Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First Release	GTC	Janice_Pang	AUG.26,2009
1.01		ADD NEW P/N(C1CN7A)	GTC	Janice_Pang	OCT.30,2009
1.02		Add New PCBA(C1CN7A-A11)	GTC	Ariel_wang	Dec.23,2009
1.03		Add New PCBA(C1CN7A-A21)	GTC	Ariel_wang	Mar.16,2010

Authorize by		Review by		Originator By	Janice

1.Objectives

Create test procedure.

2.Scope

Model: ENG100
PN: C1CN75 C1CN7A(A01&A11&A21)

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).

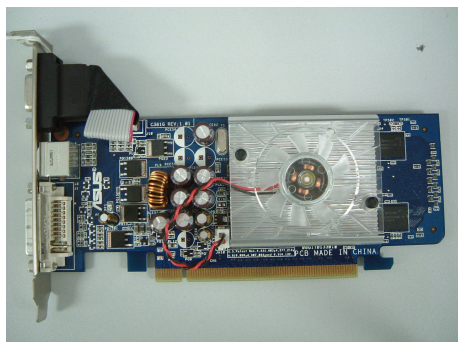| ASUSTeK COMPUTER INC	ENG100 Standard Operation Procedure	Doc. No:
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6.2 Fixture connect

6.2.1 Install Intel P5 CPU & CPU Fan.
6.2.2 Install DDR2(667/800) 1G Memory to DIMM1~2.
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 ENG100 into PCIEX16.
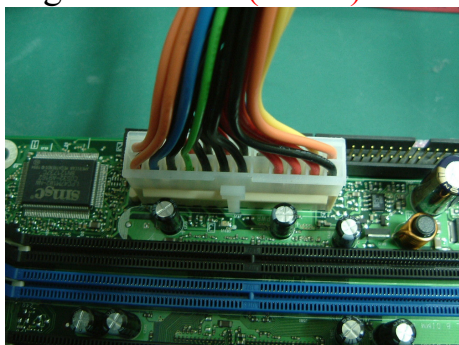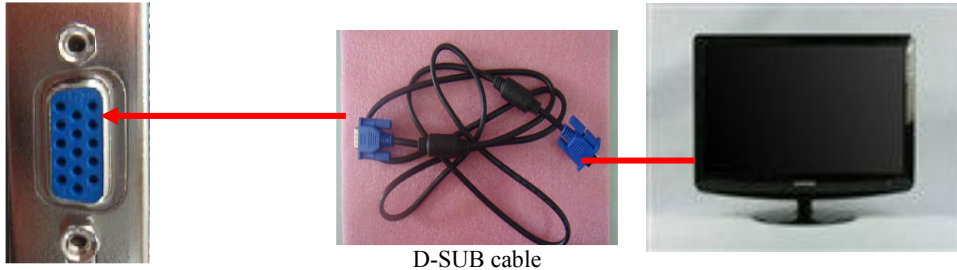
6.2.6 Connect SATA HDD with SATA CON.

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.

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\ENG100\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\ENG100\0165\

Path:VBAT\ENG100\DIAG\

6.3.6 BIOS flash

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

Path:VBAT\ENG100\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.

