockrom 0` to unlock bios. And then, please use `./atiflash -lockrom 0` to lock bios after updating latest bios.

6.4 Result upload to server (need connect to internet)

6.4.1 Download and copy RMA upload tool to diag folder by model (It don't need copy after 2018.5 uploaded model).

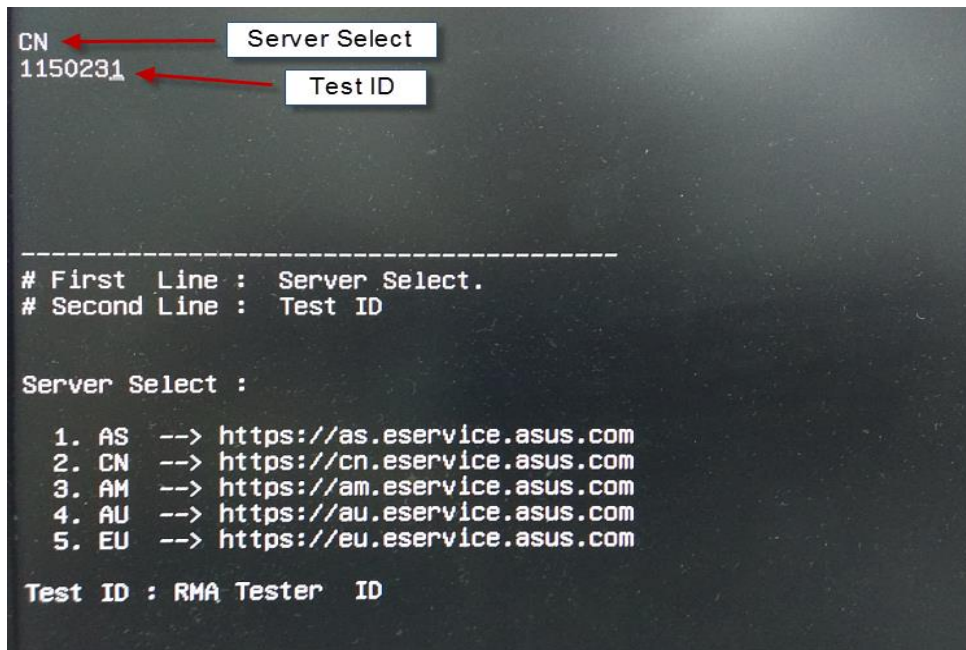
The tool of RMA upload tool includes 3 files:



6.4.2 Edit **RMA_Config** file:

First line confirms the address of local sever, second line is Tester ID.

The **RMA_Config** only need modify one time.



```

CN
1150231

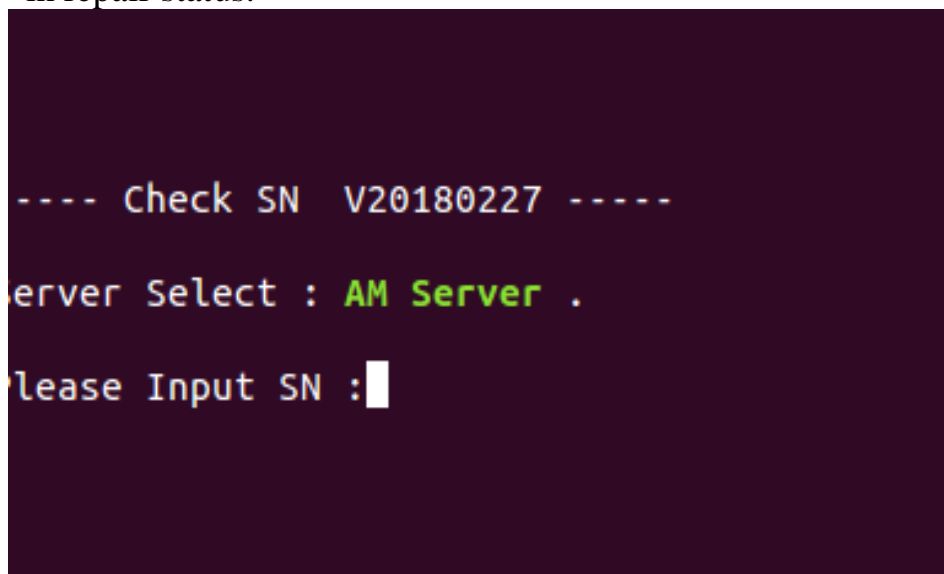
-----
# First Line : Server Select.
# Second Line : Test ID

Server Select :

1. AS --> https://as.eservice.asus.com
2. CN --> https://cn.eservice.asus.com
3. AM --> https://am.eservice.asus.com
4. AU --> https://au.eservice.asus.com
5. EU --> https://eu.eservice.asus.com

Test ID : RMA Tester ID
  
