

ASUSTeK COMPUTER INC.	EN9600GT Standard Operation Procedure	Doc. No:	
		Date: Sep.04. 2009 Revision:1.40	
		Page: 6	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 (C1CK95)	GTC	Ariel_Wang	
1.02		Add New P/N (C1CKK0)	GTC	Janice_Pang	
1.03		Add New P/N (C1CKS0)	GTC	Robin_Jiang	
1.04		Add New P/N (C1CKK5)	GTC	Daisy_Jiang	
1.05		Add New P/N (C1CK9F)	GTC	Janice_Pang	
1.06		Add New P/N (C1CK9A)	GTC	Janice_Pang	
1.07		Add New P/N (C1CKV0)	GTC	Paul_Wei	
1.08		Add New P/N (C1CL90)	GTC	Paul_Wei	
1.09		Add PCBA(C1CK9A-A13)	GTC	Paul_Wei	
1.10		Add PCBA(C1CKK5-A24)	GTC	Paul_Wei	
1.11		Add PCBA(C1CKS0-A14)	GTC	Paul_Wei	
1.12		Add PCBA(C1CL90-A15)	GTC	Kelvin_Cao	
1.13		Add New P/N (C1CLV0)	GTC	Kelvin_Cao	
1.14		Add PCBA(C1CK9F-A15)	GTC	Kelvin_Cao	
1.15		Add New P/N (C1CM70)	GTC	Paul_Wei	
1.16		Add New P/N (C1CK9K)	GTC	Paul_Wei	
1.17		Add PCBA(C1CKK5-A35)	GTC	Paul_Wei	
1.18		Add PCBA(C1CK95-A96)	GTC	Paul_Wei	
1.19		Add PCBA(C1CK95-AA7)	GTC	Paul_Wei	
1.20		Modify for new test structure	GTC	Janice_Pang	
1.21		Add New P/N (C1CK9U)	GTC	Paul_Wei	
1.22		Modify for new test structure	GTC	Janice_Pang	
1.23		Add PCBA (C1CLV0-A11)	GTC	Paul_Wei	
1.24		Add PCBA (C1CK9K-A12)	GTC	Paul_Wei	
1.25		Add PCBA (C1CK95-AC8)	GTC	Paul_Wei	
1.26		Add PCBA (C1CMT0-A01)	GTC	Paul_Wei	
1.27		Add PCBA (C1CMTA-A01)	GTC	Paul_Wei	Apr.22.2009
1.28		Add PCBA (C1CMT5-A13)	GTC	Paul_Wei	May.18.2009
1.29		Add PCBA (C1CMT0-A13)	GTC	Paul_Wei	May.18.2009
1.30		Add New P/N (C1CN10)	GTC	Paul_Wei	Jun.01.2009
1.31		Add PCBA (C1CMT0-A23)	GTC	Paul_Wei	Jun.17.2009
1.32		Add PCBA (C1CKSA-A01)	GTC	Paul_Wei	Jul.08.2009
1.33		Add PCBA (C1CKSA-A11)	GTC	Paul_Wei	Jul.24.2009

Authorize by		Review by		Originator By	Janice
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1.34		Add PCBA (C1CMT5-A24)	GTC	Paul_Wei	Jul.27.2009
1.35		Add PN (C1CMTF-A01)	GTC	Paul_Wei	Jul.27.2009
1.36		Add PCBA (C1CMTF-A11)	GTC	Paul_Wei	Jul.28.2009
1.37		Add PCBA (C1CMTA-A12)	GTC	Paul_Wei	Aug.18.2009
1.38		Add PCBA (C1CLV5-A01)	GTC	Paul_Wei	Aug.21.2009
1.39		Add PCBA (C1CKSA-A14)	GTC	Paul_Wei	Aug.24.2009
1.40		Add PCBA (C1CMTA-A23)	GTC	Paul_Wei	Sep.04.2009

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1.Objectives

Create test procedure.

2.Scope

Model: EN9600GT

PN: C1CK90 C1CK95 C1CKK0 C1CKS0
C1CKK5 C1CK9A C1CK9F C1CKV0
C1CL90 C1CLV0 C1CM70 C1CK9K
C1CK9U C1CMT0 C1CMTA C1CMT5
C1CN10 C1CKSA C1CMTF

3.Test Item

3.1 Diagnostic test in DOS

3.2 3DMark06(contain HDMI 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.

