

ASUSTeK COMPUTER INC.	EN8400GS Standard Operation Procedure	Doc. No:	
		Date: Oct. 24, 2011 Revision: 1.32	
		Page: 14	Grade:

Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First Release	GTC	Janice_Pang	
1.01		Add New P/N (C1CJFF)	GTC	Janice_Pang	
1.02		Add New P/N (C1CKF0)	GTC	Janice_Pang	
1.03		Add New P/N (C1CKD0)	GTC	Ariel_Wang	
1.04		Add New P/N (C1CJFK)	GTC	Kelvin_Cao	
1.05		Modify for new test structure	GTC	Kelvin_Cao	
1.06		Modify for new test structure	GTC	Janice_Pang	JAN.16,2009
1.07		Add New PCBA(C1CKD0-A62)	GTC	Kelvin_Cao	MAY.26,2009
1.08		Add New PCBA(C1CKD0-A82)	GTC	Kelvin_Cao	AUG.03,2009
1.09		Add New PCBA(C1CJFK-A03)	GTC	Kelvin_Cao	AUG.05,2009
1.10		Add New P/N(C1CKD5-A11 and C1CNB0-A11)	GTC	Kelvin_Cao	AUG.26,2009
1.11		Add New P/N(C1CKDA-A01)	GTC	Kelvin_Cao	Sep.25,2009
1.12		Add New P/N(C1CNB5-A01)	GTC	Kelvin_Cao	OCT.27,2009
1.13		Add New PCBA(C1CKDA –A13)	GTC	Ariel_wang	Nov.30,2009
1.14		Add New PCBA(C1CNB5 –A11)	GTC	Ariel_wang	Jan.14,2010
1.15		Add New PCBA(C1CNB5 –A21)	GTC	Ariel_wang	Jan.14,2010
1.16		Add New PCBA (C1CKDA-A23)	GTC	Ariel_wang	Mar.9,2010
1.17		Add New PCBA(C1CKDA-A33)	GTC	Ariel_wang	Mar.9,2010
1.18		Add New PCBA(C1CNB5 –A31)	GTC	Ariel_wang	Mar.9,2010
1.19		Add New PCBA(C1CKDA-A43)	GTC	Ariel_wang	Apr.26,2010
1.20		Add New PCBA(C1CNB5-A41)	GTC	Ariel_wang	May.11,2010
1.21		Add New P/N(C1CKDF-A01)	GTC	Ariel_wang	May.14,2010
1.22		Add New P/N(C1C KDP-A01)	GTC	Chongling	Nov.12,2010
1.23		Add New P/N(C1C NBA-A01)	GTC	Chongling	Nov.14,2010
1.24		Add New PCBA(C1CKDP-B01)	GRMA	Chongling	Dec.10,2010
1.25		Add New PCBA(C1CKDP-B11)	GRMA	Ariel_wang	Dec.15,2010
1.26		Add New P/N(C1CKDK-A01)	GRMA	Ariel_wang	Dec.20,2010
1.27		Add New P/N(C1CKDU-A01)	GRMA	Ariel_wang	Dec.20,2010
1.28		Add New P/N(C1CNBF-A01)	GRMA	Ariel_wang	Dec.28,2010
1.29		Add New PCBA(C1CKDU-A11)	GRMA	Ariel_wang	Dec.30,2010
1.30		Add new PCBA(C1CKDP-B21)	GRMA	Ariel_wang	Apr.2,2011
1.31		Add new P/N(YV00N0-A01)	GRMA	Ariel_wang	Oct.14,2011

Authorize by		Review by		Originator By	Janice
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ASUSTeK COMPUTER INC	EN8400GS Standard Operation Procedure	Doc. No: 1
		Date: Oct. 24, 2011 Rev. : 1.32 Page:

1.32		Add new P/N(YV00N2-A01)	GRMA	Ariel_wang	Oct.24,2011
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## 1.Objectives

Create test procedure.