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

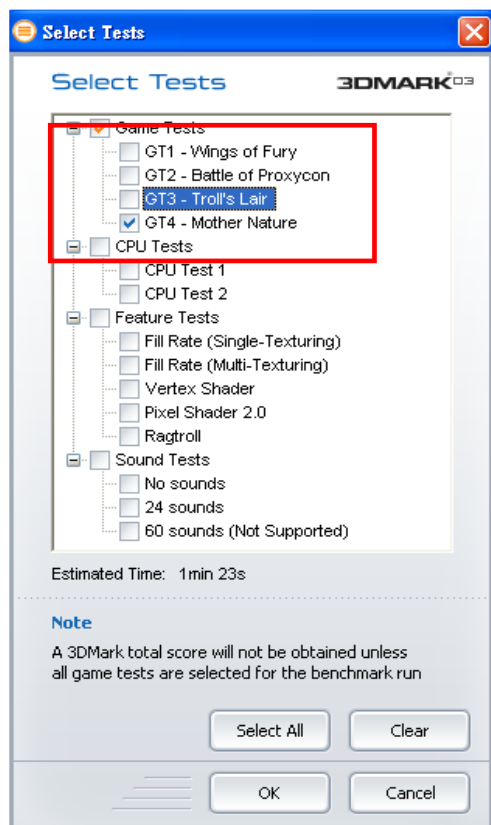## 6.4 3DMark test

6.4.1 Please install 3DMark program by yourself.

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

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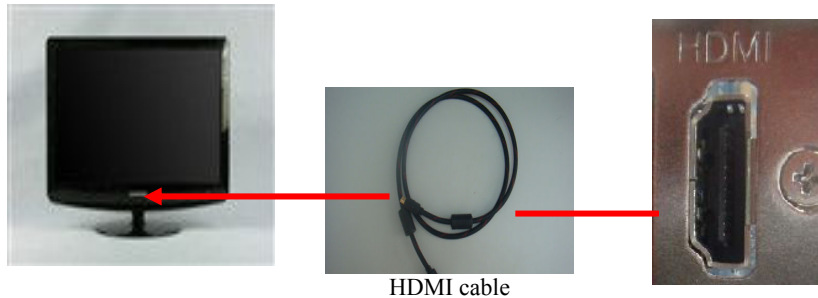
6.4.3 Please install VGA card driver in Windows(You must use individual driver of this card).

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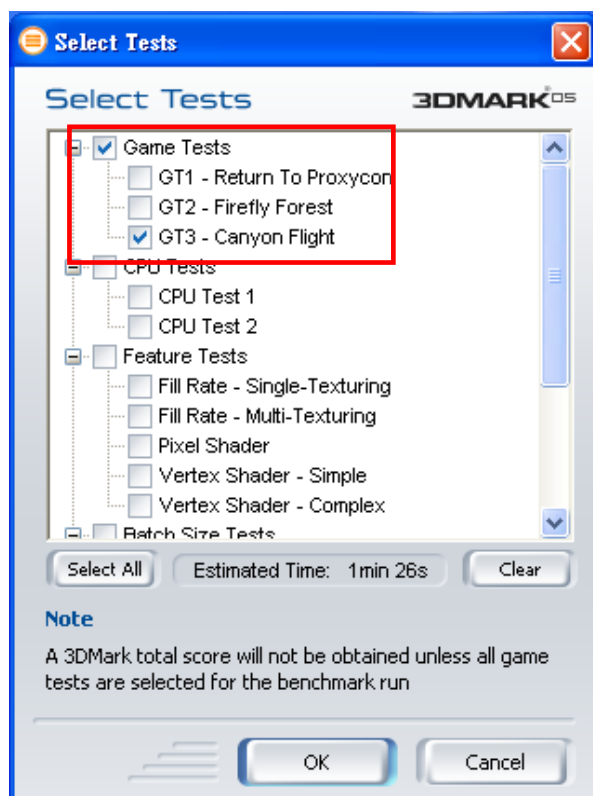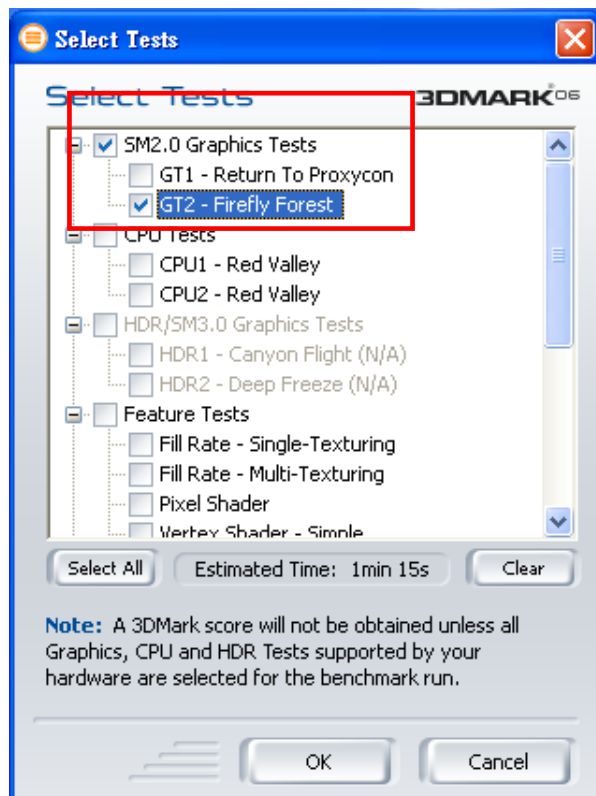
6.4.6 Please pay attention to check if there is flickering, discolor, crash and so on. If there's no problem, it can be judged OK!
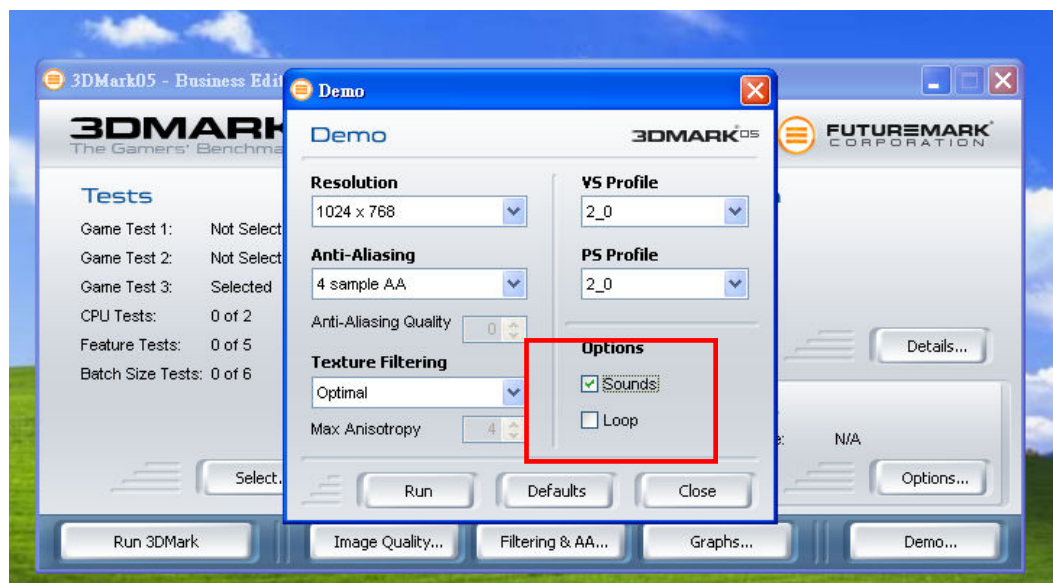