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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 test environment by yourself).

6.2 Fixture connect

6.2.1 Install Intel P5 CPU & CPU Fan.

6.2.2 Install DDR2 667/800 1GB Memory to DIMM1~2.

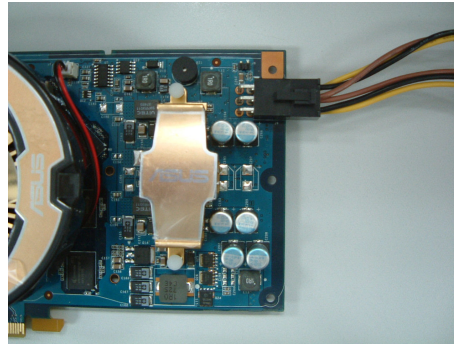
6.2.3 Plug PS/2 Mouse and PS/2 Keyboard into MB.

6.2.4 Plug VGA Card EN9600GT into PCIEX16.

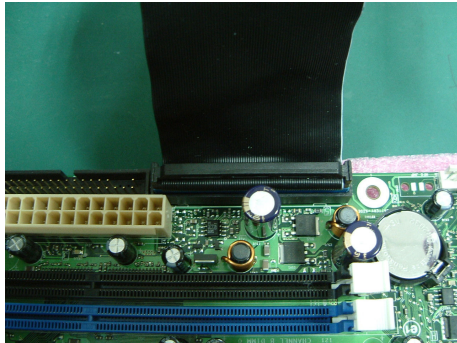
6.2.5 Connect power con of VGA card & Power supply via bundled power cable.



C1CK90

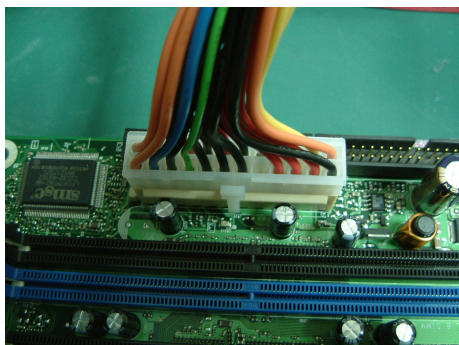


6.2.6 Connect IDE HDD with IDE CON.



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

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



6.3 Diagnostic test in DOS

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

Please connect CRT monitor & card's D-SUB CON via a D-SUB cable. (For C1CN10)



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\EN9600GT\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\EN9600GT\DIAG\

6.3.6 BIOS flash

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

Path: VBAT\EN9600GT\BIOS

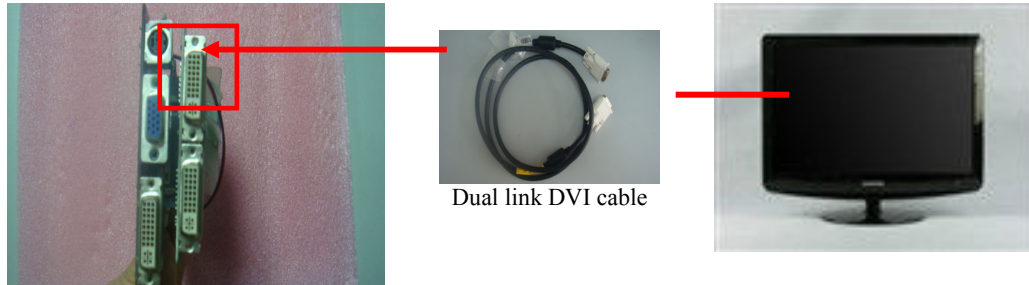
Command: **nvflash xxx.rom -4 -5 -6 -A -y**

6.3.7 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 LCD monitor & card's DVI CON via a DVI cable(no HDMI function).

