

ASUSTeK COMPUTER INC.	MARIX GTX 580 Standard Operation Procedure	Doc. No:	
		Date: Apr. 26. 2011 Revision:1.01	
		Page: 11	Grade:

0Rev .	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First release	GRMA	Ariel_wang	Apr.26.2011
1.01		Add new P/N(C1CQT0-A01)	GRMA	Ariel_wang	Apr.26.2011

Authorize by		Review by		Originator By	Ariel
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ASUSTeK COMPUTER INC	MARIX GTX 580 Standard Operation Procedure	Doc. No:
		Date: Apr. 26. 2011 Rev. : 1.01 Page: 1

1.Objectives

Create test procedure.

2.Scope

Model: MARIX GTX 580

PN: C1CQU0 (A01)C1CQT0(A01)

3.Test Item

3.1 Diagnostic test in DOS

3.2 3DMark06(**contain HDMI&DVI 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. Please use P5E platform to update MCU Firmware in window xp.

Please use Nvidia platform (**P5Q**) to test in DOS.

ASUSTeK COMPUTER INC	MARIX GTX 580 Standard Operation Procedure	Doc. No:
		Date: Apr. 26. 2011 Rev. : 1.01 Page: 2

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 P5 CPU & CPU Fan.

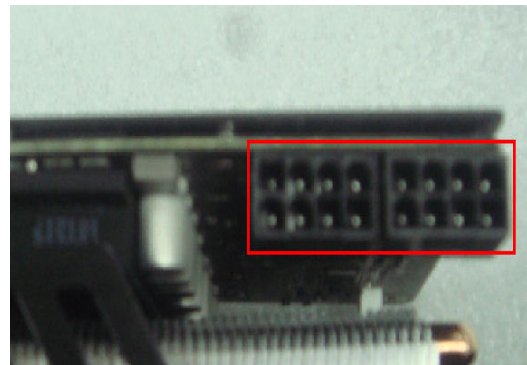
6.2.2 Install DDR2 667/800 2GB Memory to DIMM1~4.

6.2.3 Plug PS2 Mouse and PS/2 Keyboard into P5E(MBB7X0) Motherboard.

6.2.4 Plug VGA Card MARIX GTX 580 into PCIEX16.

6.2.5 If this card has 8 PIN of Power supply, please connect power con of VGA card & Power supply via bundled power cable.

(8 PIN of Power supply to 8 PIN of VGA card)

