

ASUSTeK COMPUTER INC.	GTX960 Standard Operation Procedure	Doc. No:	
		Date: Apr.15.2016 Revision:1.82	
		Page: 12	Grade:

0Rev .	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.66		Add new PCBA(YV07N3-B02)	GRTD	Xiaoming Lu	Mar.18.1016
1.67		Add new PCBA(YV07N2-B01)	GRTD	Xiaoming Lu	Mar.18.1016
1.68		Add new PCBA(YV07NB-A02)	GRTD	Xiaoming Lu	Mar.18.1016
1.69		Add new PCBA(YV07N8-B12)	GRTD	Xiaoming Lu	Mar.25.1016
1.70		Add new PCBA(YV07N9-B12)	GRTD	Xiaoming Lu	Mar.25.1016
1.71		Add new PCBA(YV08B3-A35)	GRTD	Xiaoming Lu	Mar.25.1016
1.72		Add new PCBA(YV07ND-B01)	GRTD	Xiaoming Lu	Mar.25.1016
1.73		Add new PCBA(YV07NE-A12)	GRTD	Xiaoming Lu	Apr.1.1016
1.74		Add new PCBA(YV07NA-A12)	GRTD	Xiaoming Lu	Apr.1.1016
1.75		Add new PCBA(YV07N1-B12)	GRTD	Xiaoming Lu	Apr.8.1016
1.76		Add new PCBA(YV07N0-C32)	GRTD	Xiaoming Lu	Apr.15.1016
1.77		Add new PCBA(YV07N2-B12)	GRTD	Xiaoming Lu	Apr.15.1016
1.78		Add new PCBA(YV07N3-B12)	GRTD	Xiaoming Lu	Apr.15.1016
1.79		Add new PCBA(YV07N7-A15)	GRTD	Xiaoming Lu	Apr.15.1016
1.80		Add new PCBA(YV07NC-A13)	GRTD	Xiaoming Lu	Apr.15.1016
1.81		Add new PCBA(YV08B5-A14)	GRTD	Xiaoming Lu	Apr.15.1016
1.82		Add new PCBA(YV07N0-A5E)	GRTD	Xiaoming Lu	Apr.15.1016

Authorize by		Review by		Originator By	Mao
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1.Objectives

Create test procedure.

2.Scope

Model: GTX960

PN: YV07N3(B02) YV07N2(B01) YV07NB(B02) YV07N8(B12) YV07N9(B12)
YV08B3(A35) YV07ND(B01) YV07NE(A12) YV07NA(A12) YV07N1(B12)
YV07N0(C23) YV07N2(B12) YV07N3(B12) YV07N7(A15) YV07NC(A13)
YV08B5(A24) YV07N0(A5E)

3.Test Item

3.1 Diagnostic test in Tiny 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.

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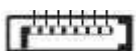
6. Operation Procedures:

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 7 test environment by yourself).

6.2 Fixture connect

- 6.2.1 Install Intel CPU & CPU Fan.
- 6.2.2 Install DDR3 Memory to DIMM1~4..
- 6.2.3 Plug USB Mouse and PS/2 Keyboard into MB.
- 6.2.4 Plug VGA Card GTX960 into PCIEX16.
- 6.2.5 Connect power con of VGA card & Power supply via bundled power cable.
- 6.2.6 Connect SATA HDD with SATA CON.