## 2.Scope

Model: EN8400GS

PN: C1CJF0(A01) C1CJFF(A01/A44/A85/A95) C1CKF0(A01)  
C1CKD0(A01/A11/A22/A32/A42/A62/A82) C1CJFK(A01/A03)  
C1CKD0(A11) C1CNB0(A11) C1CKDP(A01&B01&B11&B21)  
C1CNBA(A01)  
C1CKDA(A01&A13&A23&A33&A43) C1CKDF(A01)  
C1CNB5(A01&A11&A21&A31&A41) C1CKDK(A01)  
C1CKDU(A01&A11) C1CNBF(A01)YV00N0(A01)YV00N2(A01)

## 3.Test Item

3.1 Diagnostic test in DOS

3.2 3DMark03/05

3.3 Temperature test

## 4.Relevant Document

None.

## 5.Definition : 1. If the model name contains P, please test HDCP function.

Ex: EN\*\*\*/HTDP/512M/A

2. If you test HDMI already, it's unnecessary to test HDCP. The HDMI contains HDCP function.

## 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

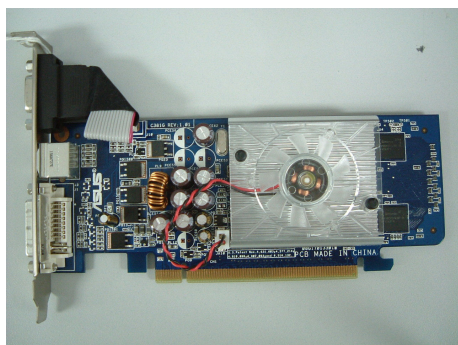
6.2.1 Install Intel P5 CPU & CPU Fan.

6.2.2 Install DDR2(667/800) 1G Memory to DIMM1~2.(For C1CJF0/C1CJFK/C1CKD0/  
C1CKDA/ C1CKDF)

6.2.3 Install DDR3 1GB Memory to DIMM1~2.

6.2.4 Plug PS/2 Mouse and Keyboard into PS/2 port.

6.2.5 Plug VGA Card EN8400GS into PCIEX16.



6.2.6 Connect SATA HDD with SATA CON.

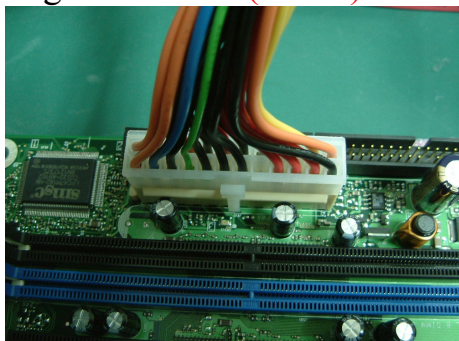


SATA



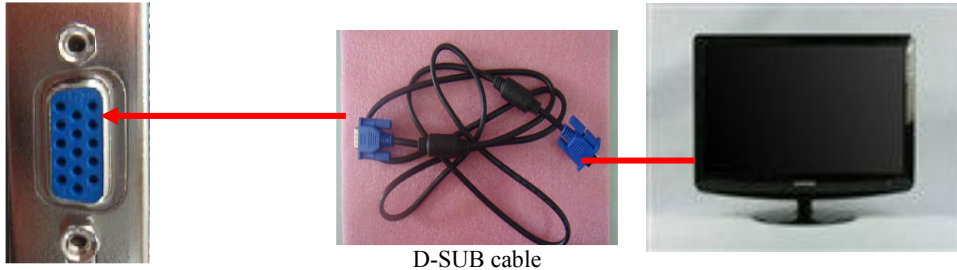
6.2.7 Plug 4PIN 12V power(600W) cable into CON12V.