6.4.7 Please run 3DMark05 base on this card (please test 1 cycle).
6.4.8 Press "Select" to enter Select test menu. You can choose "GT3" for default setting.

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

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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.

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6.5 Temperature test

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

6.5.2 Please run ThermalTest.exe.

ThermalTest.exe
ThermalTest Microsoft 基础类应用...

6.5.3 If it test ok, show pass.
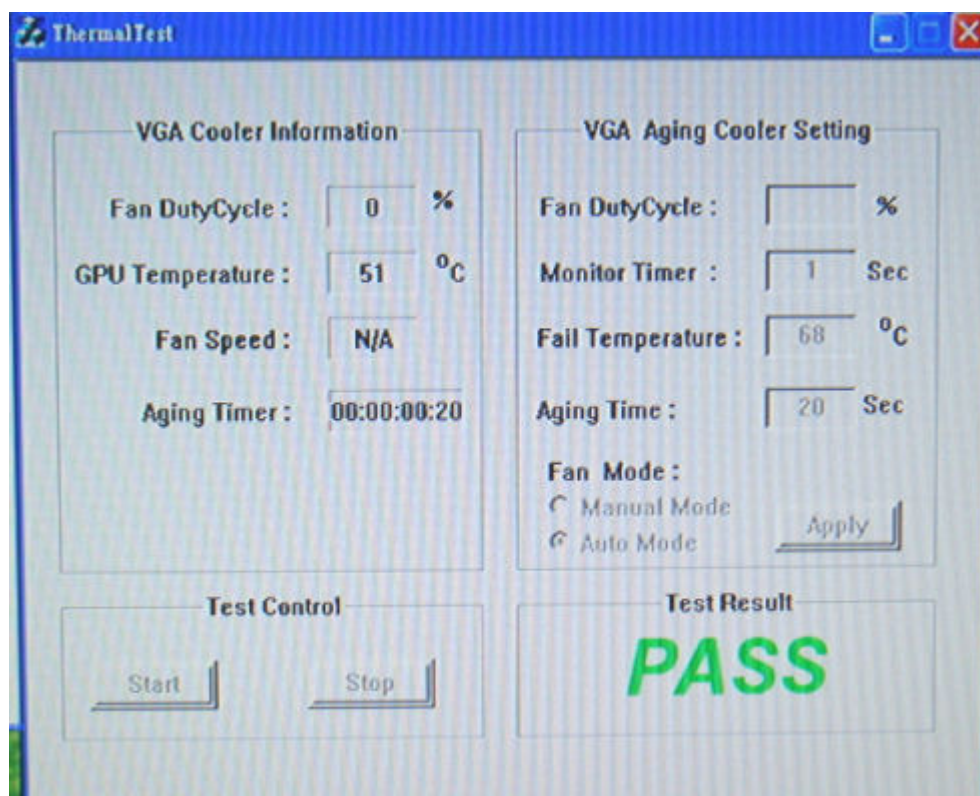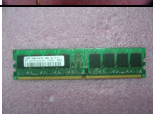
6.5.4 If it test fail, show fail.