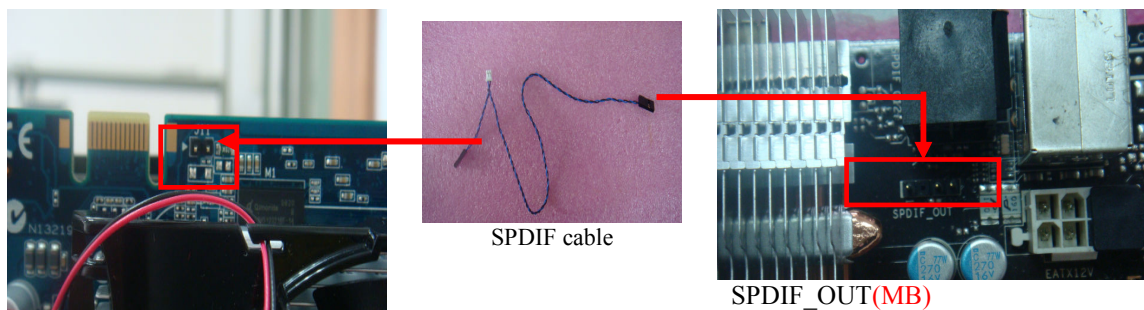


Please connect VGA card to LCD via HDMI cable(for HDMI function).



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

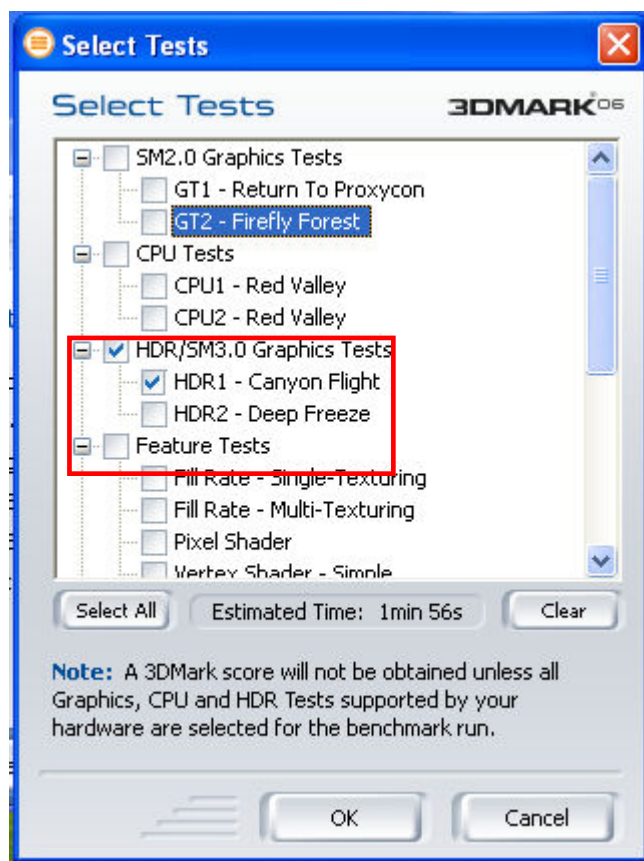
6.4.4 Plug 4 Pin black cable into SPDIF_OUT of MB. Plug another 2 Pin white cable into SPDIF_IN of VGA card(for HDMI function).



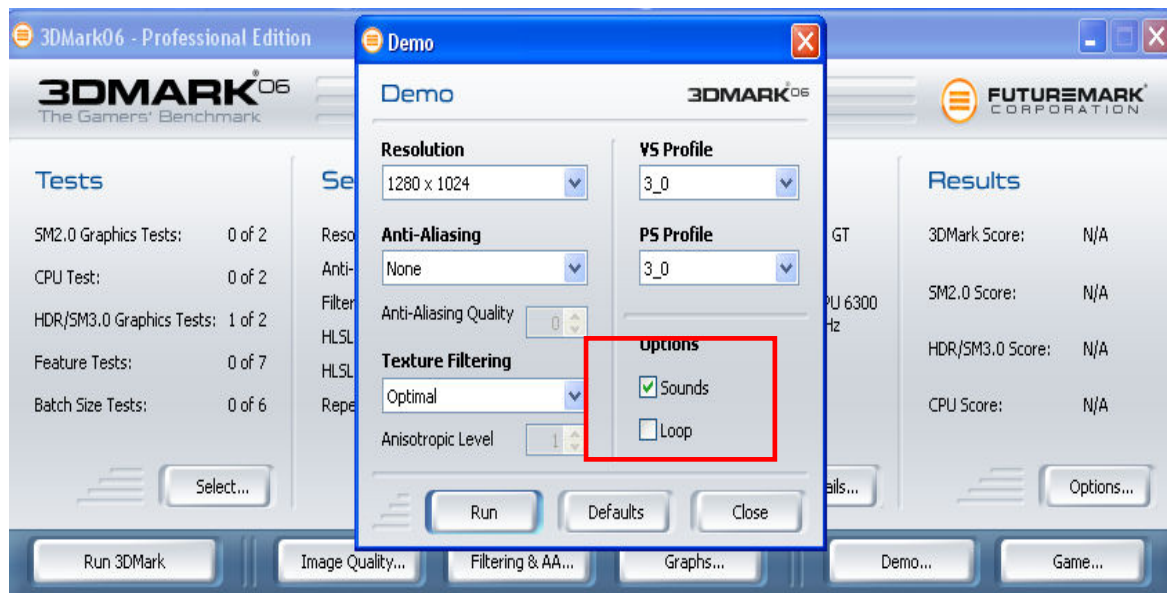
6.4.5 Plug SUPREME FX II card into PCIEX1 of MB(for HDMI function).