6.2.8 Plug ATX Power(600W) on Power Connector.



## 6.3 Diagnostic test in DOS

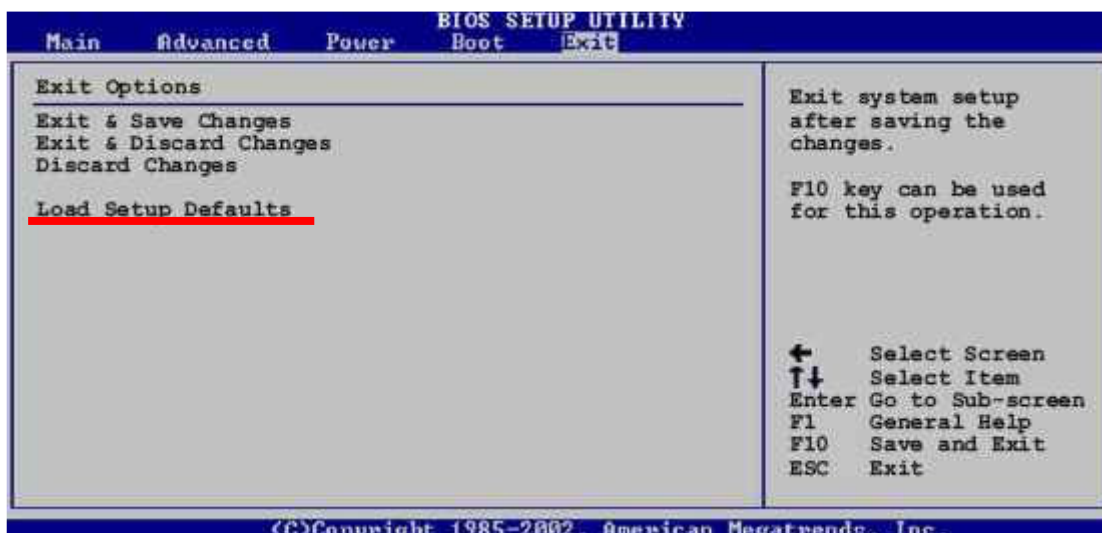
6.3.1 Please connect LCD monitor & card's D-SUB CON via a D-SUB cable.



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\EN8400GS\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\EN8400GS\0111GX2\ (For C1CJF0).

Path: VBAT\EN8400GS\DIAG\ (For C1CJFF)

Path: VBAT\EN8400GS\DIAG2\ (For C1CJFK)

Path: VBAT\EN8400GS\SUITE\ (For C1CKF0)

Path: VBAT\EN8400GS\0165\ (For C1CKD0)

Path: VBAT\EN8400GS\0165GX2\ (For C1CKD5 and C1CNB0)

Path: VBAT\EN8400GS\DIAG3\ (For C1CKDA and C1CNB5 and C1CKDF)

Path: VBAT\EN8400GS\18567\ (For C1CKDP-A01/B01)

Path: VBAT\EN8400GS\18567A\ (For C1CKDP-B11 and C1CNBF-A01 and C1CKDP-B21)

ASUSTeK COMPUTER INC	EN8400GS Standard Operation Procedure	<div>Doc. No: 5</div> <div>Date:Oct. 24, 2011</div> <div>Rev. : 1.32 Page:</div>
<div> Path: VBAT\EN8400GS\18567B\(<a href="#">For C1CKDK-A01/C1CKDU-A01</a>)  Path: VBAT\EN8400GS\18567C\(<a href="#">For C1CKDU-A11</a>)  Path: VBAT\EN8400GS\18567D\(<a href="#">For YV00N0-A01</a>) </div> <div> 6.3.6 BIOS flash  Please use the following command to flash bios and notice the size of character.  Path:VBAT\EN8400GS\BIOS  Command:<a href="#">nvflash xxx.rom -4 -5 -6 -A -y</a> </div> <div> <b>Notice:</b>  If you can not flash bios because of the bios locked, please use <a href="#">nvflash.exe /r</a> to unlock bios. And then, please use <a href="#">nvflash.exe /w</a> to lock bios after updating latest bios. </div> <div> 6.3.7 After finish DOS testing, please enter Windows environment to test 3DMark. </div>		

## 6.4 3DMark test

6.4.1 Please install 3DMark program by yourself.

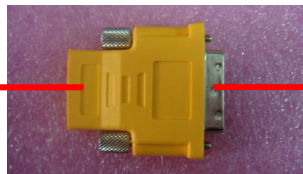
6.4.2 Please connect LCD monitor & card's DVI CON via a DVI cable.



