ASUSTeK COMPUTER INC.	GTX680 Buy and sell Standard Operation Procedure	Doc. No:
		Date:Mar. 19, 2012 Revision:1.00
		Page: 10 **Grade:**

Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First Release	GRMA	Ariel_wang	Mar.19,2012

Authorize by		Review by		Originator By	Ariel

1.Objectives

Create test procedure.

2.Scope

Model: GTX680(Buy and Sell)

PN: YV02H0(A01)

3.Test Item

3.1 Diagnostic test in 64-bit Tiny Linux

3.2 3DMark06(contain HDMI test)

3.3 Temperature 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. GTX680 Test Program in 64-bit Tiny Linux system.
5. **You must flash BIOS on DOS 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 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 GTX680 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.
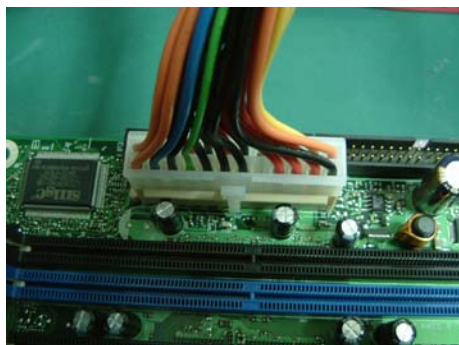
(6 PIN of Power supply to 6 PIN of VGA card)

(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.
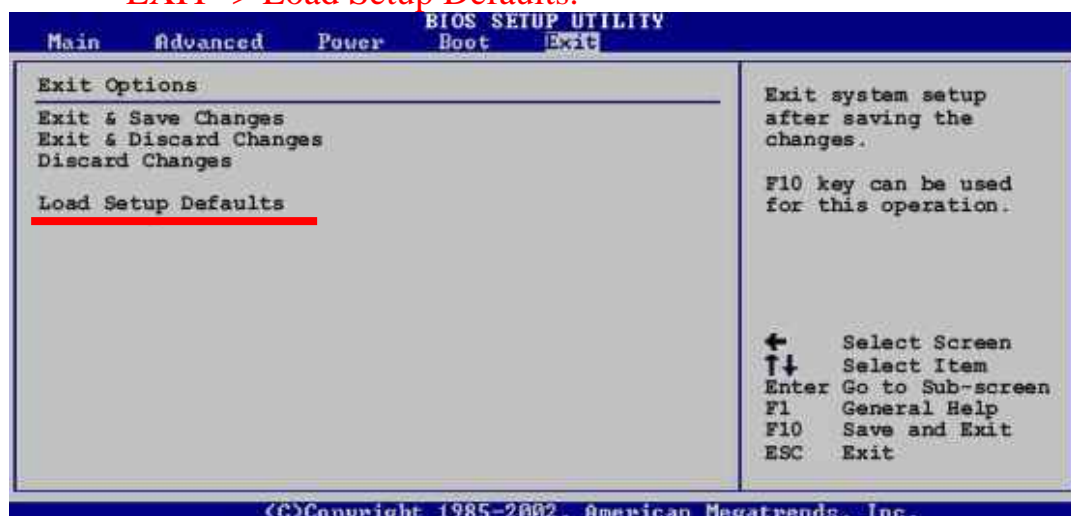

Dual link DVI cable

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 Tiny linux system.

Please download TinyLinux11.12.rar from sip and copy the all file and folder of TinyLinux11.12 to DOS system root directory, then run dos2lin.bat goto Tinylinux system, Path:c:/dos2lin/dos2lin.bat

Path:tiny/mods/gtx680b\yv02h0a0.sh

Please enter into the file of gtx680b enter the following command: cd ./gtx680b

Then,please run ./yv02h0a0.sh

6.3.5 Memory test

If you want to test memory, please run ./mats.

Path:gtx680b\

6.3.6 BIOS flash(you must flash BIOS on DOS system)

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

Path: VBAT\gtx680b\BIOS

Command:nvflash xxx.rom -4 -5 -6 -A -y

Notice:

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

6.3.7 After finish linux testing, please enter Windows 7 environment to test 3DMark.

6.3.2 3DMark test(contain HDMI test)

6.3.2.1 Please install 3DMark program by yourself.

6.3.2.2 Please connect VGA card to LCD via HDMI cable or MINI Display Port to HDMI cable.

MINI Display Port to HDMI cable

MINI Display Port CON(*2)