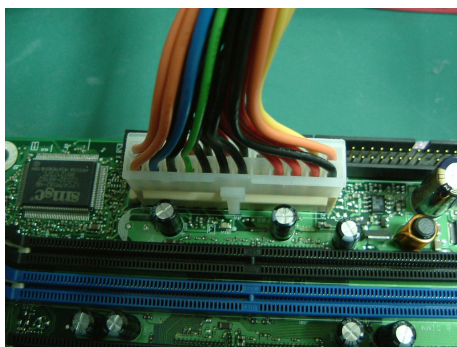


6.2.6 Connect SATA HDD(windows test environment&VGA driver) with SATA CON.

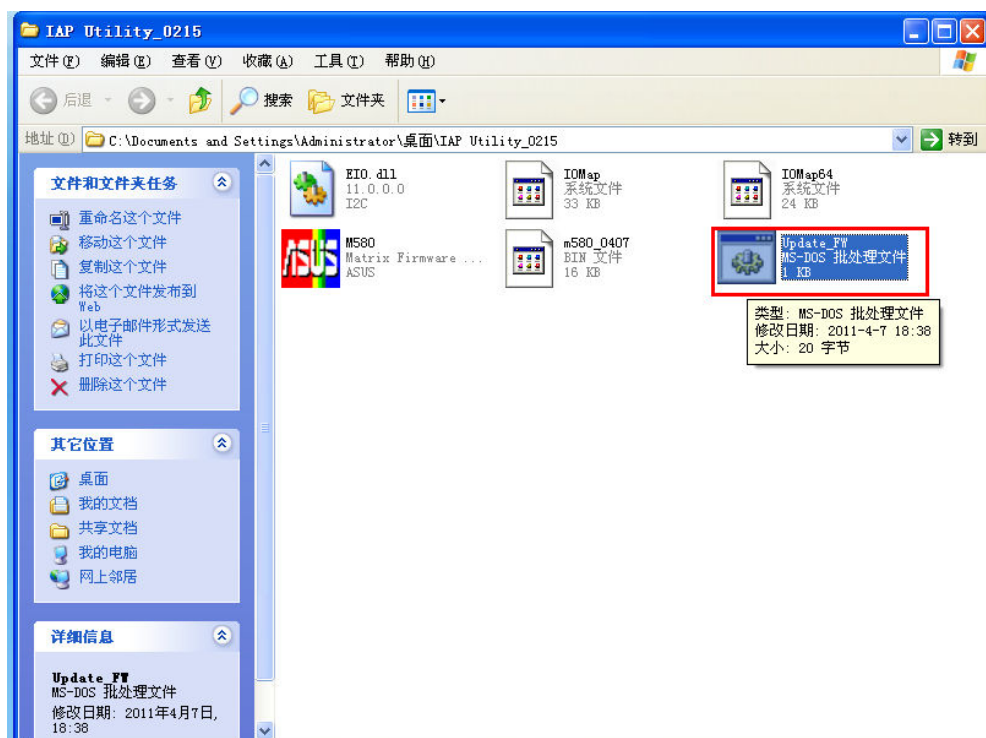


6.2.7 Plug 4PIN 12V (1200W) power cable into CON12V.

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



6.2.9 Copy folder of IAP Utility_0215 to desktop of windows XP, and run Update_FW.bat as following



It shows the below pic, "Firmware updated Success", then goto DOS Diagnostic test.

```
C:\WINDOWS\system32\cmd.exe

C:\Documents and Settings\Administrator\桌面\IAP Utility_0215>m580 m580_0407.bin

=== Matrix UGA Firmware Update Utility v1.00 ===
Firmware sector 1 updating.... Success
Firmware sector 2 updating.... Success
Firmware sector 3 updating.... Success
Firmware sector 4 updating.... Success
*** Firmware updated Success ***

[ Re-Start the Computer ]
```

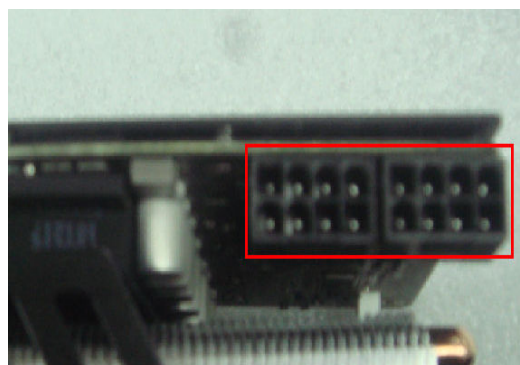
6.3 Diagnostic test in DOS

6.3.1 Plug PS2 Mouse and PS/2 Keyboard into **P5Q** Motherboard.

6.3.2 Plug VGA Card MARIX GTX 580 into PCIEX16.

6.3.3 If this card has 8 PIN of Power supply, please connect power con of VGA card & Power supply via bundled power cable.

(8 PIN of Power supply to 8 PIN of VGA card)