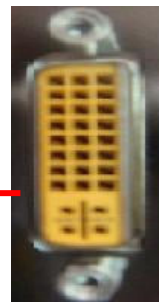
Dual link DVI cable



Please connect VGA card to LCD via HDMI cable.



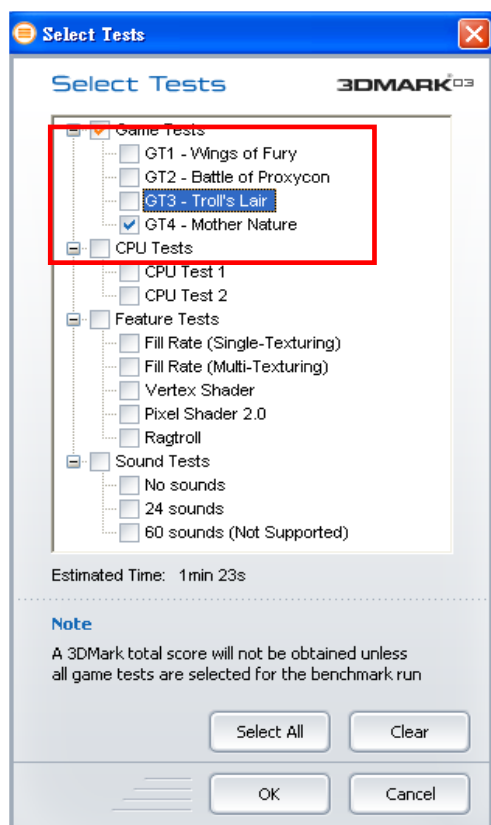
DVI-HDMI cable



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

6.4.4 Please run 3DMark03 base on this card (please test 1 cycle).

6.4.5 Press "Select" to enter Select test menu. You can choose "GT4" for default setting.



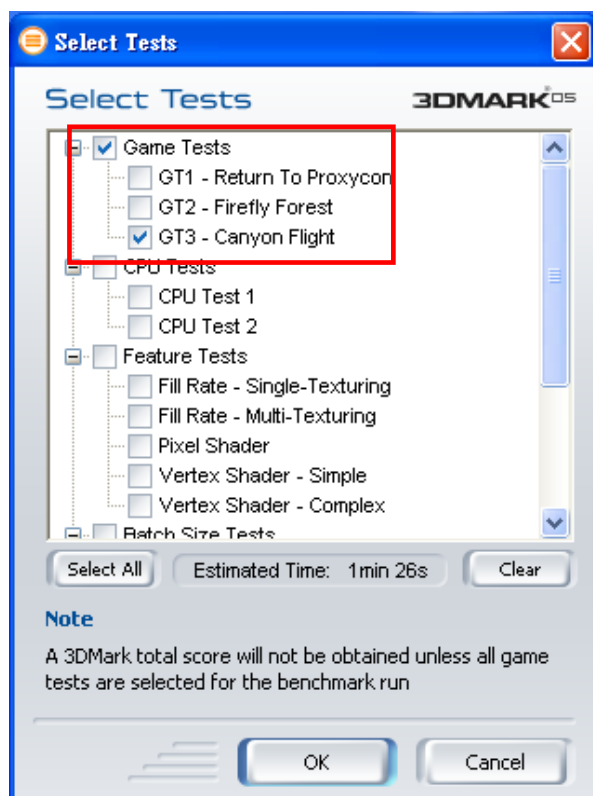


6.4.6 Please pay attention to check if there is flickering, discolor, crash and so on.  
If there's no problem, it can be judged OK!

