

ASUSTeK COMPUTER INC.	GTX1650 Standard Operation Procedure	Doc. No:	
		Date: Dec.12.2019	
		Revision:1.61	
		Page: 9	Grade:

0Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First release	GRTD	Maico_Zhang	Apr.3.2019
1.01		Add new PCBA(YV0CV1-A02)	GRTD	Maico_Zhang	Apr.3.2019
1.02		Add new PCBA(YV0CV2-A01)	GRTD	Maico_Zhang	Apr.3.2019
1.03		Add new PCBA(YV0CV3-A02)	GRTD	Maico_Zhang	Apr.3.2019
1.04		Add new P/N(YV0CX1-A01)	GRTD	Maico_Zhang	Apr.3.2019
1.05		Add new PCBA(YV0CX0-A01)	GRTD	Maico_Zhang	Apr.3.2019
1.06		Add new PCBA(YV0CX2-A01)	GRTD	Maico_Zhang	Apr.3.2019
1.07		Add new PCBA(YV0CV0-A12)	GRTD	Maico_Zhang	Apr.24.2019
1.08		Add new PCBA(YV0CV1-A12)	GRTD	Maico_Zhang	Apr.24.2019
1.09		Add new PCBA(YV0CV2-A12)	GRTD	Maico_Zhang	Apr.24.2019
1.10		Add new PCBA(YV0CV3-A12)	GRTD	Maico_Zhang	Apr.24.2019
1.11		Add new PCBA(YV0CV4-A02)	GRTD	Maico_Zhang	May.22.2019
1.12		Add new PCBA(YV0CV4-A11)	GRTD	Maico_Zhang	May.22.2019
1.13		Add new PCBA(YV0CX1-A13)	GRTD	Maico_Zhang	May.22.2019
1.14		Add new PCBA(YV0CX0-A13)	GRTD	Maico_Zhang	May.22.2019
1.15		Add new PCBA(YV0CX2-A13)	GRTD	Maico_Zhang	May.22.2019
1.16		Add new P/N(YV0CV0-A25)	GRTD	Maico_Zhang	Jul.4.2019
1.17		Add new PCBA(YV0CV1-A25)	GRTD	Maico_Zhang	Jul.4.2019
1.18		Add new P/N(YV0CV2-A24)	GRTD	Maico_Zhang	Jul.4.2019
1.19		Add new PCBA(YV0CV3-A24)	GRTD	Maico_Zhang	Jul.4.2019
1.20		Add new P/N(YV0CX1-A25)	GRTD	Maico_Zhang	Aug.1.2019
1.21		Add new PCBA(YV0CX0-A25)	GRTD	Maico_Zhang	Aug.1.2019
1.22		Add new PCBA(YV0CX2-A25)	GRTD	Maico_Zhang	Aug.1.2019
1.23		Add new PCBA(YV0CV4-A21)	GRTD	Maico_Zhang	Aug.1.2019
1.24		Add new P/N(YV0D30-B01)	GRTD	Maico_Zhang	Aug.1.2019
1.25		Add new PCBA(YV0D31-B01)	GRTD	Maico_Zhang	Aug.1.2019
1.26		Add new P/N(YV0CV2-A34)	GRTD	Maico_Zhang	Aug.1.2019
1.27		Add new PCBA(YV0CV3-A34)	GRTD	Maico_Zhang	Aug.1.2019
1.28		Add new PCBA(YV0CV2-A44)	GRTD	Maico_Zhang	Aug.1.2019
1.29		Add new PCBA(YV0CV3-A44)	GRTD	Maico_Zhang	Aug.1.2019
1.30		Add new PCBA(YV0CV5-A02)	GRTD	Maico_Zhang	Aug.1.2019
1.31		Add new PCBA(YV0CV6-A02)	GRTD	Maico_Zhang	Aug.1.2019
1.32		Add new PCBA(YV0CV0-A35)	GRTD	Maico_Zhang	Aug.1.2019

Authorize by		Review by		Originator By	Maico
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ASUSTeK COMPUTER INC	GTX1650 Standard Operation Procedure	Doc. No:
		Date: Dec.12.2019
		Rev.: 1.61 Page: 1