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



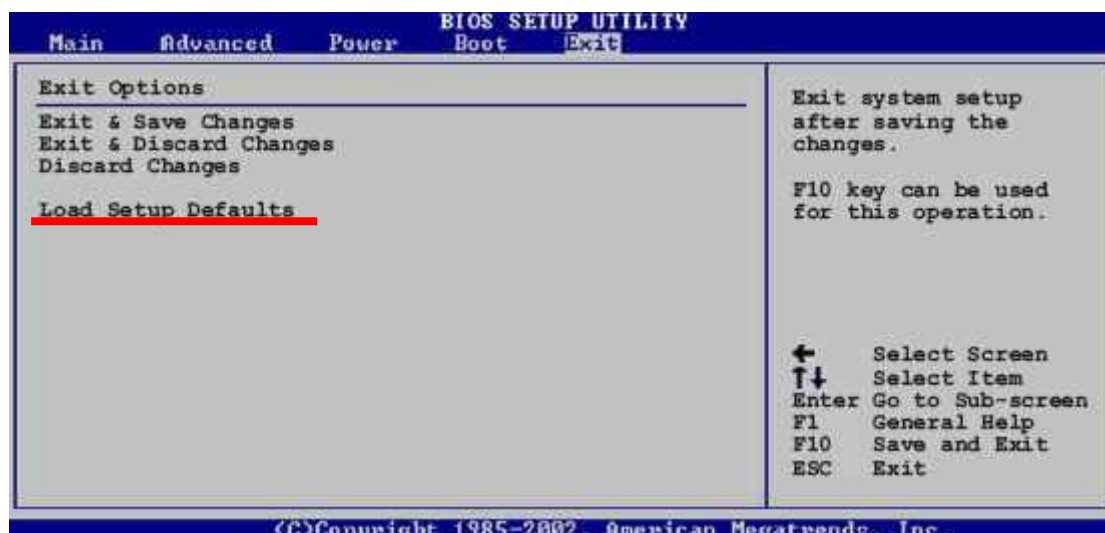
Dual link DVI cable



6.3.5 Press Power Switch then turn on power button.

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

EXIT -> Load Setup Defaults.



ASUSTeK COMPUTER INC	MARIX GTX 580 Standard Operation Procedure	Doc. No:
		Date: Apr. 26. 2011
		Rev. : 1.01 Page: 6

6.3.7 System will reboot, select DOS to run test program.

Path: VBAT\MAGTX580\BATCH\

Run the test program refer to the prompt.

6.3.8 Memory test

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

Path: VBAT\MAGTX580\0265KP5

6.3.9 BIOS flash

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

Path: VBAT\MAGTX580\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.

6.3.10 After finish DOS testing, please enter Windows environment to test 3DMark.

ASUSTeK COMPUTER INC	MARIX GTX 580 Standard Operation Procedure	Doc. No: Date: Apr. 26. 2011 Rev. : 1.01 Page: 7
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6.4 3DMark test(contain HDMI test)

6.4.1 Please install 3DMark program by yourself.

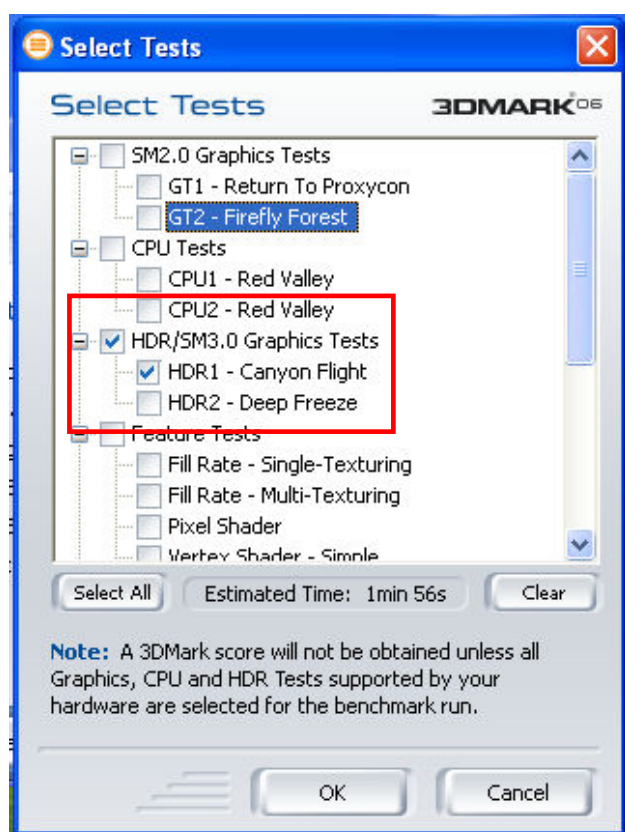
6.4.2 Please connect VGA card to LCD via HDMI cable.



