Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First release	GRMA	Ariel_wang	Apr.13.2011
1.01		Add new P/N(C1CQF0-A01)	GRMA	Ariel_wang	Apr.13.2011
1.02		Add new P/N(C1CQH0-A01)	GRMA	Ariel_wang	Apr.13.2011
1.03		Add new P/N(C1CQF5-A01)	GRMA	Ariel_wang	May.25.2011
1.04		Add new PCBA(C1CQG0-A15)	GRMA	Ariel_wang	May.25.2011
1.05		Add new PCBA(C1CQF0-A15)	GRMA	Ariel_wang	May.25.2011
1.06		Add new P/N(C1CQG5-A01)	GRMA	Ariel_wang	Jun.20.2011
1.07		Add new PCBA(C1CQFA-A11)	GRMA	Ariel_wang	Jun.20.2011
1.08		Add new P/N(C1CR70-A02)	GRMA	Ariel_wang	Aug.12.2011
1.09		Add new PCBA(C1CR70-A13)	GRMA	Ariel_wang	Aug.12.2011
1.10		Add new PCBA(YV00U2-A24)	GRMA	Ariel_wang	Oct.21.2011
1.11		Add new PCBA(YV00U0-A13)	GRMA	Ariel_wang	Oct.21.2011
1.12		Add new PCBA(YV00U6-A12)	GRMA	Ariel_wang	Oct.31.2011
1.13		Add new PCBA(YV00U5-A24)	GRMA	Ariel_wang	Nov.21.2011
1.14		Add new PCBA(YV00U7-A01)	GRMA	Ariel_wang	Dec.16.2011
1.15		Add new P/N(YV00U8-A01)	GRMA	Ariel_wang	Mar.16.2012
1.16		Add new P/N(YV00U9-A01)	GRMA	Ariel_wang	Mar.27.2012
1.17		Add new P/N(YV00U8-A11)	GRMA	Ariel_wang	Jul.27.2012
1.18		Add new PCBA(YV00U6-A23)	GRMA	Ariel_wang	Aug.28.2012
1.19		Add new PCBA(YV00U5-A35)	GRMA	Ariel_wang	Sep.18.2012
1.20		Add new PCBA(YV00U2-A36)	GRMA	Ariel_wang	Oct.23.2012

Authorize by		Review by		Originator By	Ariel

1.Objectives

Create test procedure.

2.Scope

Model: ENGTX 550

PN: C1CQG0(A01&A15) C1CQF0(A01&A15) C1CQH0(A01) C1CQF5(A01) C1CQG5(A01) C1CQFA(A11) C1CR70(A02&A13) YV00U2(A24&A36) YV00U0(A13) YV00U6(A12&A23)YV00U5(A24&A35)YV00U7(A01) YV00U8(A01&A11) YV00U9(A01)

3.Test Item

3.1 Diagnostic test in DOS

3.2 3DMark06(**contain HDMI&DVI test**)

3.3 Fan test

3.4 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 Nvidia platform (**P5Q/P7H55-M/USB3**) to test in DOS**.**

Note: this model must use a D-SUB cable to test DOS program, thanks.

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/P7 CPU & CPU Fan.

6.2.2 Install DDR2/DDR3 Memory to DIMM1~4.

6.2.3 Plug PS2 Mouse and PS/2 Keyboard into P5Q/P7H55-M/USB3 Motherboard.

6.2.4 Plug VGA Card ENGTX 550 into PCIEX16.

6.2.5 If this card has 8 PIN or 6 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 PIN of Power supply to 6 PIN of VGA card)

6.2.6 Connect SATA HDD with SATA CON.

SATA1
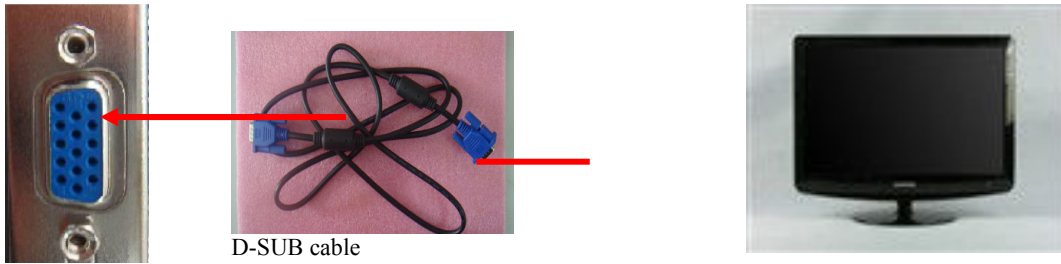
6.2.7 Plug 4PIN 12V (1200W) power cable into CON12V.