```

6.4.3 Run **Check_SN** and type in your VGA SN which need to be testing. The SN must be in repair status.



```

---- Check SN V20180227 ----

Server Select : AM Server .

Please Input SN :
  
```

6.4.4 Run **Diag test** and the diag name is same as the PN of your VGA card.

Left	File	Command	Options	Right
<-	/mnt/nv/UTinyLinux/gt1030	.	[^]	<- /mnt/usbkey
'n	Name	Size	Modify time	'n Name
*tegraboards.js		22036	Apr 18 2017	/60YV0615-VG0A02
*tegracom~unc.js		11556	Apr 18 2017	/60YV0BB0-VG0A76
*tegraperf.js		26572	Apr 18 2017	/ATI flash
*test.cfg		2107	Apr 18 2017	/EX-P106-6GR1.01
*test.sh		42325	Apr 18 2017	/GRUB
*testlist.js		37240	Apr 18 2017	/GTx1060
*thermal.js		16568	Apr 18 2017	/MINING-P104-4G
*tofile.js		5600	Apr 18 2017	/PH-GT103~2GD4-DI
*tunetrim.js		21924	Apr 18 2017	/R7240
*tunevolt.js		14036	Apr 18 2017	/RMA_Uplo~_update
*vic_data.bin		16384	Apr 18 2017	/RX550-2G-DIS
*vp2_stre.bin		203520	Apr 18 2017	/RX550-4G-DIS
*yvv0at0a0.sh		559	Apr 21 2017	/RX560_diag
*yvv0at0a1.sh		559	Apr 21 2017	/RX570_diag
*yvv0at1a0.sh		559	Apr 21 2017	/RX580_diag
*yvv0at1a1.sh		559	Apr 21 2017	/System U~rmation
*yvv0at0a1.sh				/RMA_Upload_Tool_upda
44G/75G (59%)				66
Hint: To use the mouse cut and paste may require holding the s				
#				
1	Help	2	Menu	3
4	View	5	Edit	6
7	Copy	8	RenMov	9
10	Mkdir	11	Delete	12

6.4.5 After Diag test is finished, run **RMALInfo** and the test result will be sent to server.

```
=====
=          ASUS VGA RMA Infomation          =
=          Rev2018.02.27                    =
=====

Tester ID = 11502YQ
Addr = AM Server .
Problem Code : MNTF01
NV Test Result = PASS
NV Error Code  = 000000000000

Update Data To ASUS VGA Server.....

Update Data:  HAC0YZ268879 PASS 06/03/2018 08:51:59  11502YQ

Please Wait For Ther Return Status:












Result:

SUCCESS
```

6.5 If test OK, please NTF test.

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7.Appendix

NO#	Equipment Description	ASUS Part#	Supplier	Quantity	Remarks
1	LCD Monitor with HDMI/Display Port 4096 x 2304 @ 60 Hz		local	1	
2	USB MOUSE		local	1	
3	USB KEYBOARD		local	1	
4	ATX POWER SUPPLY (a minimum power of 600W) -- ROG-THOR-850P	90YE0090-B001X0	local	1	
4-1	ROG-THOR-850P Cable	90YE0090-B001Y0	local	1	
5	AMD AM4 Socket 3rd Ryzen Processors (Support PCIe 4.0x16)	*You can select one for below 3 Part No.	-	-	-
	AMD CPU R5-3600 3.6G/32M	01002-01320300	local	1	
	AMD CPU R7-3700X 3.6G/32M	01002-01320100			
	AMD CPU R7-3800X 3.9G/32M	01002-01320000			
6	Heat sink + FAN		local	1	
7	DDR4 2400 4G		local	2	
8	SATA HDD		local	1	
9	SATA HDD Cable		local	1	
10	Dual link DVI cable (Buying a local DVI cable by yourself)		local	1	
11	HDMI extend cable (Buying a local HDMI cable by yourself)		local	1	
12	X570 Series MB (Support PCIe 4.0x16) -- ASUS ROG STRIX X570-F GAMING	90MB1160-M0AAY0	local	1	
13	Display port cable (Buying a local Display port cable by yourself)		local	1	

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