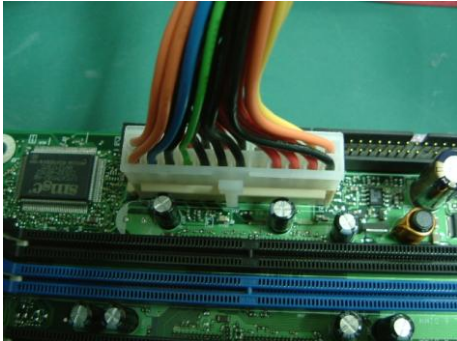


SATA1



6.2.7 Plug 4PIN 12V (1200W) power cable into CON12V.

6.2.8 Plug ATX Power (1200W) on Power Connector.



6.3 Diagnostic test in Tiny Linux.

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



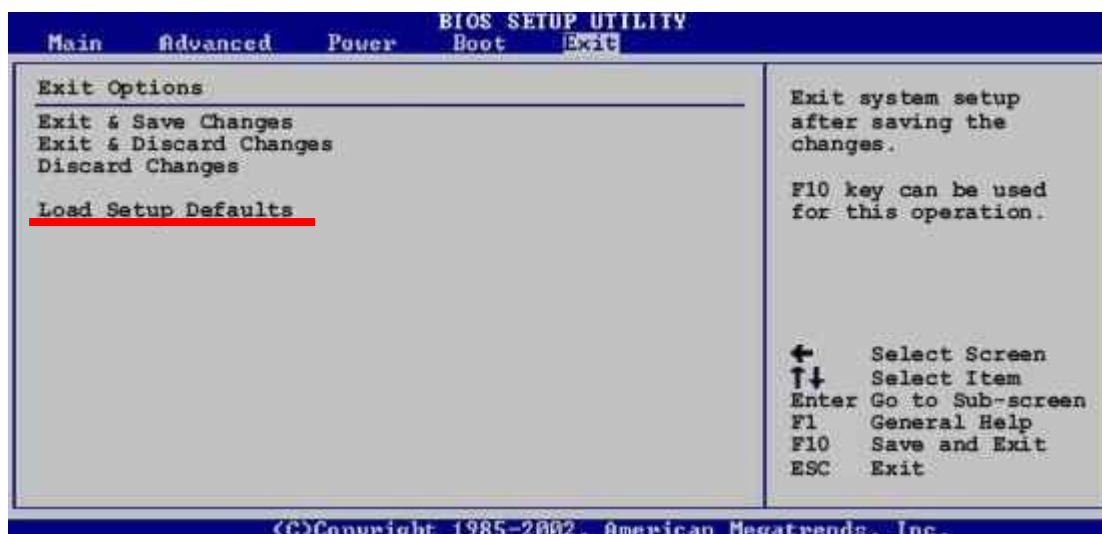
Dual link DVI cable



6.3.2 Press Power Switch then turn on power button.

6.3.3 Press "Del" to enter CMOS setup menu while boot screen is displaying.

EXIT -> Load Setup Defaults.



6.3.4 System will reboot, select Linux to run test program.

Path: GTX960r\yv07n3b0.sh or yv07n2b0.sh or yv07nbb0.sh or yv07ndb0.sh or yv07n2b1.sh or yv07n3b1.sh or yv07n7a1.sh or yv07ncal.sh

Path: GTX960s\yv07n8b1.sh or yv07n9b1.sh or yv07n1b1.sh

Path: GTX960t\yv08b3a3.sh

Path: GTX960u\yv07naa1.sh or yv07nea1.sh

Path: GTX960v\yv07n0c2.sh or yv07n0a5.sh

Path: GTX960w\yv08b5a2.sh

Run the test program refer to the prompt.

6.3.5 Memory test

If you want to test memory, please run **./mats -e xx**

Where, -c xx----- only xx% of frame buffer is detected.

Path: GTX960r\

Path: GTX960s\

Path: GTX960t\

Path: GTX960u\

Path: GTX960v\

Path: GTX960w\

6.3.7 BIOS flash

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

Path: Path: GTX960\

Command: **nvflash xxx.rom -6 -A**

Notice:

If you can not flash bios because of the bios locked, please use **nvflash.exe /r** or **nvflash.exe -r** to unlock bios. And then, please use **nvflash.exe /w** or **nvflash.exe -w** to lock bios after updating latest bios.

6.3.8 Please connect LCD monitor & card's the other DVI CON via a DVI cable.

(Please refer to step 6.3.2&6.3.4)
















Dual link DVI cable



6.3.9 If test OK, NTF test.

7 Appendix

NO#	Equipment Description	ASUS Part#	Supplier	Quantity	Remarks
1	SAMSUNG 2232MW			1	
2	USB MOUSE			1	
3	PS/2 KEYBOARD			1	
4	ATX POWER SUPPLY(a minimum power of 500W)			1	
5	Intel CPU Intel(R) Core(TM)2 CPU		local	1	
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	
12	HDMI extend cable (Buying a local HDMI cable by yourself)			1	
13	P7H55-M/USB3 MB	80- MIBBKA-*		1	
14	TV extend cable (Buying a local TV cable by yourself)			1	
15	LCD “Y” Cable	14-010230000		1	
16	HDMI to MINI HDMI cable (Buying a local cable by yourself)			1	