6.2.8 Plug ATX Power (1200W) on Power Connector.
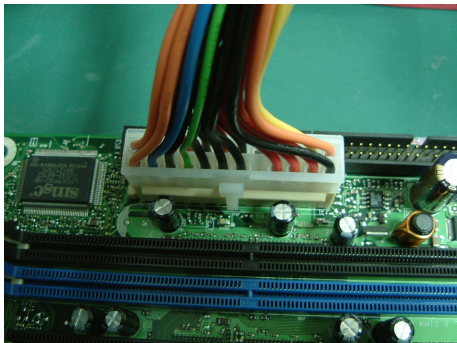
6.3 Diagnostic test in DOS

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

D-SUB 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 DOS to run test program.
Path:VBAT\ENGTX550\BATCH\
Run the test program refer to the prompt.

6.3.5 Memory test
If you want to test memory, please run mats.exe.
Path:VBAT\ENGTX550\26529
Path:VBAT\ENGTX550\0265-LPC(For YV00U5-A2*&A3*/YV00U8-A1*)
Path:VBAT\ENGTX550\STD (For YV00U6-A1*/YV00U6-A2*)
Path:VBAT\ENGTX550\26536 (For YV00U2-A3*/C1CQFA –A1*)

6.3.6 Fan test
If you want to test fan , please run fanqg0.bat or fanqf0.bat or fanqh0.bat.
Path:VBAT\ENGTX550\26529

6.3.7 BIOS flash
Please use the following command to flash bios and notice the size of character.
Path: VBAT\ENGTX550\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
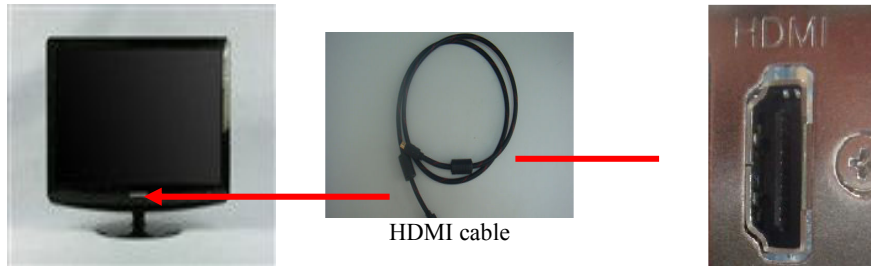unlock bios. And then, please use nvflash.exe /w to lock bios after updating latest

bios.

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

6.4 3DMark test(contain HDMI test)

6.4.1 Please install 3DMark program by yourself.

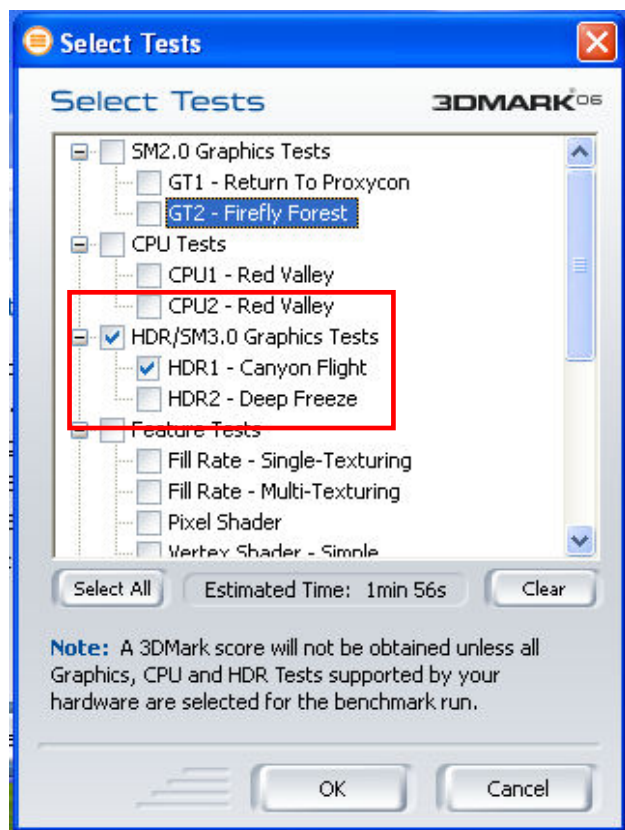6.4.2 Please connect VGA card to LCD via HDMI cable.