HDMI cable
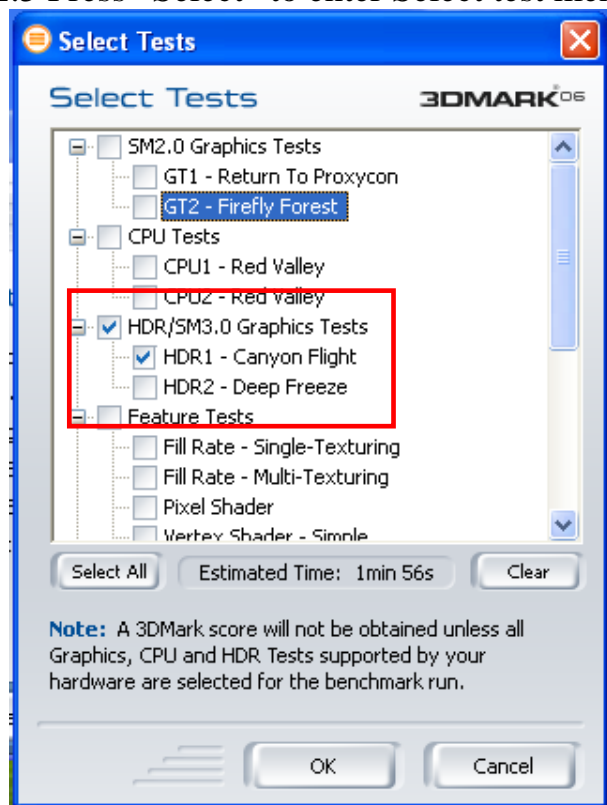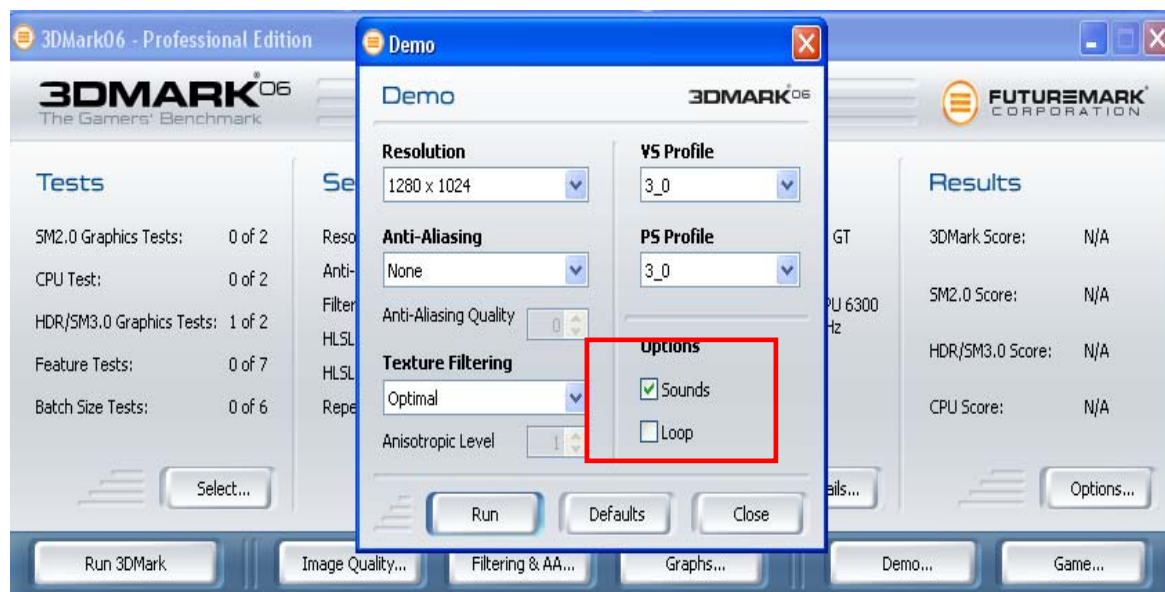
HDMI Port

6.3.2.3 Please install VGA card driver in Windows(You must use individual driver of this card).

6.3.2.4 Please run 3DMark06 base on this card (please test 1 cycle).

6.3.2.5 Press "Select" to enter Select test menu. You can choose "HDR1" for default setting.

6.3.2.6 Press "Demo" to enter Demo menu. You can choose "Sounds" for default setting.

6.3.2.7 Please pay attention to check if there is flickering, discolor, crash and so on. If there's no problem, it can be judged OK!