- 6.4.6 Please install SUPREME FX II card driver in Windows and enter Windows to test HDMI(for HDMI function).
- 6.4.7 Please run 3DMark06 base on this card (please test 1 cycle).
- 6.4.8 Press “Select” to enter Select test menu. You can choose “HDR1” for default setting.



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



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!

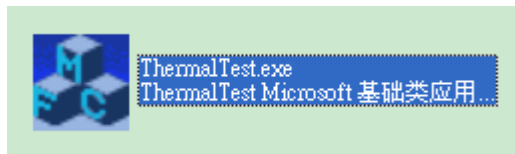
6.4.11 Listen to voice carefully to check whether it outputs sounds. If not, HDMI test fail(for HDMI function).



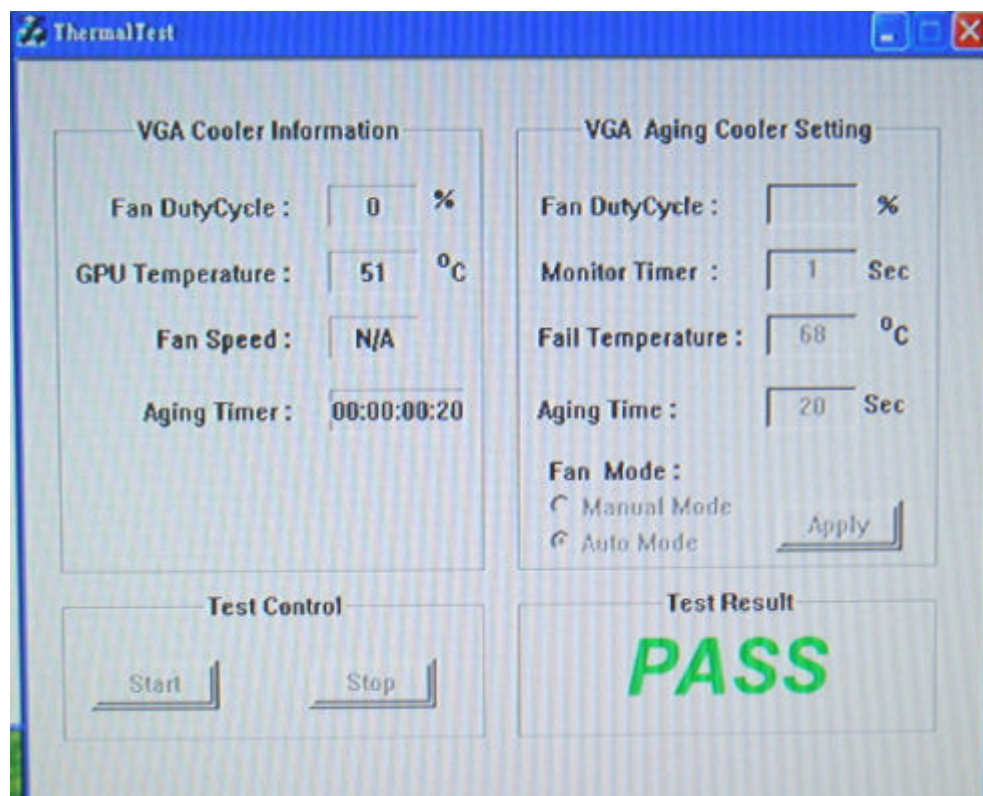
6.5 Temperature test

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

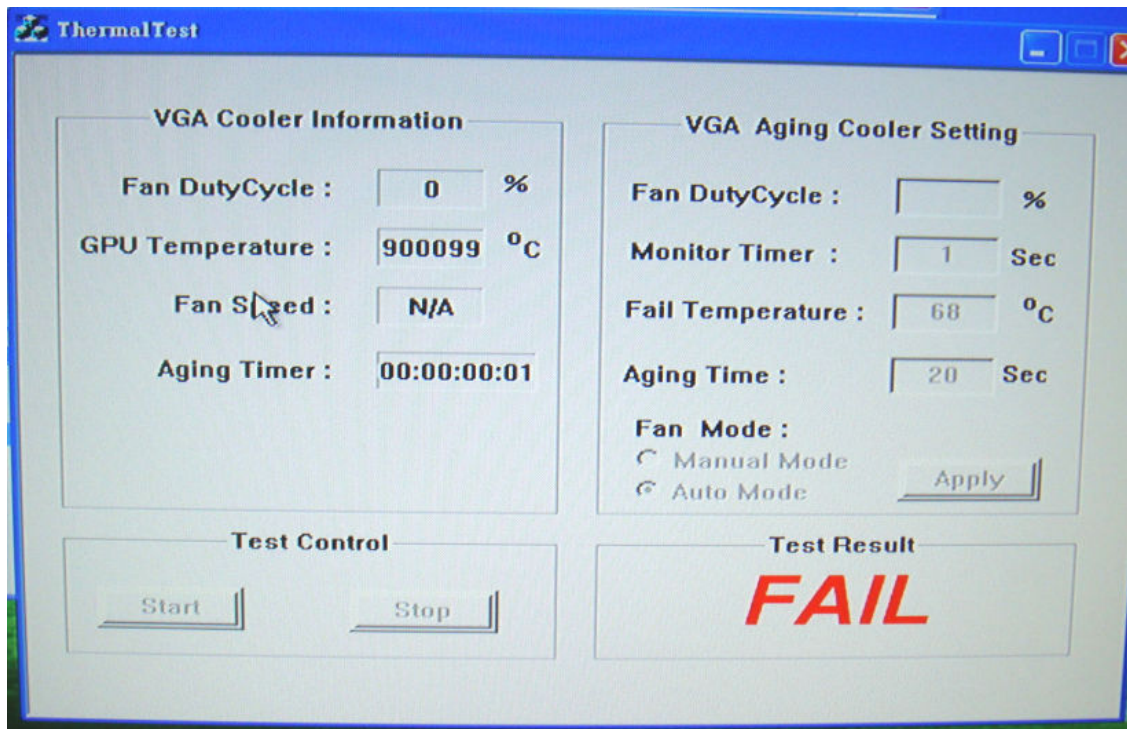
6.5.2 Please run ThermalTest.exe.



6.5.3 If test ok, show pass.















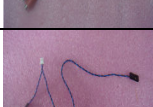


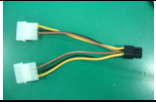