1.33		Add new PCBA(YV0CV1-A35)	GRTD	Maico_Zhang	Aug.1.2019
1.34		Add new PCBA(YV0CV5-A12)	GRTD	Maico_Zhang	Sep.12.2019
1.35		Add new PCBA(YV0CV5-A22)	GRTD	Maico_Zhang	Sep.12.2019
1.36		Add new PCBA(YV0CV6-A12)	GRTD	Maico_Zhang	Sep.12.2019
1.37		Add new PCBA(YV0CV6-A22)	GRTD	Maico_Zhang	Sep.12.2019
1.38		Add new PCBA(YV0D30-B11)	GRTD	Maico_Zhang	Sep.12.2019
1.39		Add new PCBA(YV0D31-B11)	GRTD	Maico_Zhang	Sep.12.2019
1.40		Add new PCBA(YV0D30-B21)	GRTD	Maico_Zhang	Nov.21.2019
1.41		Add new PCBA(YV0D31-B21)	GRTD	Maico_Zhang	Nov.21.2019
1.42		Add new P/N(YV0E40-A02)	GRTD	Maico_Zhang	Nov.21.2019
1.43		Add new PCBA(YV0E41-A01)	GRTD	Maico_Zhang	Nov.21.2019
1.44		Add new P/N(YV0E42-A02)	GRTD	Maico_Zhang	Nov.21.2019
1.45		Add new PCBA(YV0E43-A02)	GRTD	Maico_Zhang	Nov.21.2019
1.46		Add new P/N(YV0E10-A01)	GRTD	Maico_Zhang	Nov.21.2019
1.47		Add new PCBA(YV0E11-A01)	GRTD	Maico_Zhang	Nov.21.2019
1.48		Add new PCBA(YV0E12-A01)	GRTD	Maico_Zhang	Nov.21.2019
1.49		Add new P/N(YV0CV6-A33)	GRTD	Maico_Zhang	Nov.21.2019
1.50		Add new PCBA(YV0CV5-A33)	GRTD	Maico_Zhang	Nov.21.2019
1.51		Add new P/N(YV0CV0-A46)	GRTD	Maico_Zhang	Nov.21.2019
1.52		Add new PCBA(YV0CV1-A46)	GRTD	Maico_Zhang	Nov.21.2019
1.53		Add new PCBA(YV0CV2-A55)	GRTD	Maico_Zhang	Nov.21.2019
1.54		Add new PCBA(YV0CV3-A55)	GRTD	Maico_Zhang	Nov.21.2019
1.55		Add new PCBA(YV0E40-A14)	GRTD	Maico_Zhang	Dec.12.2019
1.56		Add new PCBA(YV0E41-A14)	GRTD	Maico_Zhang	Dec.12.2019
1.57		Add new P/N(YV0E42-A14)	GRTD	Maico_Zhang	Dec.12.2019
1.58		Add new PCBA(YV0E43-A14)	GRTD	Maico_Zhang	Dec.12.2019
1.59		Add new PCBA(YV0E10-A11)	GRTD	Maico_Zhang	Dec.12.2019
1.60		Add new PCBA(YV0E11-A11)	GRTD	Maico_Zhang	Dec.12.2019
1.61		Add new PCBA(YV0E12-A11)	GRTD	Maico_Zhang	Dec.12.2019

ASUSTeK COMPUTER INC	GTX1650 Standard Operation Procedure	Doc. No:
		Date: Dec.12.2019 Rev.: 1.61 Page: 2

## 1. Objectives

Create test procedure.

## 2. Scope

Model: GTX1650

PN: YV0CV0(A02/A12/A25/A35/A46) YV0CV1(A02/A12/A25/A35/A46)  
YV0CV2(A02/A12/A24/A34/A44/A55) YV0CV3(A02/A11/A24/A34/A44/A55)  
YV0CX0(A01/A13) YV0CX1(A01/A13) YV0CX2(A01/A13) YV0CV4(A02/A11)  
YV0CX0(A25) YV0CX1(A25) YV0CX2(A25) YV0CV4(A21) YV0D30(B01/B11/B21)  
YV0D31(B01/B11/B21) YV0CV5(A02/A12/A22/A33) YV0CV6(A02/A12/A22/A33)  
YV0E10(A01) YV0E11(A01) YV0E12(A01) YV0E40(A02) YV0E41(A01)  
YV0E42(A02) YV0E43(A02)

## 3. Test Item

[3.1 Diagnostic test in Tiny Linux](#)

## 4. Relevant Document

None.

