

ASUSTeK COMPUTER INC.	RTX3090 Standard Operation Procedure	Doc. No:	
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0Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00			GRTD	Maico_Zhang	Nov.25.2020

1. Objectives

Create test procedure.

2. Scope

Model: RTX3090

PN:

Authorize by		Review by		Originator By	Maico
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3. Test Item

3.1 Diagnostic test in Tiny Linux

4. Relevant Document

None.

5. Definition: Please install OS above Tinylinux20.07 ver. to test HDD.

6. Operation Procedures:

6.1 Attention

- 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 10 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 RTX3090 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.

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6.2.7 Plug 4PIN 12V power cable into CON12V.

6.2.8 Plug ATX Power on Power Connector.



6.3 Diagnostic test in Tiny Linux.

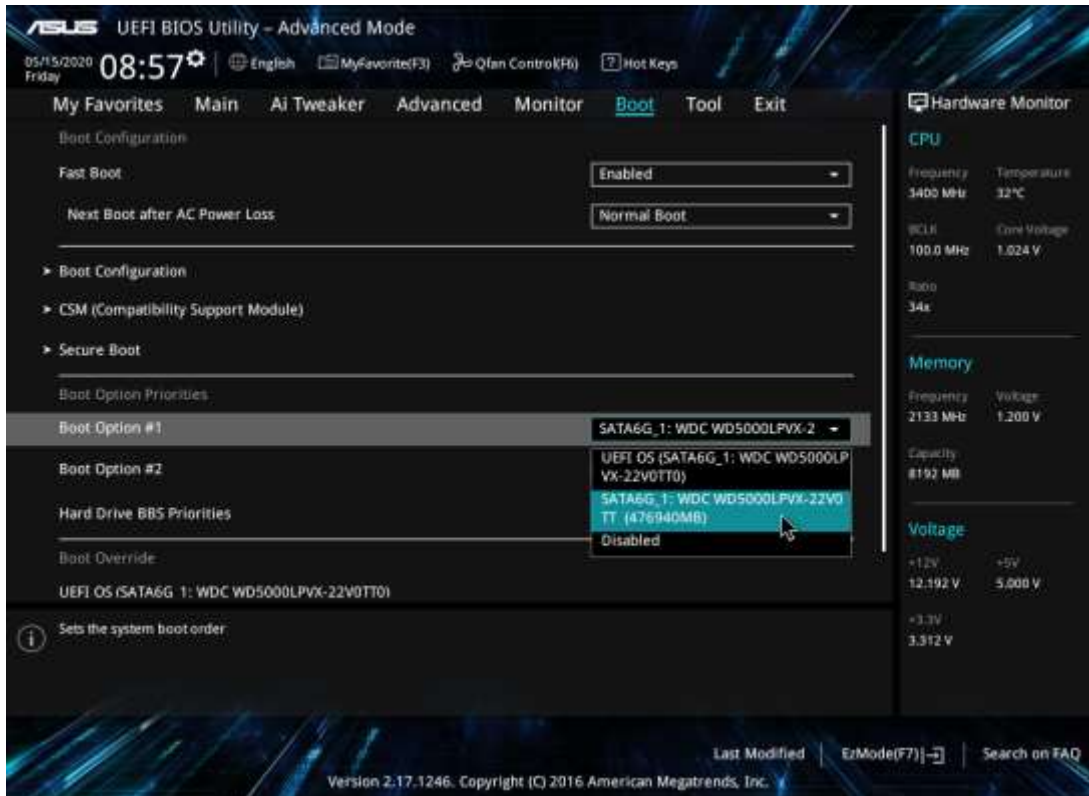
6.3.1 Please connect LCD monitor & card's first HDMI CON via a HDMI cable.



