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| ASUSTeK COMPUTER INC. | RTX3070 Standard Operation Procedure | Doc. No: | |
| | | Date: Nov.25.2020 Revision:1.00 | |
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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: RTX3070

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 RTX3070 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(DP) CON via a HDMI(DP) cable.

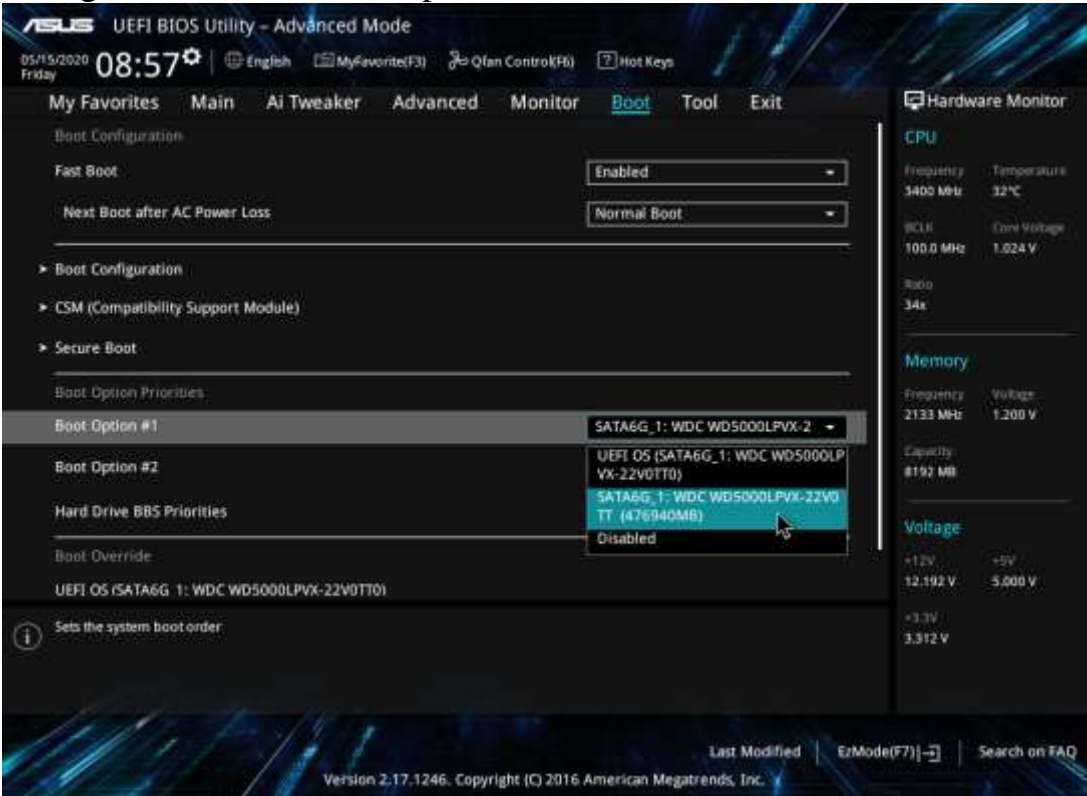


6.3.2 Press Power Switch then turn on power button.

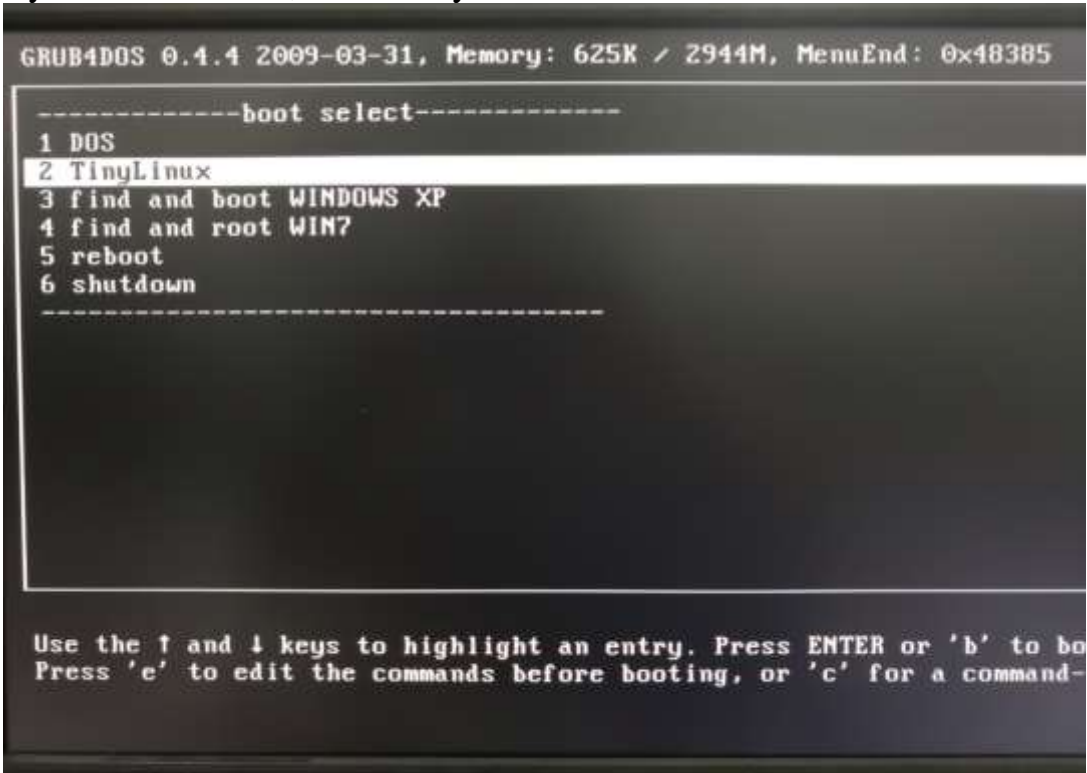
6.3.3 Select Boot Option with Non-UEFI mode in BIOS. Then press “F10” to save

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changes and exit BIOS setup.



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.UBRAM 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 800W) | | 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 | |
| 13 | Display port cable (Buying a local Display port cable by yourself) | | local | 1 |  |