

ASUSTeK COMPUTER INC.	RX460 Standard Operation Procedure	Doc. No:	
		Date: Nov.21.2016	
		Revision:1.17	
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Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First Release	GRTD	Maico_Zhang	Jun.28.2016
1.01		Add new PCBA(YV09L0-B01)	GRTD	Maico_Zhang	Aug.23.2016
1.02		Add new PN(YV09L1-A01)	GRTD	Maico_Zhang	Aug.23.2016
1.03		Add new PCBA(YV09L1-B01)	GRTD	Maico_Zhang	Aug.23.2016
1.04		Add new PCBA(YV09L1-C01)	GRTD	Maico_Zhang	Aug.23.2016
1.05		Add new PN(YV09L2-A01)	GRTD	Maico_Zhang	Aug.23.2016
1.06		Add new PCBA(YV09L2-B01)	GRTD	Maico_Zhang	Aug.23.2016
1.07		Add new PN(YV09L3-A01)	GRTD	Maico_Zhang	Aug.23.2016
1.08		Add new PCBA(YV09L3-C01)	GRTD	Maico_Zhang	Aug.23.2016
1.09		Add new PCBA(YV09L3-B01)	GRTD	Maico_Zhang	Aug.23.2016
1.10		Add new PCBA(YV09L0-C01)	GRTD	Maico_Zhang	Sep.14.2016
1.11		Add new PCBA(YV09L2-C01)	GRTD	Maico_Zhang	Sep.14.2016
1.12		Add new PN(YV09L0-C11)	GRTD	Maico_Zhang	Sep.23.2016
1.13		Add new PN(YV09L2-C11)	GRTD	Maico_Zhang	Sep.23.2016
1.14		Add new PN(YV09L3-C15)	GRTD	Maico_Zhang	Sep.23.2016
1.15		Add new PN(YV09L1-C15)	GRTD	Maico_Zhang	Nov.21.2016
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1.17		Add new PN(YV09L1-C25)	GRTD	Maico_Zhang	Nov.21.2016

Authorize by		Review by		Originator By	Maico
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1.Objectives

Create test procedure.

2.Scope

Model: RX460

PN:YV09L0(A01) YV09L0(B01)YV09L1(A01) YV09L1(B01) YV09L1(C01) YV09L2(A01)
YV09L2(B01) YV09L3(A01) YV09L3(C01) YV09L3(B01) YV09L0(C01) YV09L2(C01)
YV09L0(C11) YV09L2(C11) YV09L3(C15) YV09L1(C15) YV09L3(C25) YV09L1(C25)

3.Test Item

3.1 Diagnostic test in 14_04_64-bit Linux

4.Relevant Document

None.

5.Definition :

1. RX460 Test Program in 64-bit Linux system.

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6. Operation Procedures:

6.1 Attention

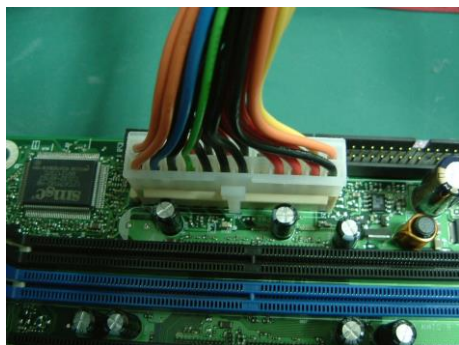
- 6.1.1 To avoid damaging devices or M/B, please turn off A/C power then unplug VGA card.
- 6.1.2 While unplugging the card, do it in upright direction to avoid damaging slot & golden finger.
- 6.1.3 If any problem happens, please inform test supervisor. Base on ATX power specification, +5V standby voltage 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).**

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 RX460 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.



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:rx460\ yv0910a0 or yv0910b0 or yv0910c0
 Path:rx4601\yv0911a0 or yv0911b0 or yv0911c0
 Path:rx4602\yv0912a0 or yv0912b0 or yv0912c0
 Path:rx4603\yv0913a0 or yv0913b0 or yv0913c0
 Path:rx4604\ yv0910c1
 Path:rx4605\ yv0912c1
 Path:rx4606\ yv0913c1
 Path:rx4607\ yv0911c2
 Path:rx4608\ yv0913c2
 Path:rx4609\ yv0911c1

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6.3.1.5 Memory test

If you want to test memory, please run `./tserver -boardtest=memfa` or `./memtest.sh`
Path:rx460\

6.3.1.6 BIOS Version

If you want to see the version of bios,please run `./atiflash -ai 0` or `./biosinfo`.
Path:rx460\

6.3.1.7 BIOS flash

Please use the following command to flash bios and notice the size of character.
Path:rx460\

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:



6.4.2 Edit **RMA_Config** file:

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First line confirms the address of local sever, Second line is Tester ID.
The **RMA_Config** only need modify one time.

```

CN
1150231

-----
# 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 ----

Server Select : AM Server .

Please 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/UTinyLinux/gt1030	[^]	<	/mnt/usbkey
'n	Name	Size	Modify time	'n Name \$
*	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
*	thermal.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.

```
=====
=          ASUS VGA RMA Infomation          =
=          Rev2018.02.27                    =
=====

Tester ID = 11502YQ
Addr = AM Server .
Problem Code : MNTF01
NV Test Result = PASS
NV Error Code = 000000000000

Update Data To ASUS VGA Server.....

Update Data: HAC0YZZ68879 PASS 06/03/2018 08:51:59 11502YQ

Please Wait For Ther Return Status:

Result:

SUCCESS
```

6.5 If test OK, please NTF test.

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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	