HDMI cable

HDMI CON

6.4.3 Please install VGA card driver in Windows(You must use individual driver of this card).
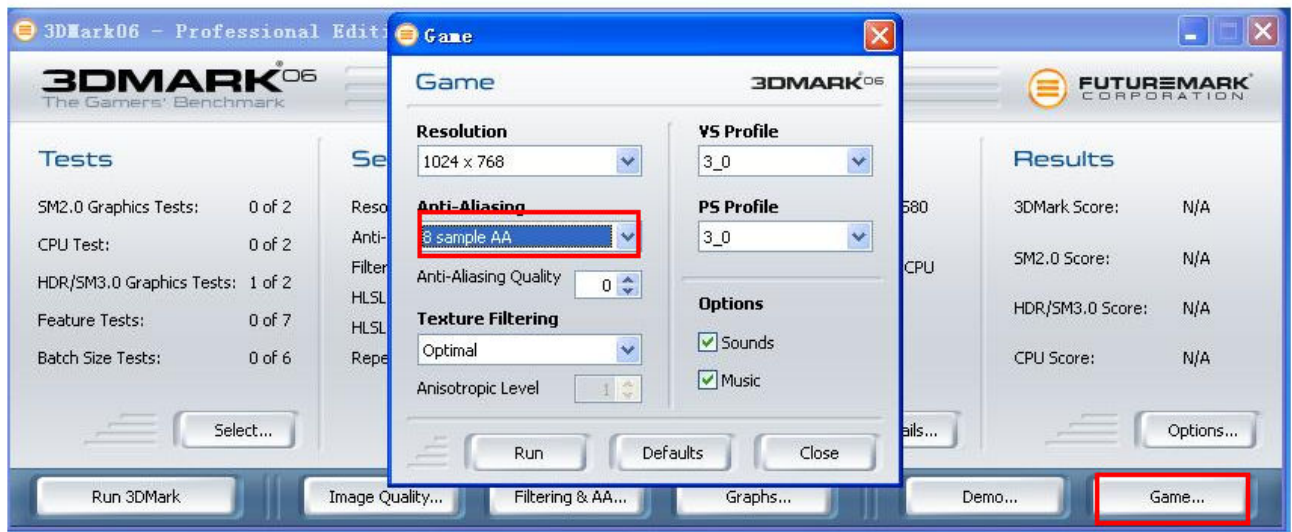
6.4.4 Please run 3DMark06 base on this card (please test 1 cycle).

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.
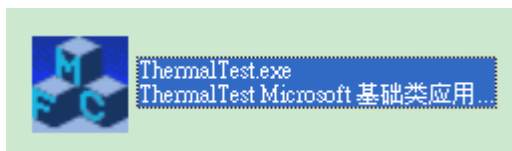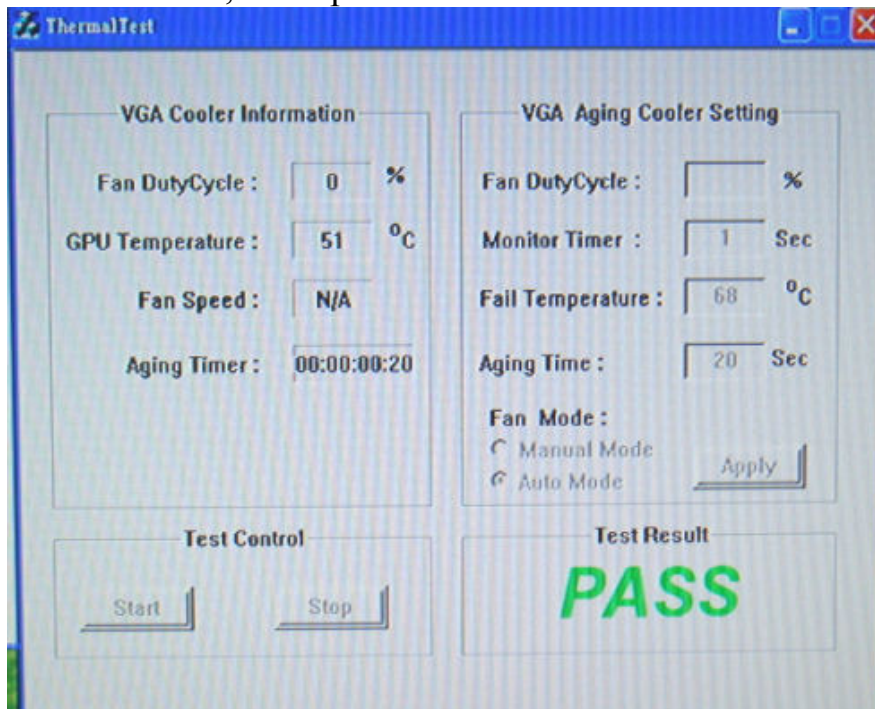