6.5.4 If test fail, show fail.



6.5.5 If test OK, please 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 Celeron E1200			1	
6	Heat sink + FAN	22-240000160		1	
7	DDR3	22-TT0000452		2	
8	TEST HDD			1	
9	40Pins IDE Cable ATA66		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	DVI-HDMI	04G460002400 /04G460002450		1	
14	TV extend cable (Buying a local TV cable by yourself)			1	
15	S CABLE(NVIDIA)	14G010005113 /14G010005100		1	
16	SPDIF CABLE	14G003200813 /14G003200810		1	

17	P5E64 WS PRO	80- MBB830		1	
18	Power Cable	14G000602510 /14G000602502		1	
19	P5K	80-MBB670		1	
20	DDR2(667 or 800)	20-TT2601204		4	
21	P5E (FOR C1CK9A C1CKK5 C1CL90-A15 C1CLV0 C1CM70 C1CK9K C1CKK5-A35 C1CK95-A96 C1CK9U C1CMT0 C1CMTAC1CMT5 C1CKSA C1CMTF)	80-MBB7X0-G0A01		1	
22	SUPREME FX II	80-C1BHK5-0C01		1	
23	LCD "Y" Cable	14-010230000		1	
24	D-SUB extend cable (Buying a local D-SUB cable by yourself)			1	