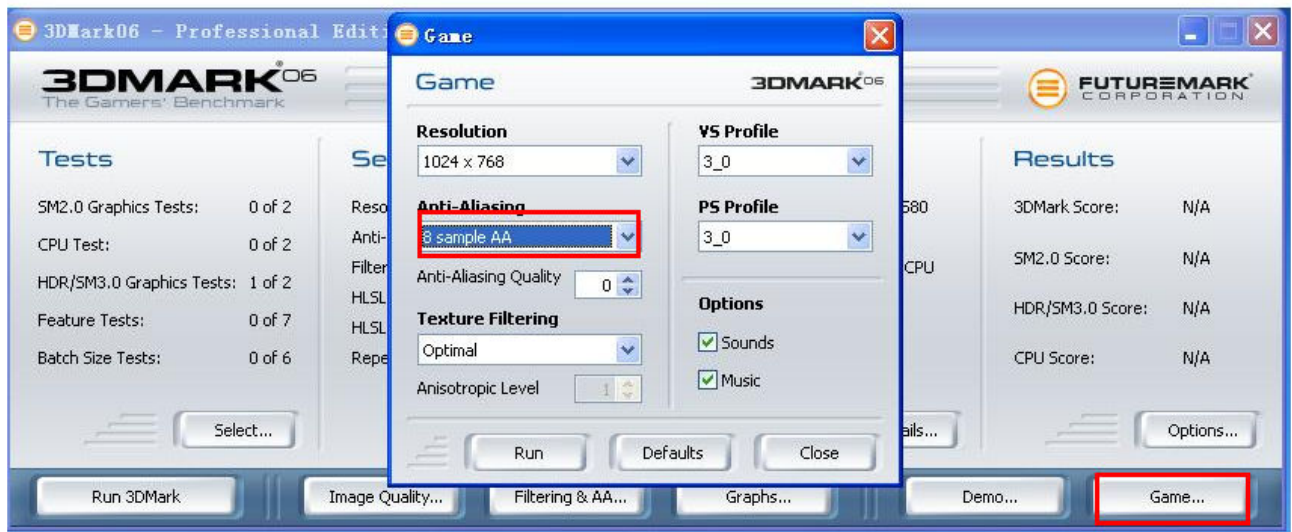
6.4.3 Please install VGA card driver in Windows(You must use individual driver of this card).

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

6.4.5 Press “Select” to enter Select test menu. You can choose “HDR1” for default setting.



6.4.6 Press “Game” to enter Demo menu. You can choose “8 Sample AA” of Anti-aliasing for default setting.



6.4.7 Please pay attention to check if there is flickering, discolor, crash and so on.

If there's no problem, it can be judged OK!

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



6.4.9 If test OK, please test **Display port**.

6.4.10 Connect VGA card to LCD via Display cable test HDMI function.

(Please refer to step 6.4.4&6.4.5&6.4.6&6.4.7&6.4.8)