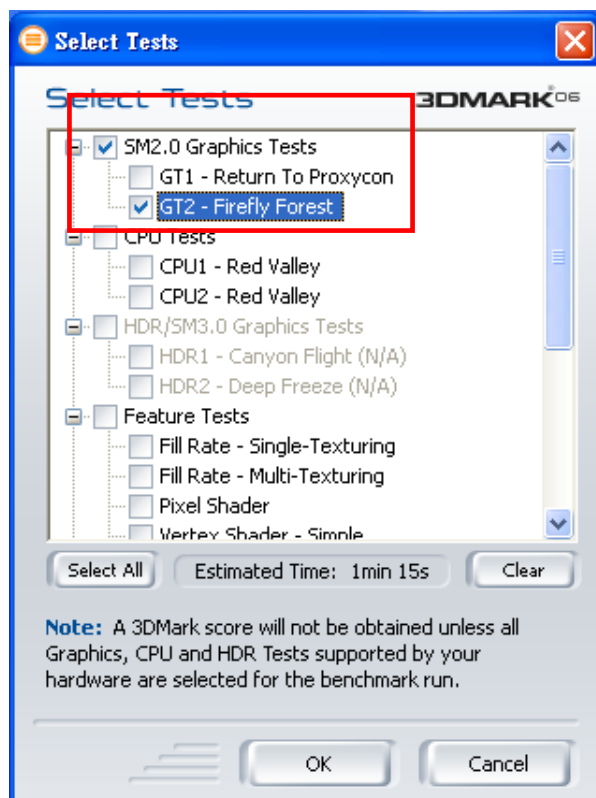


6.4.7 Please run 3DMark05 base on this card (please test 1 cycle). For C1CKD0-A62

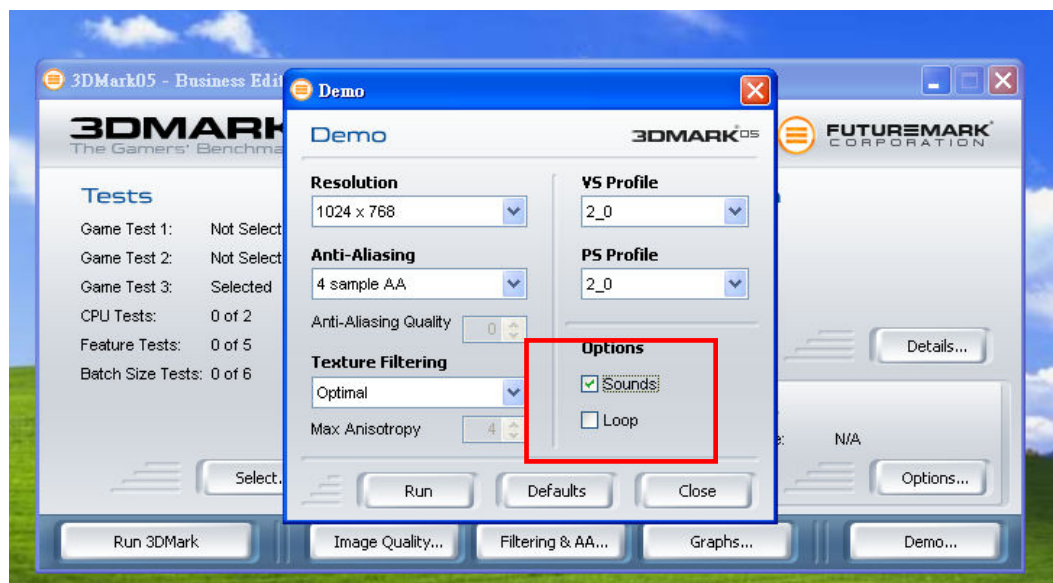
6.4.8 Press “Select” to enter Select test menu. You can choose “GT3/GT2” for default setting.