**5. Definition :** [Please install OS above Tinylinux18.07 ver. to test HDD.](#)

## 6. Operation Procedures:

### 6.1 Attention

ASUSTeK COMPUTER INC	GTX1650 Standard Operation Procedure	Doc. No:
		Date: Dec.12.2019 Rev.: 1.61 Page: 3

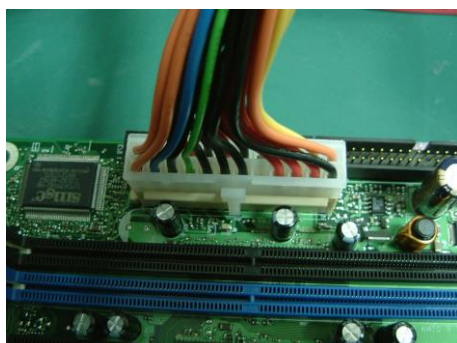
- 6.1.1 To avoid damaging devices or M/B, please turn off A/C power then unplug VGA card.
- 6.1.2 While unplugging the card, do it in upright direction to avoid damaging slot & golden finger.
- 6.1.3 If any problem happens, please inform test supervisor. Base on ATX power specification, +5V standby voltage 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 7 test environment by yourself).

## 6.2 Fixture connect

- 6.2.1 Install Intel CPU & CPU Fan.
- 6.2.2 Install DDR Memory to DIMM1~4.
- 6.2.3 Plug USB Mouse and Keyboard into MB.
- 6.2.4 Plug VGA Card GTX1650 into PCIEX16.
- 6.2.5 Connect power con of VGA card & Power supply via bundled power cable.
- 6.2.6 Connect SATA HDD with SATA CON.



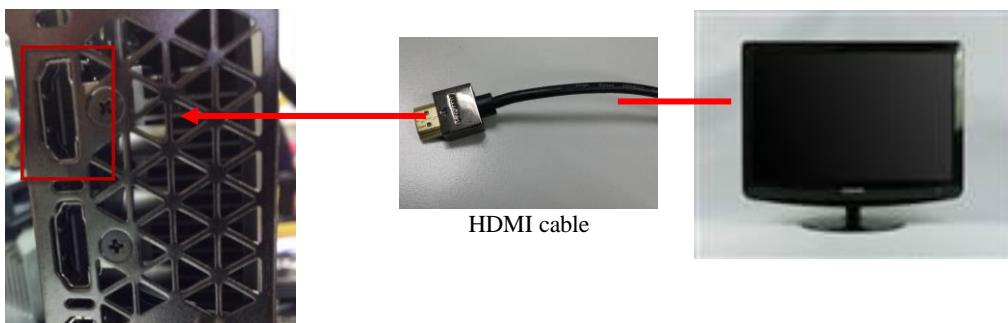
- 6.2.7 Plug 4PIN 12V power cable into CON12V.
- 6.2.8 Plug ATX Power on Power Connector.



ASUSTeK COMPUTER INC	GTX1650 Standard Operation Procedure	Doc. No:
		Date: Dec.12.2019 Rev.: 1.61 Page: 4

## 6.3 Diagnostic test in Tiny Linux.

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



6.3.2 Press Power Switch then turn on power button.

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

**EXIT -> Load Setup Defaults.**



6.3.4 System will reboot, select Linux to run test program.

Path:GTX1650\ yv0cv0a0.sh or yv0cv1a0.sh or yv0cv2a0.sh or yv0cv3a0.sh or yv0cv0a1.sh or yv0cv1a1.sh or yv0cv2a1.sh or yv0cv3a1.sh or yv0cv4a0.sh or yv0cv4a1.sh

