Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First Release	GRTD	Maico_Zhang	Jun.24.2016
1.01		Add new PN(YV09K0-A02)	GRTD	Maico_Zhang	Jun.29.2016
1.02		Add new PN(YV09K1-A02)	GRTD	Maico_Zhang	Jul.7.2016
1.03		Add new PN(YV09I0-A02)	GRTD	Maico_Zhang	Aug.22.2016
1.04		Add new PN(YV09I1-A01)	GRTD	Maico_Zhang	Aug.22.2016
1.05		Add new PN(YV09I0-A15)	GRTD	Maico_Zhang	Oct.24.2016
1.06		Add new PN(YV09I1-A14)	GRTD	Maico_Zhang	Oct.24.2016
1.07		Add new PN(YV09I2-A02)	GRTD	Maico_Zhang	Oct.24.2016
1.08		Add new PN(YV09I3-A02)	GRTD	Maico_Zhang	Nov.1.2016
1.09		Add new PN(YV09I0-A025)	GRTD	Maico_Zhang	Nov.10.2016
1.10		Add new PN(YV09I1-A024)	GRTD	Maico_Zhang	Nov.22.2016
1.11		Add new PN(YV09K0-A017)	GRTD	Maico_Zhang	Nov.29.2016
1.12		Add new PN(YV09K1-A018)	GRTD	Maico_Zhang	Nov.29.2016

Authorize by		Review by		Originator By	Maico

1.Objectives

Create test procedure.

2.Scope

Model: RX480

PN: :YV09Z0(A01) YV09K0(A02) YV09K1(A02) YV09I0(A02) YV09I1(A01) YV09I0(A15) YV09I1(A14) YV09I2(A02)YV09I3(A02) YV09I0(A25) YV09I1(A24) YV09K0(A17) YV09K1(A18)

3.Test Item

3.1 Diagnostic test in 14_04_64-bit Linux

4.Relevant Document

None.

5.Definition :

1.   RX480 Test Program in 64-bit Linux system.
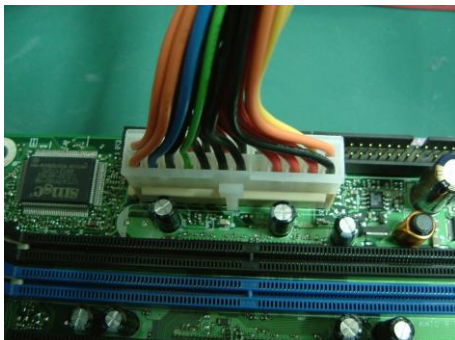
6. Operation Procedures:

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 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. **(a minimum memory of 2GB for Linux test)**

6.2.3 Plug USB Mouse and Keyboard into MB.

6.2.4 Plug VGA Card RX480 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

SATA

6.2.7 Plug 4PIN 12V power**(a minimum power of 1200W)** cable into CON12V.

6.2.8 Plug ATX Power on Power**(a minimum power of 1200W)** Connector.

6.3 Certain test.

6.3.1 Diagnostic test in 64-bit LINUX system

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

Dual link DVI 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:rx480\ yv09z0a0
Path:rx4801\ yv09k0a0
Path:rx4802\ yv09k1a0
Path:rx4803\ yv09i0a0
Path:rx4804\ yv09i1a0
Path:rx4805\ yv09i0a1
Path:rx4806\ yv09i1a1
Path:rx4807\ yv09i2a0
Path:rx4808\ yv09i3a0
Path:rx4809\ yv09i0a2
Path:rx480a\ yv09i1a2
Path:rx480b\ yv09k0a1
Path:rx480c\ yv09k1a1

6.3.1.5 Memory test

If you want to test memory, please run ./tserver -boardtest=memfa or ./memtest.sh
Path:rx480\

6.3.1.6 BIOS Version
If you want to see the version of bios,please run ./atiflash –ai 0 or ./biosinfo.
Path:rx480\

6.3.1.7 BIOS flash
Please use the following command to flash bios and notice the size of character.
Path:rx480\

Command:./atiflash -p -f 0 xxx.rom or ./acom_v1.3 0 xx.rom –f
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 include 3 files:

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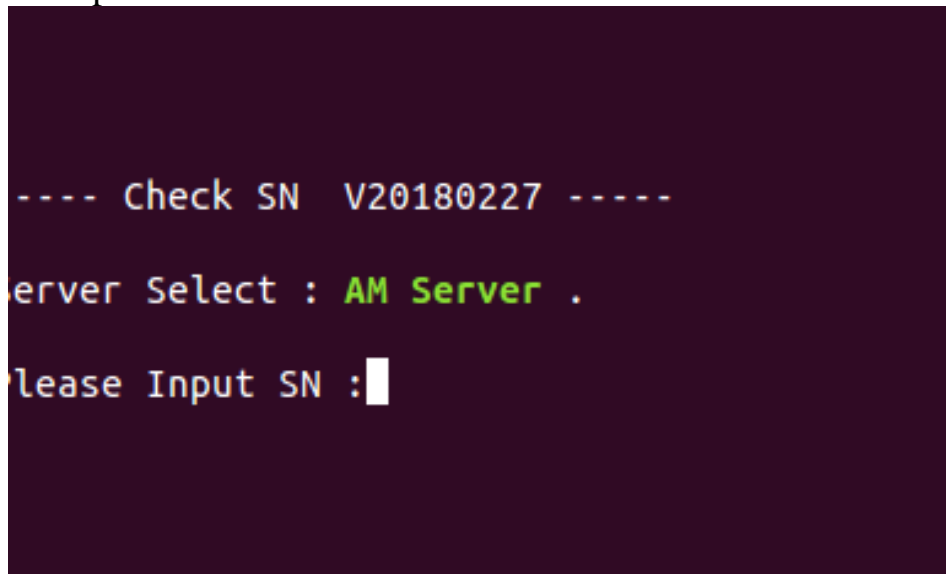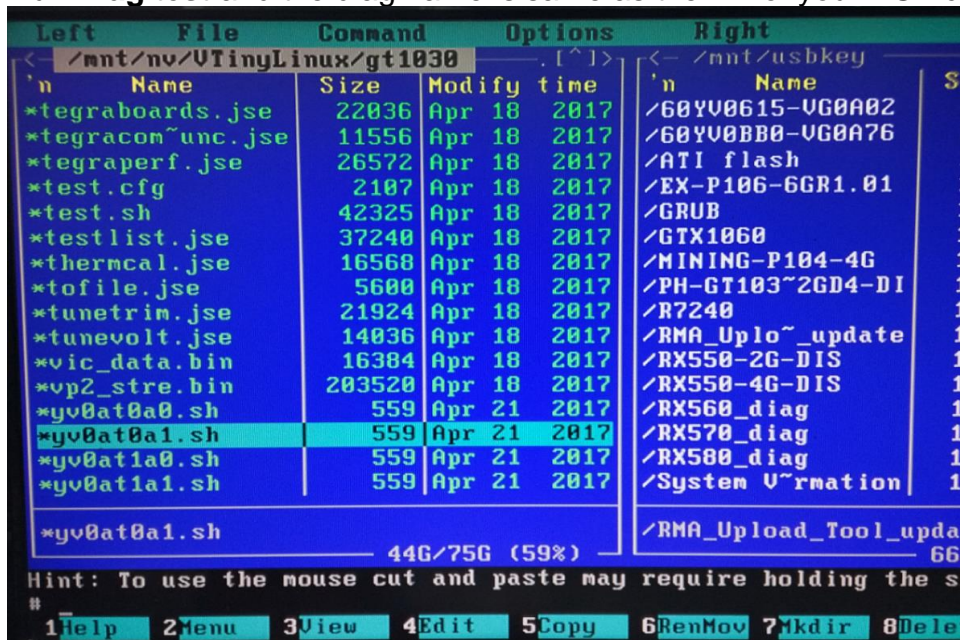
6.4.3 Run **Check_SN** and type in your VGA SN which need to be testing. The SN must be in repair status.

```
----- Check SN  V20180227 -----

erver Select : AM Server .

lease 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/VTinyLinux/gt1030      . [^]>  <- /mnt/usbkey
'n    Name        Size  Modify time   'n    Name        S
*tegraboards.jse   22036 Apr 18  2017  /60YV0615-VG0A02
*tegracom~unc.jse  11556 Apr 18  2017  /60YV0BB0-VG0A76
*tegraperf.jse     26572 Apr 18  2017  /ATI flash
*test.cfg           2107 Apr 18  2017  /EX-P106-6GR1.01
*test.sh           42325 Apr 18  2017  /GRUB
*testlist.jse      37240 Apr 18  2017  /GTX1060
*thermcal.jse      16568 Apr 18  2017  /MINING-P104-4G
*tofile.jse         5600 Apr 18  2017  /PH-GT103~2GD4-DI
*tunetrim.jse      21924 Apr 18  2017  /R7240
*tunevolt.jse      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
*yv0at0a0.sh         559 Apr 21  2017  /RX560_diag
*yv0at0a1.sh         559 Apr 21  2017  /RX570_diag
*yv0at1a0.sh         559 Apr 21  2017  /RX580_diag
*yv0at1a1.sh         559 Apr 21  2017  /System V~rmation

*yv0at0a1.sh                           /RMA_Upload_Tool_upda
              ---- 44G/75G (59%) ----                    66
Hint: To use the mouse cut and paste may require holding the s
#
 1Help   2Menu   3View   4Edit   5Copy   6RenMov 7Mkdir  8Dele
```

6.4.5 After Diag test is finished, run **RMAInfo** and the test result will be sent to server.
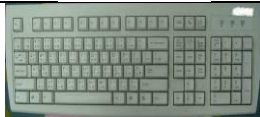
6.5 If test OK, please NTF test.

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 700W)**		**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	**Dual link DVI cable** **(Buying a local DVI cable by yourself)**		**local**	**1**	
11	**ASUS Prime B250-plus MB**		**local**	**1**	
12	**HDMI cable** **(Buying a local HDMI cable by yourself)**		**local**	**1**	
13	**Display port cable** **(Buying a local Display port cable by yourself)**		**local**	**1**	