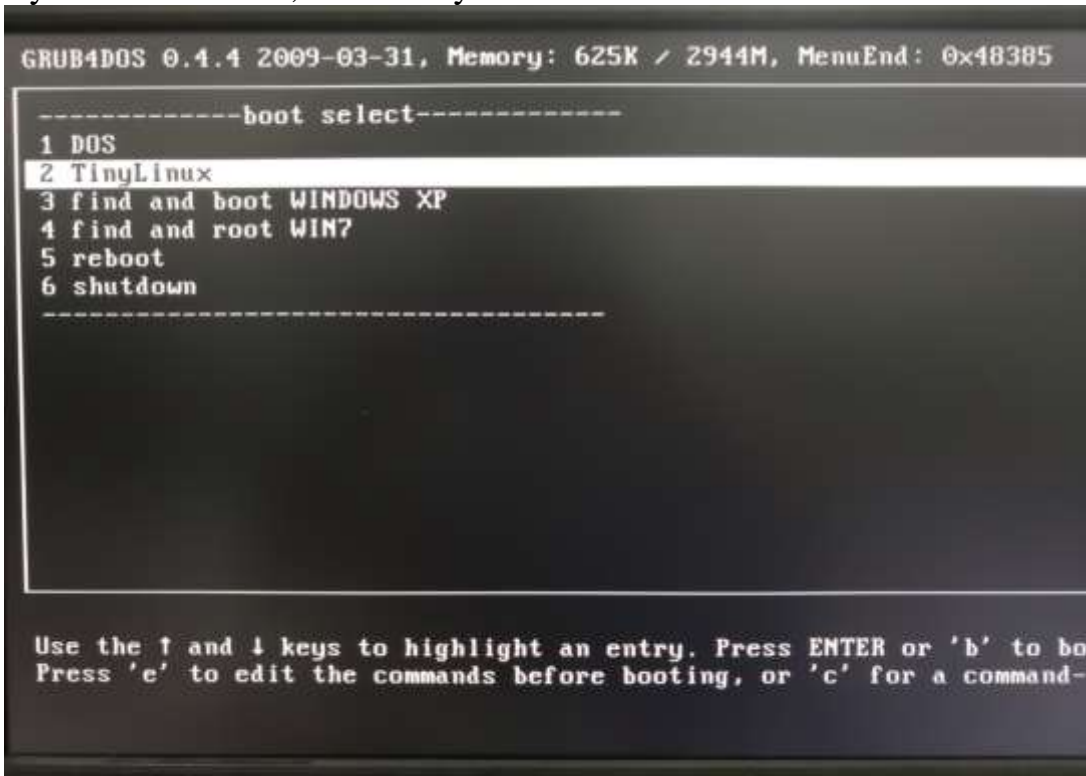
6.3.2 Press Power Switch then turn on power button.

6.3.3 Select Boot Option with Non-UEFI mode in BIOS. Then press "F10" to save changes and exit BIOS setup.

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6.3.4 System will reboot, select TinyLinux into OS.



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6.3.5 Run **nv.sh**, input Serial No. and 60Part No.as below.

```
[16:53:03] /home
# nv.sh
#####
# NVIDIA UGA LINUX TEST PROGRAM #
#           Ver.  2.0           #
#####
Please input SN:
SN:j5c0yz2064628
Please input PN (Ex.YU0B10):
PN:yv0bm0
Please input PCB (Ex.A03 -> A0):
PCB:a9_
```

6.3.6 Select 5 to run final test.

```
#####
# NVIDIA UGA LINUX TEST PROGRAM #
#           Ver.  2.0           #
#####
Please input SN:
SN:j5c0yz2064628
Please input PN (Ex.YU0B10):
PN:yv0bm0
Please input PCB (Ex.A03 -> A0):
PCB:a9
##### Diag Ver. 370.27 #####
Please input one test item:
1.Diag Test
2.Update VBIOS
3.URAM Test
4.Upload Test Result by Case
5.Final Test
6.Upload All Test Result
0.Exit

input:5_
```

6.3.7 Flash VBIOS

a. Single BIOS

-- Select 2, auto update VBIOS.

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```

6.Upload All Test Result
0.Exit
input:2
Diag folder exist
Please wait for downloading BIOS file!
[=====] 100.00%
Are you sure to update the latest BIOS?(Y/N)
Y/N:n
##### Diag Ver. 400.209_2060 #####
Please input one test item:
1.Diag Test
2.Update VBIOS
3.URAM Test
4.Upload Test Result by Case
5.Final Test
6.Upload All Test Result
0.Exit

```

b. Dual-VBIOS

-- Please use the following command to flash VBIOS in DIAG folder.

Path: refer to Diag Ver. as below.

```

PN:Y00a20
Please input PCB (Ex.A03 -> A0):
PCB:b1
##### Diag Ver. 367.51 #####
Please input one test item:
1.Diag Test
2.Update VBIOS
3.URAM Test

```

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.

6.5 If test OK, please NTF test.

7. Appendix

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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 1000W)		local	1	
5	Intel CPU Intel(R) I5 7500 CPU		local	1	
6	Heat sink + FAN		local	1	
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	90MBSJ0-M0AAY0	local	1	
12	Display port cable (Buying a local Display port cable by yourself)		local	1	