6.3.2.8 Please listen to voice carefully to check whether it outputs sounds. If not, HDMI test fail.
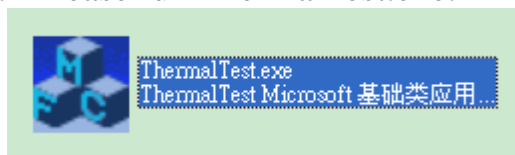

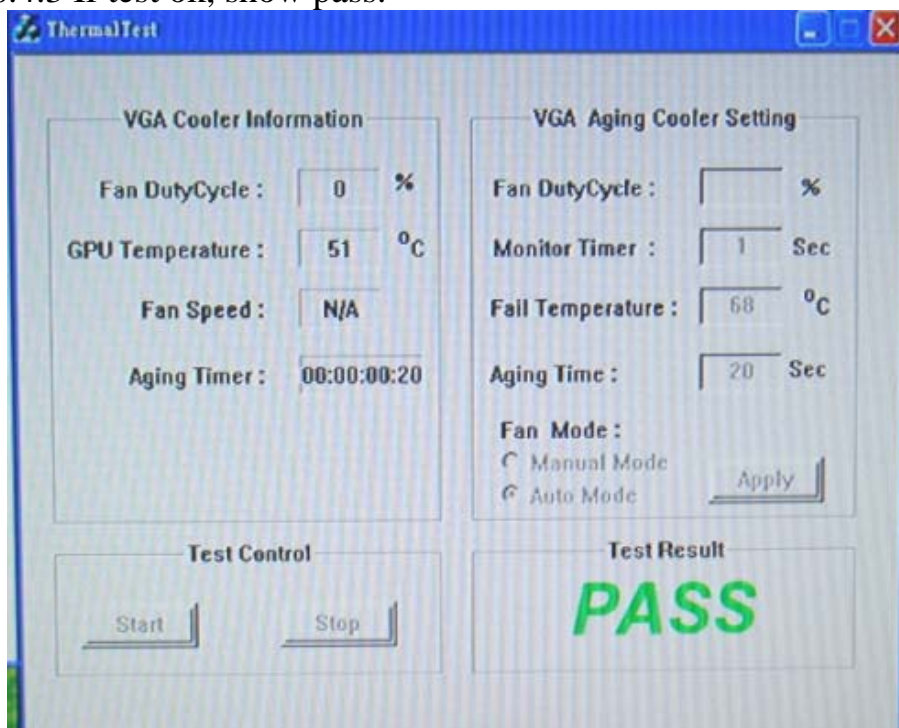6. 3.2.9 If test OK, please test temperature test.

6.4 Temperature test

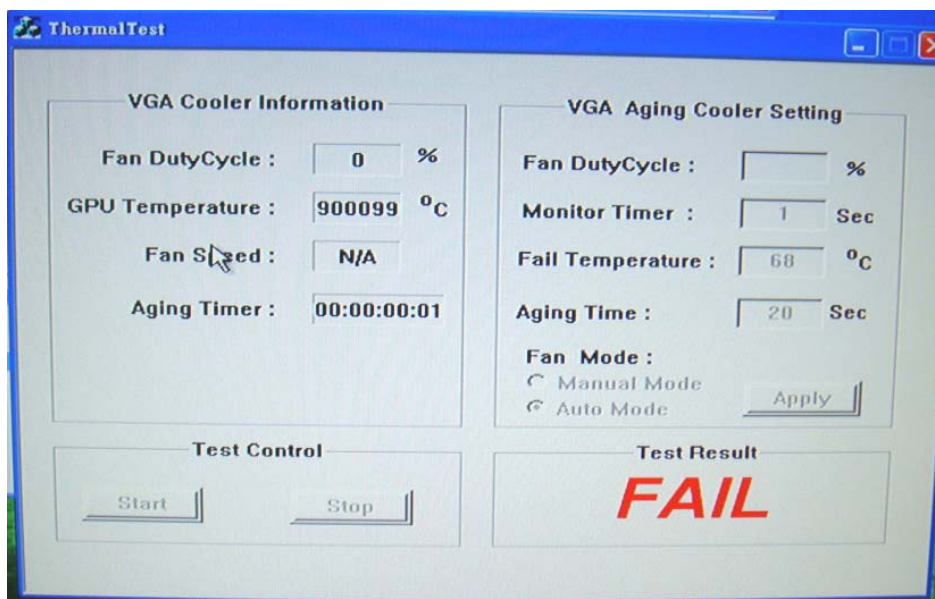6.4.1 Please copy Thermaltool(1.0.05) to Windows by yourself.

6.4.2 Please run ThermalTest.exe.

6.4.3 If test ok, show pass.

6.4.4 If test fail, show fail.

6.4.5 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	
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	**Mini Display port to HDMI cable (Buying a local Mini Display port to HDMI cable by yourself)**			1	