Path:GTX16501\ yv0cx0a0.sh or yv0cx1a0.sh or yv0cx2a0.sh or yv0cx0a1.sh or yv0cx1a0.sh or yv0cx2a1.sh

Path:GTX16502\ yv0cv0a2.sh or yv0cv1a2.sh or yv0cv0a3.sh or yv0cv1a3.sh

Path:GTX16504\ yv0cx1a2.sh or yv0cx0a2.sh or yv0cx2a2.sh

ASUSTeK COMPUTER INC	GTX1650 Standard Operation Procedure	Doc. No:
		Date: Dec.12.2019 Rev.: 1.61 Page: 5

Path:GTX16505\ yv0d30b0.sh or yv0d31b0.sh or yv0d30b1.sh or yv0d31b1.sh  
or yv0d30b2.sh or yv0d31b2.sh  
Path:GTX16506\ yv0cv2a3.sh or yv0cv3a3.sh or yv0cv6a0.sh or yv0cv5a0.sh  
or yv0cv6a1.sh or yv0cv5a1.sh or yv0cv6a2.sh or yv0cv5a2.sh  
Path:GTX16507\ yv0cv2a2.sh or yv0cv3a2.sh or yv0cv2a4.sh or yv0cv3a4.sh or  
yv0cv4a2.sh  
Path:GTX16508\ yv0e40a0.sh or yv0e41a0.sh or yv0e40a1.sh or yv0e41a1.sh  
Path:GTX16509\ yv0e42a0.sh or yv0e43a0.sh or yv0e42a1.sh or yv0e43a1.sh  
Path:GTX1650a\ yv0e10a0.sh or yv0e11a0.sh or yv0e12a0.sh or yv0e10a1.sh  
or yv0e11a1.sh or yv0e12a1.sh  
Path:GTX1650b\ yv0cv5a3.sh or yv0cv6a3.sh  
Path:GTX1650c\ yv0cv0a4.sh or yv0cv1a4.sh or yv0cv2a5.sh or yv0cv3a5.sh

Run the test program refer to the prompt.

#### 6.3.5 Memory test

If you want to test memory, please run **./mats -e xx** or **./mats -c xx**

Where, -c xx----- only xx% of frame buffer is detected.

Path:GTX1650\

#### 6.3.7 BIOS flash

If you want to check Vbios infor, Please run **biosinfo**

Please use the following command to flash bios and notice the size of character.

Path: Path:GTX1650\

Command: **nvflash xxx.rom -6 -A** or **iromflsh xxx.rom**

**Notice:**

If you can not flash bios because of the bios locked, please use **nvflash.exe /r** or **nvflash.exe -r** to unlock bios. And then, please use **nvflash.exe /w** or **nvflash.exe -w** 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 including 3 files:**

ASUSTeK COMPUTER INC	GTX1650 Standard Operation Procedure	Doc. No:
		Date: Dec.12.2019 Rev.: 1.61 Page: 6



