Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First Release	GRMA	Jory_yuan	Sep.12.2013
1.01		Add new P/N(PA05X0-A01)	GRMA	Jory_yuan	Nov.20.2013
1.02		Add new P/N(YV04T1-A01)	GRMA	Jory_yuan	Dec.25.2013
1.03		Add new PCBA(YV04T0-A23)	GRMA	Jory_yuan	Jan.15.2014
1.04		Add new P/N(PA05X1-A01)	GRMA	Jory_yuan	Feb.12.2014
1.05		Add new PCBA(PA05X1-A11)	GRMA	Jory_yuan	Feb.12.2014
1.06		Add new PCBA(PA05X0-A12)	GRMA	Jory_yuan	Feb.12.2014
1.07		Add new PCBA(PA05X0-A22)	GRMA	Jory_yuan	Feb.12.2014
1.08		Add new P/N(YV04T3-A01)	GRMA	Jory_yuan	Feb.26.2014
1.09		Add new P/N(YV04T0-B01)	GRMA	Jory_yuan	Mar.12.2014
1.10		Add new PCBA(YV04T0-B11)	GRMA	Jory_yuan	Mar.12.2014
1.11		Add new P/N(YV04T2-A03)	GRMA	Jory_yuan	Mar.12.2014
1.12		Add new PCBA(YV04T0-A33)	GRMA	Jory_yuan	Mar.7.2014
1.13		Add new P/N(YV0680-A05)	GRMA	Jory_yuan	Mar.7.2014
1.14		Add new PCBA(YV04T1-A11)	GRMA	Jory_yuan	Jun.4.2014
1.15		Add new PCBA(YV04T2-A13)	GRMA	Jory_yuan	Jun.4.2014
1.16		Add new PCBA(YV04T2-A23)	GRMA	Jory_yuan	Jul.24.2014
1.17		Add new PN(YV07V0-A02)	GTSD	Mao Lu	Mar.17.2015
1.18		Add new PCBA(YV04T0-A43)	GTSD	Mao Lu	Jun.10.2015
1.19		Add new PCBA(YV0680-A16)	GTSD	Mao Lu	Jun.10.2015
1.20		Add new PCBA(YV04T3-A12)	GTSD	Mao Lu	Jun.10.2015
1.21		Add new PN(YV0680-A26)	GRTD	Maico Zhang	Nov.29.2016
1.22		Add new PN(YV04T2-A43)	GRTD	Maico Zhang	Nov.29.2016
1.23		Add new PN(YV0BG0-A03)	GRTD	Maico Zhang	Sep.22.2017
1.24		Add new PN(YV0BG1-A03)	GRTD	Maico Zhang	Oct.5.2017
1.25		Add new PCBA(YV0BG0-A15)	GRTD	Maico Zhang	Dec.20.2017
1.26		Add new PN(YV04T2-A53)	GRTD	Maico Zhang	Jan.18.2018
1.27		Add new PCBA(YV04T2-A63)	GRTD	Maico Zhang	Feb.8.2018
1.28		Add new PCBA(YV04T0-A64)	GRTD	Maico Zhang	Feb.8.2018
1.29		Add new PN(YV04T0-A74)	GRTD	Maico Zhang	Mar.15.2018
1.30		Add new PCBA(YV0BG3-A01)	GRTD	Maico Zhang	Apr.20.2018
1.31		Add new PCBA(YV0BG2-A01)	GRTD	Maico Zhang	Apr.20.2018
1.32		Add new PCBA(YV04T5-A01)	GRTD	Maico Zhang	Apr.20.2018

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

1.33		Add new PCBA(YV04T6-A01)	GRTD	Maico Zhang	Apr.20.2018
1.34		Add new PN(YV04T0-A84)	GRTD	Maico Zhang	Aug.15.2018
1.35		Add new PCBA(YV04T0-A94)	GRTD	Maico Zhang	Oct.8.2018
1.36		Add new PN(YV0BG1-A15)	GRTD	Maico Zhang	Apr.21.2020

1.Objectives

Create test procedure.

2.Scope

Model: R7240

PN: YV04T0(A02&A23&A33&B01&B11)PA05X0(A01&A12&A22)
YV04T1(A01&A11)PA05X1(A01&A11)YV04T3(A01)YV04T2(A03&A13&A23)
YV0680(A05)YV07V0(A02)YV04T0(A43&A63&A74)YV0680(A16)YV04T3(A12)
YV0680(A26) YV04T2(A43) YV0BG0(A03) YV0BG1(A03) YV0BG0(A15)
YV04T2(A53&A63) YV0BG2(A01) YV0BG3(A01) YV04T5(A01) YV04T6(A01)
YV04T0(A84&A94) YV0BG1(A15)

3.Test Item

3.1 Diagnostic test in 14_04_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: 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. R7240 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 PS/2 Keyboard into MB.

6.2.4 Plug VGA Card R7240 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.

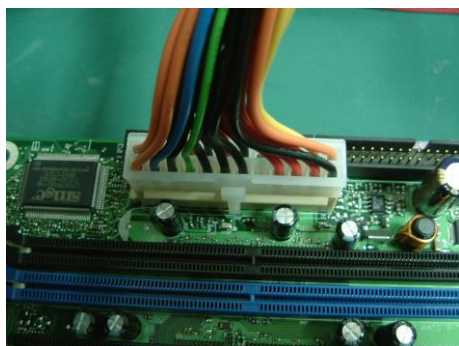(6 PIN of Power supply to 6 PIN of VGA card)

(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 cable into CON12V.

6.2.8 Plug ATX Power on Power 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

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```

6.3.1.4 Run test program in 64-bit linux system.

Path: r7240\ yv04t0a0.sh or yv04t1a0.sh or yv04t0a2.sh or yv04t0b0.sh or yv04t0b1.sh or yv04t2a0.sh or yv0680a0.sh or yv04t0a3.sh or yv04t1a1.sh or yv04t2a1.sh or yv04t2a2.sh or yv04t0a4.sh or yv0680a1.sh or yv04t0a6.sh

Path: r72401\ pa05x0a0.sh or pa05x0a1.sh or pa05x0a2.sh or pa05x1a0.sh or pa05x0a1.sh

Path: r72402\ yv04t3a0.sh or yv04t3a1.sh

Path: r72403\ yv07v0a0.sh

Path: r72404\ yv0680a2

Path: r72405\ yv04t2a4

Path: r72406\ yv0bg0a0 or yv0bg0a1 or yv0bg3a0

Path: r72407\ yv0bg1a0 or yv0bg2a0

Path: r72408\ yv04t2a5 or yv04t2a6 or yv04t5a0

Path: r72409\ yv04t0a7 or yv04t6a0

Path: r7240a\ yv04t0a8 or yv04t0a9

Path: r7240b\ yv0bg1a1

6.3.1.5 Memory test

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

Path:R7240\

6.3.1.6 BIOS Version

If you want to see the version of bios,please run ./atiflash –ai 0 or ./biosinfo.

Path:R7240\

6.3.1.7 BIOS flash

Please use the following command to flash bios and notice the size of character.
Path:R7240\
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.

6.4 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 500W)**		**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		Local	1	
12	Dual link DVI cable (Buying a local DVI cable by yourself)		local	1	
13	Display port cable (Buying a local Display port cable by yourself)		local	1	
14	D-SUB extend cable (Buying a local D-SUB cable by yourself)		local	1	