# R9280X Standard Operation Procedure Revision: 1.05

Doc. No:

Date: Apr. 16. 2014

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Rev. Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00	First Release	GRMA	Jory_yuan	Sep.4.2013
1.01	Add new PCBA(YV04Y1-A01)	GRMA	Jory_yuan	Sep.4.2013
1.02	Add new P/N(YV0500-A02)	GRMA	Jory_yuan	Aug.11.2013
1.03	Add new P/N(YV0501-A02)	GRMA	Jory_yuan	Aug.11.2013
1.04	Add new PCBA(YV0500-A13)	GRMA	Jory_yuan	Mar.26.2014
1.05	Add new PCBA(YV0501-A13)	GRMA	Jory_yuan	Apr.16.2014

Authorize by	Review by	Originator By	Jory

Form No: T2-009-01 Rev.01

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### 1.Objectives

Create test procedure.

### 2.Scope

Model: R9280X

PN: YV04Y0(A01)YV04Y1(A01)YV0500(A02&A13)YV0501(A02&A13)

#### 3.Test Item

- 3.1 Diagnostic test in 12\_04\_64-bit Linux
- 3.2 3DMark06(contain HDMI test)
- 3.3 Temperature test
- 3.4 Fan Test

#### **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: 1GB for a single GPU test station; please add an additional 512MB of system memory for each additional GPU used for the test configuration
- 4. R9280X Test Program in 64-bit Linux system.

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### **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).

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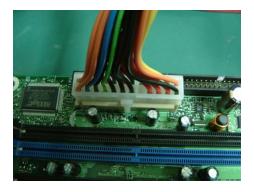
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#### **6.2** Fixture connect

- 6.2.1 Install Intel P7 CPU & CPU Fan.
- 6.2.2 Install DDR3 Memory to DIMM1~4. (a minimum memory of 2GB for Linux test)
- 6.2.3 Plug USB Mouse and PS/2 Keyboard into MB.
- 6.2.4 Plug VGA Card R9280X 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



- 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.



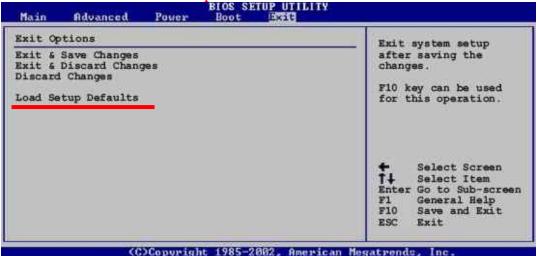
- 6.3.1.2 Press Power Switch then turn on power button.
- 6.3.1.3 Press "Del" to enter CMOS setup menu while boot screen is displaying.

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EXIT -> Load Setup Defaults.



6.3.1.4 Run test program in 64-bit linux system.

 $Path: R9280X \setminus yv04y0a0.sh \ or \ ./yv04y1a0.sh \ or \ ./yv0500a0.sh \ or \ ./yv0501a0.sh \ or \ yv0500a1.sh \ or \ yv0501a1.sh$ 

6.3.1.5 Memory test

If you want to test memory, please run ./tserver -boardtest=memfa or ./memtest.sh Path:R9280X\

6.3.1.6 BIOS Version

If you want to see the version of bios, please run ./atiflash -ai 0 or ./biosinfo. Path:R9280X\

6.3.1.7 BIOS flash

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

Path:R9280X\

Command:./atiflash -p -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.

6.3.1.8 FAN Test

It has been included in the FCT test.

6.3.2 If test OK, please NTF test.

### 7.Appendix

NO#	Equipment Description	ASUS Part#	Supplier	Quantity	Remarks
1	Dell 30 inches (3008WFP) (Buying a local LCD by yourself)			1	Posts

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2	USB MOUSE			1	
3	PS/2 KEYBOARD			1	
4	ATX POWER SUPPLY(a minimum power of 500W)			1	A STATE OF THE STA
5	Intel CPU Intel(R) Core(TM)2 CPU		local	1	E11200
6	Heat sink + FAN	22-240000160		1	
7	DDR3 1333 2G	20-TT2605618	local	4	
8	TEST HDD			1	
9	SATA HDD Cable	14-000107070	ASUS	1	
10	PCIEX16 VGA CARD			1	
11	Dual link DVI cable (Buying a local DVI cable by yourself)			1	O
12	HDMI extend cable (Buying a local HDMI cable by yourself)			1	O
13	P7H55-M/USB3 MB	80- MIBBKA-*		1	
14	Display port cable (Buying a local Display port cable by yourself)			1	
15	Mini Display port to HDMI cable (Buying a local Mini Display port to HDMI cable by yourself)			1	
16	D-SUB extend cable (Buying a local D-SUB cable by yourself)			1	