Check\_SN



RMA\_Config



RMAInfo

#### 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 ← Server Select
1150231 ← Test ID

-----
# 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

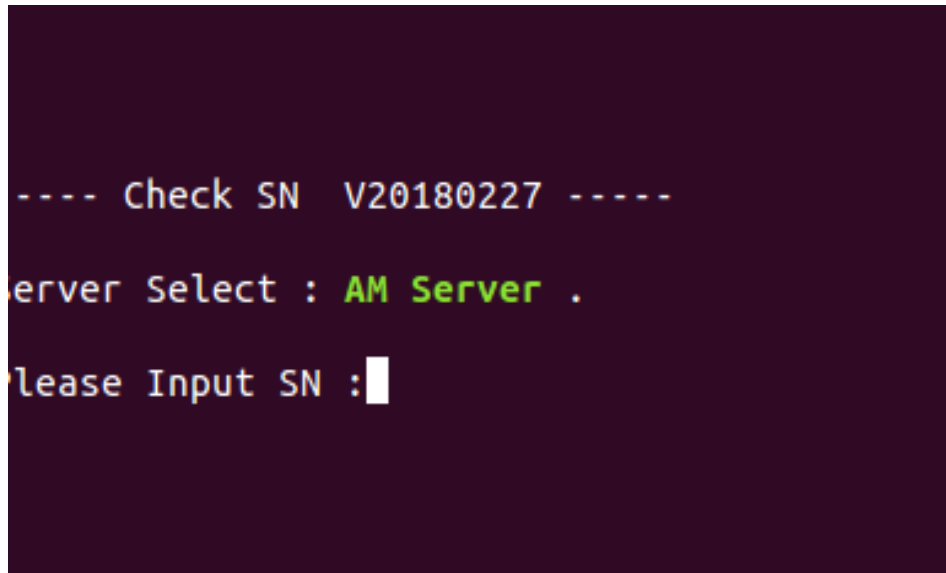
Test ID : RMA Tester ID

```

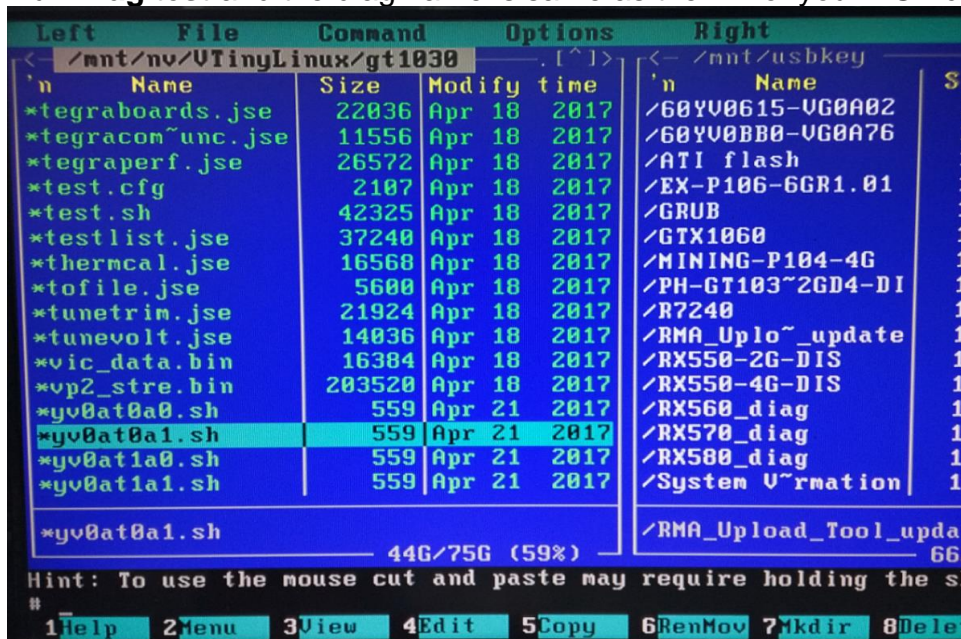
6.4.3 Run **Check\_SN** and type in your VGA SN which need to be testing. The SN must be in repair status.



ASUSTeK COMPUTER INC	GTX1650 Standard Operation Procedure	Doc. No:
		Date: Dec.12.2019 Rev.: 1.61 Page: 7



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



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



ASUSTeK COMPUTER INC	GTX1650 Standard Operation Procedure	Doc. No:
		Date: Dec.12.2019 Rev.: 1.61 Page: 8

```

=====
=      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.

## 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	KEYBOARD		local	1	
4	ATX POWER SUPPLY(a minimum power of 600W)		local	1	
5	Intel CPU Intel(R) I5 7500 CPU		local	1	
6	Heat sink + FAN			1	

ASUSTeK COMPUTER INC	GTX1650 Standard Operation Procedure	Doc. No:
		Date: Dec.12.2019 Rev.: 1.61 Page: 9

7	DDR4 2400 4G		local	2	
8	TEST HDD		local	1	
9	SATA HDD Cable		local	1	
10	HDMI cable (Buying a local HDMI cable by yourself)		local	1	
11	ASUS Prime B250-plus MB		local	1	
12	Display port cable (Buying a local Display port cable by yourself)		local	1	