Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First Release	GRTD	Maico_Zhang	Jan.31.2019

Authorize by		**Review by**		**Originator By**		**Maico**

1.Objectives

Create test procedure.

2.Scope

Model: Radeon VII

PN: YV0CY0(A01)

3.Test Item

3.1 Diagnostic test in Ubuntu16.04.03_64-bit Linux

4.Relevant Document

None.

5.Definition

:1.   If the model name contains P, please test HDCP function.

Ex: EAH***/HTDP/512M/A

2.   If you test HDMI already, it's unnecessary to test HDCP. The HDMI contains HDCP function.

3.   System Memory: 16GB for a single GPU test station.

4.   Radeon 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 I5 CPU & CPU Fan.

6.2.2 Install DDR4 Memory to DIMM1~4. **(This model need more than 16GB memory)**

6.2.3 Plug USB Mouse and PS/2 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.
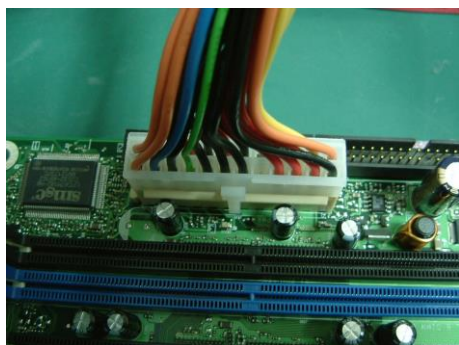
(6 PIN of Power supply to 6 PIN of VGA card)

(8 PIN of Power supply to 8 PIN of VGA card)

6.2.6 Connect SATA HDD & SATA con via SATA cable

SATA

6.2.7 Plug 4PIN 12V power**(a minimum power of 800W)** cable into CON12V.

6.2.8 Plug ATX Power on Power**(a minimum power of 800W)** 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.

```
                        BIOS SETUP UTILITY
   Main    Advanced    Power    Boot    Exit

   Exit Options                              Exit system setup
   Exit & Save Changes                       after saving the
   Exit & Discard Changes                    changes.
   Discard Changes
                                             F10 key can be used
   Load Setup Defaults                       for this operation.




                                             ←    Select Screen
                                             ↑↓   Select Item
                                             Enter Go to Sub-screen
                                             F1    General Help
                                             F10   Save and Exit
                                             ESC   Exit

            (C)Copyright 1985-2002, American Megatrends, Inc.
```

6.3.1.4 Run test program in 64-bit linux system.

Path: RadeonVII\yv0cy0a0

6.3.1.5 Memory test

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

6.3.1.6 BIOS Version

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

6.3.1.7 BIOS flash

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

Command:./amdvbflash -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 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.
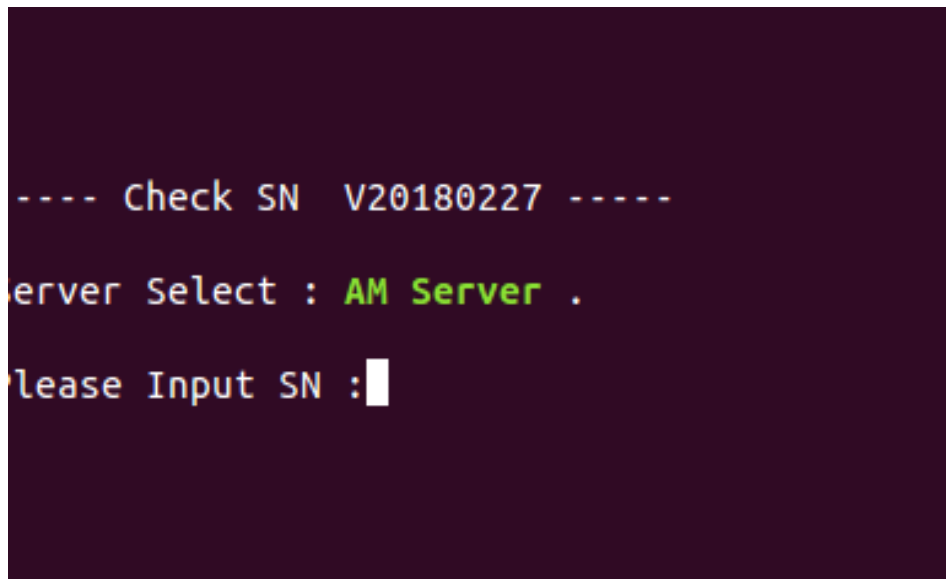
6.4.4 Run **Diag test** and the diag name is same as the PN of your VGA card.
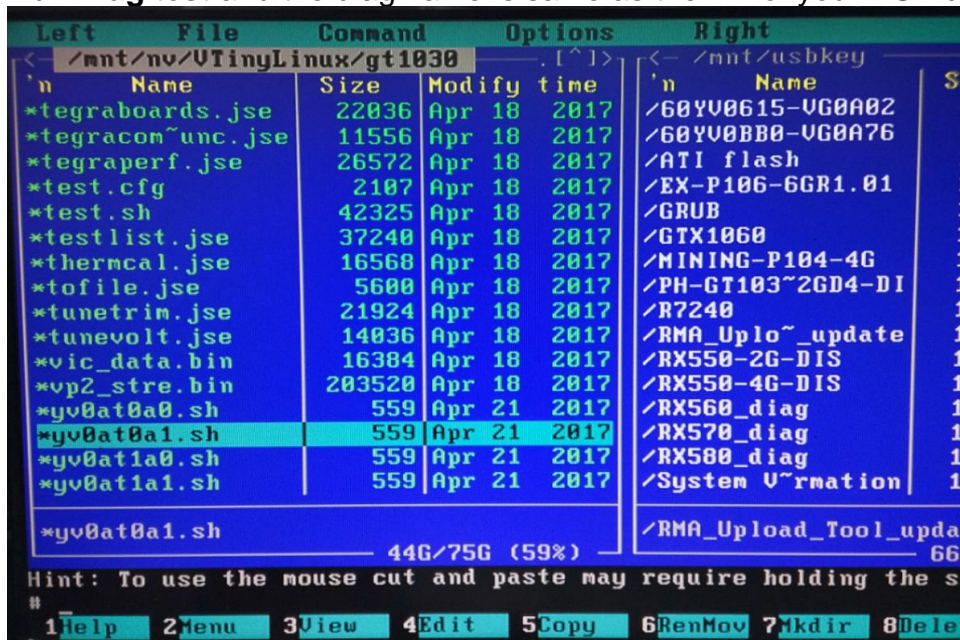
6.4.5 After Diag test is finished, run **RMAInfo** and the test result will be sent to server.

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 800W)**		**local**	**1**	
5	**Intel CPU Intel(R) i5 6400 CPU**		**local**	**1**	
6	**Heat sink + FAN**		**local**	**1**	

7	DDR4 2400 4G		local	4		
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	HDMI extend cable (Buying a local HDMI cable by yourself)		local	1		
12	ASUS Prime B250-PLUS MB		local	1		
13	Display port cable (Buying a local Display port cable by yourself)		local	1		