6.4.9 Press “Demo” to enter Demo menu. You can choose “Sounds” for default setting.



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

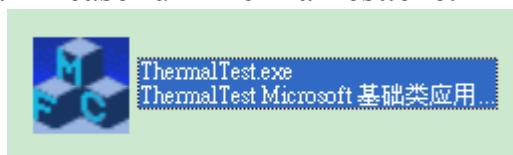
6.4.11 Please listen to voice carefully to check whether it outputs sounds. If not, HDMI test fail.



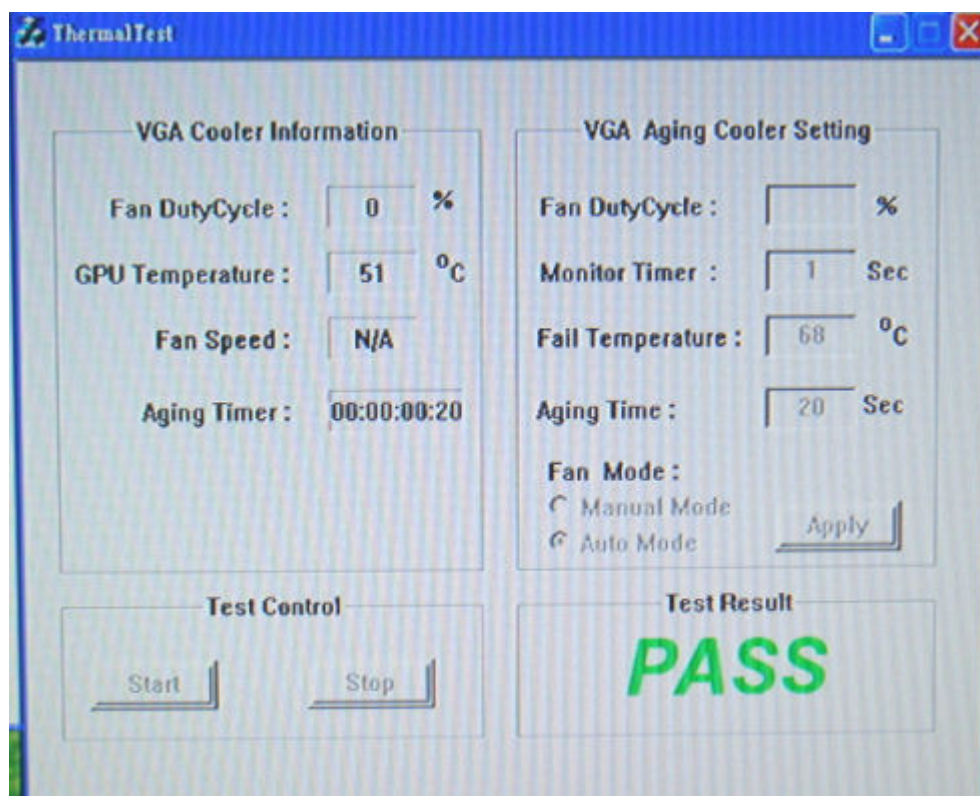
## 6.5 Temperature test

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

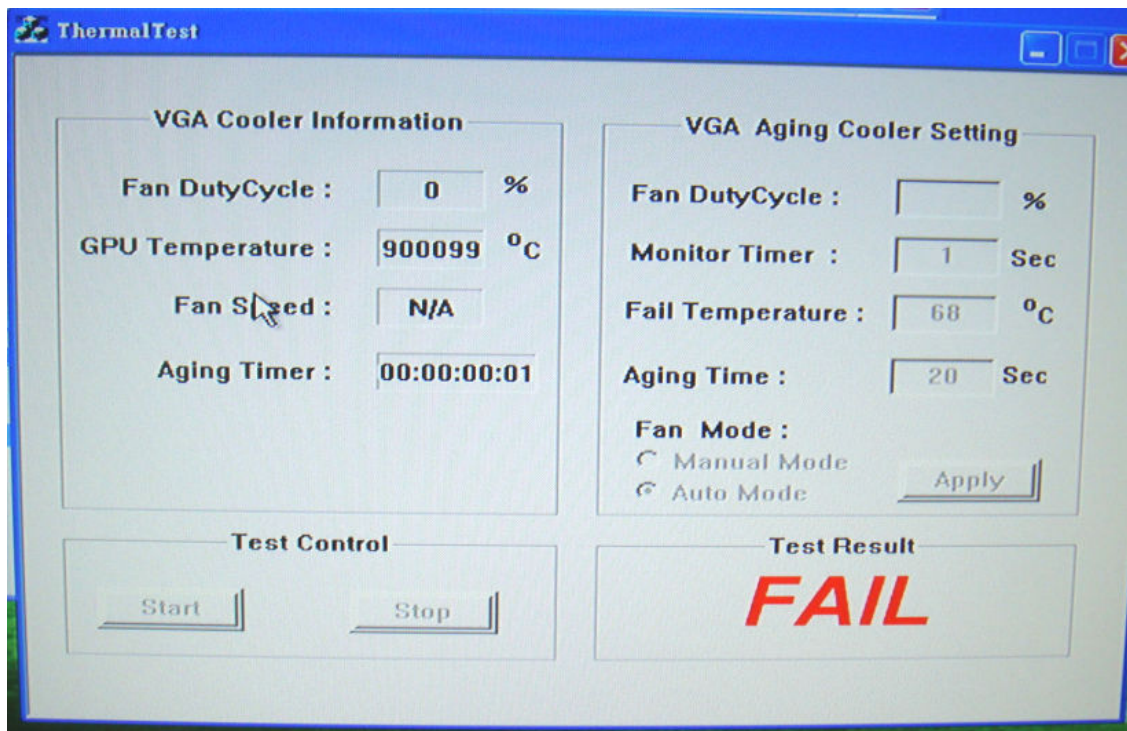
6.5.2 Please run ThermalTest.exe.



6.5.3 If it test ok, show pass.





6.5.4 If it test fail, show fail.



6.5.5 If test OK, NTF test.

## 7. Appendix

NO#	Equipment Description	ASUS Part#	Supplier	Quantity	Remarks
1	LCD MONITOR		SAMSUNG 2232MW	1	
2	PS/2 MOUSE			1	
3	PS/2 KEYBOARD			1	
4	ATX POWER SUPPLY(600W)			1	
5	INTEL P5 CPU			1	
6	Intel CPU Intel(R) Core(TM)2 CPU		local	1	
7	Heat sink + FAN	22-240000160		1	