6.5.5 If test OK, NTF test.

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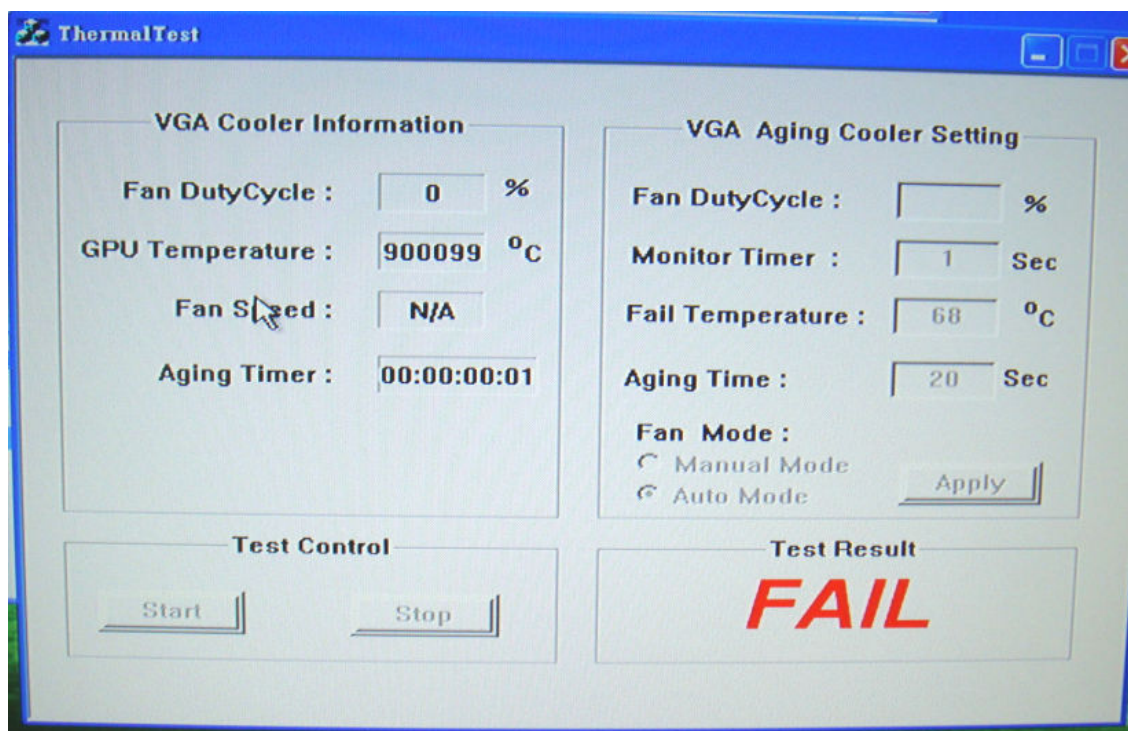
7.Appendix

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	Heat sink + FAN	22-240000160		1	
7	MEMORY DDRII	APACER 800MHz 512M or 800MHz 1G		512M 2pcs or 1G 1pcs	
8	TEST HDD(with TestProgram)			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	TV extend cable (Buying a local TV cable by yourself)			1	
13	S CABLE(NVDIA)	14G010005113 /14G010005100		1	
14	P5E	80- MBB7X0-G0A01		1	
15	D-SUB extend cable (Buying a local D-SUB cable by yourself)			1	
16	LCD "Y" Cable	14-010230000		1	
17	DVI-HDMI	04G460002400 /04G460002450		1	