6.4.9 If test OK, please test temperature

6.5 Temperature test

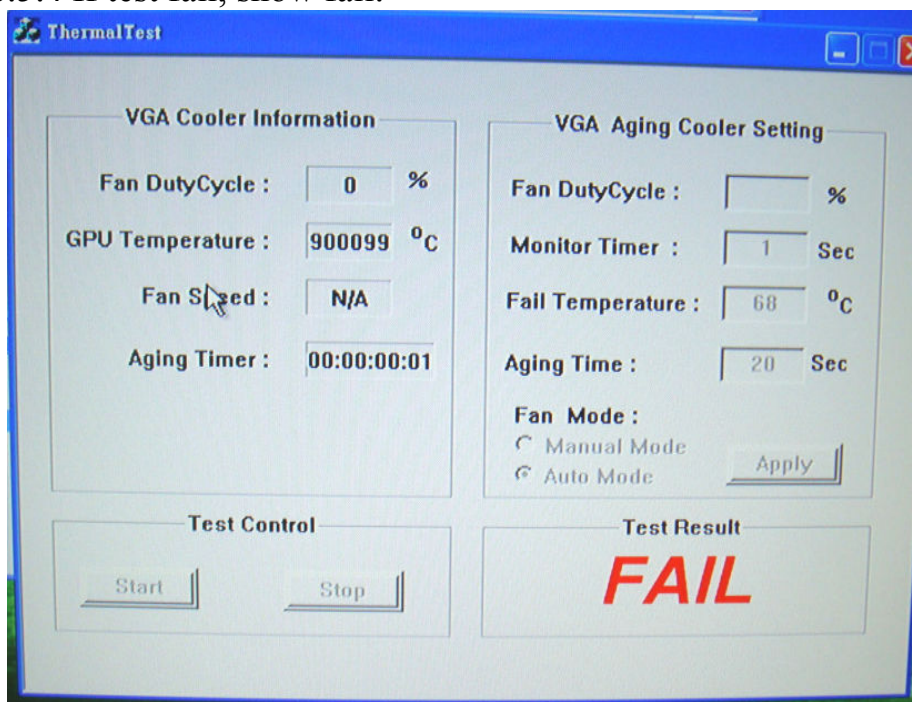6.5.1 Please copy Thermaltool(1.0.05) to Windows by yourself.

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	Intel CPU Intel(R) Core(TM)2 CPU		local	1	
7	Heat sink + FAN	22-240000160		1	
8	APACER 800MHz 1G			2	
9	DDR3 1333 2G	20-TT2605618	local	4	
10	SATA HDD			1	
11	SATA HDD Cable	14-000107070		1	
12	PCIEX16 VGA CARD			1	
13	D-SUB extend cable (Buying a local D-SUB cable by yourself)			1	
14	Dual link DVI cable (Buying a local DVI cable by yourself)			1	
15	HDMI extend cable (Buying a local HDMI cable by yourself)			1	
16	TV extend cable (Buying a local TV cable by yourself)			1	
17	DVI-HDMI	04G460002400 /04G460002450		1	

18	LCD "Y" Cable	14-010230000		1	
19	P5Q (C1CQH0-A01 and before model)	80-MIB4P0-G0A01		1	
20	P7H55-M/USB3 (C1CQF5-A01 and after model)	80-MIBBKA-G0*	ASUS	1	