8	MEMORY DDRII	APACER 800MHz 512M or 800MHz 1G		512M 2pcs or 1G 1pcs	
9	DDR3	22-TT0000452		2	
10	DDR3 1333 2G	20-TT2605618	local	4	
11	TEST HDD(with TestProgram)			1	
12	SATA HDD Cable	14-000107070	ASUS	1	
13	PCIEX16 VGA CARD			1	
14	Dual link DVI cable (Buying a local DVI cable by yourself)			1	
15	TV extend cable (Buying a local TV cable by yourself)			1	
16	S CABLE(NVIDIA)	14G010005113 /14G010005100		1	
17	P5LD2 MB(FOR C1CJF0)	80- MBL1A5-*		1	
18	P5E64 WS PRO	80- MBB830		1	

19	<b>P5E (For C1CJFK and C1CKD0/ C1CKDA/C1CNB5-A11/A21)</b>	80- MBB7X0-G0A01		1	
20	<b>P5Q(For C1CKDP and C1CNBA &amp; C1CKDK &amp;C1CKDU&amp;C1CNBF)</b>	80-MIB4P0-G0B02		1	
21	<b>P7H55-M/USB3 (YV00N0-A01 and later)</b>	80-MIBBKA-G0*	ASUS	1	
22	<b>D-SUB extend cable (Buying a local D-SUB cable by yourself)</b>			1	
23	<b>LCD “Y” Cable</b>	14-010230000		1	
24	<b>DVI-HDMI</b>	04G460002400 /04G460002450		1	