DISPLAY CON

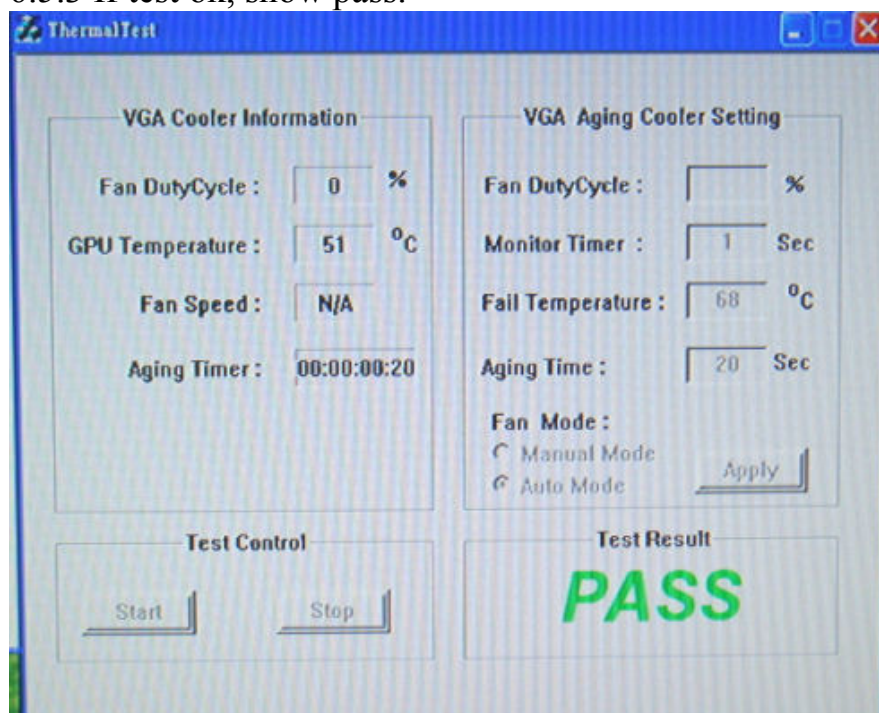
6.5 Temperature test

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

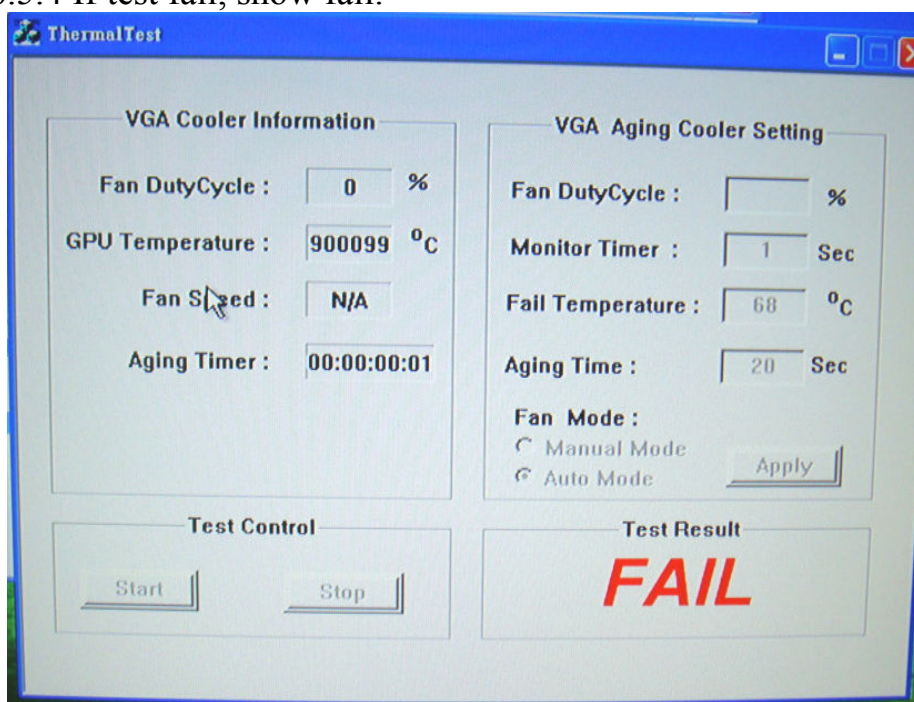
6.5.2 Please run ThermalTest.exe.



6.5.3 If test ok, show pass.



6.5.4 If test fail, show fail.



6.5.5 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(1200W)			1	
5	INTEL Celeron E1200			1	
6	Heat sink + FAN	22-240000160		1	
7	APACER 800MHz 1G			2	
8	SATA HDD			1	
9	SATA HDD Cable	14-000107070		1	
10	PCIEX16 VGA CARD			1	
11	D-SUB extend cable (Buying a local D-SUB cable by yourself)			1	
12	Dual link DVI cable (Buying a local DVI cable by yourself)			1	
13	HDMI extend cable (Buying a local HDMI cable by yourself)			1	
14	TV extend cable (Buying a local TV cable by yourself)			1	
15	DVI-HDMI	04G460002400 /04G460002450		1	
16	LCD "Y" Cable	14-010230000		1	
17	P5Q	80-MIB4P0-G0A01		1	
18	Display port cable (Buying a local TV cable by yourself)			1	
19	P5E	80-MBB7X0*		1	