

ASUSTeK COMPUTER INC.	EAH4350 Standard Operation Procedure	Doc. No:	
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Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First Release	GTC	Paul_Wei	
1.01		Modify for new test structure	GTC	Janice_Pang	
1.02		Add new P/N	GTC	Paul_Wei	
1.03		Add NEW PCBA(C1CM15-A42)	GTC	Paul_Wei	AUG.05.2009
1.04		Add new P/N	GTC	Paul_Wei	AUG.07.2009
1.05		Add new P/N	GTC	Paul_Wei	AUG.31.2009
1.06		Add New PCBA(C1CM1A-A12)	GTC	Ariel_wang	Dec.01.2009
1.07		Add New PCBA(C1CM1F-A11)	GTC	Ariel_wang	Jan.05.2010
1.08		Add New PCBA(C1CM15-A52)	GTC	Ariel_wang	Jan.07.2010
1.09		Add new P/N(C1CM1K-A01)	GTC	Ariel_wang	Jan.25.2010
1.10		Add New PCBA(C1CM15-B01)	GTC	Ariel_wang	Mar.19.2010
1.11		Add New PCBA(C1CM1F-B01)	GTC	Ariel_wang	Mar.19.2010
1.12		Add New PCBA(C1CM1A-B01)	GTC	Ariel_wang	Mar.19.2010
1.13		Add New PCBA(C1CM15-B31)	GTC	Ariel_wang	Jun.22.2010
1.14		Add New PCBA(C1CM15-B21)	GTC	Chongling	Jun.28.2010
1.15		Add New PCBA(C1CM1F-B11)	GTC	Chongling	Jun.29.2010
1.16		Add New PCBA(C1CM1A-B21)	GTC	Chongling	Jul.23.2010
1.17		Add New PCBA(C1CM15-B61)	GTC	Chongling	Aug.31.2010
1.18		Add New PCBA(C1CM1A-B41)	GTC	Chongling	Sep.09.2010
1.19		Add New PCBA(C1CM1F-B22)	GTC	Chongling	Sep.09.2010
1.20		Add New PCBA(C1CM1A-B51)	GTC	Ariel_wang	Dec.15.2010
1.21		Add New P/N(C1CM1U-A01)	GTC	Ariel_wang	Dec.24.2010
1.22		Add New P/N(C1CM1P-A01)	GTC	Ariel_wang	Dec.24.2010

Authorize by		Review by		Originator By	Paul
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1.Objectives

Create test procedure.

2.Scope

Model: EAH4350  
PN: C1CM10(A01)  
C1CM15(A01&A21&A42&A52&B01&B31&B21&B61)  
C1CND0(A01)C1CM1A(A01&A12&B01&B21&B41&B51)C1CM1F(A01&A11&B01&B11&B22) C1CM1K(A01) C1CM1U(A01) C1CM1P(A01)

3.Test Item

3.1 Diagnostic test in DOS

3.2 3DMark03(contain HDMI test)

3.3 Temperature test

3.4 Suspend 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).

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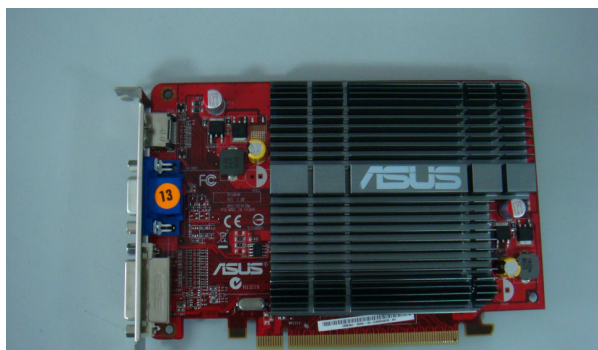
## 6.2 Fixture connect

6.2.1 Install Intel P5 CPU & CPU Fan.

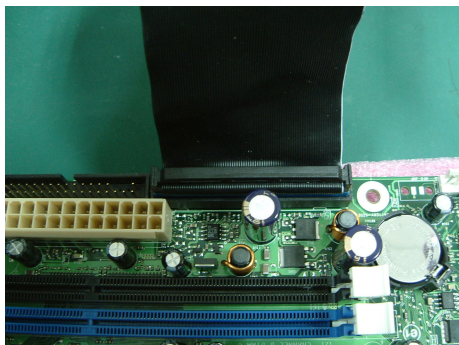
6.2.2 Install DDR2 **667/800M** 1GB Memory to DIMM1~2.

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

6.2.4 Plug VGA Card EAH4350 into PCIEX16.

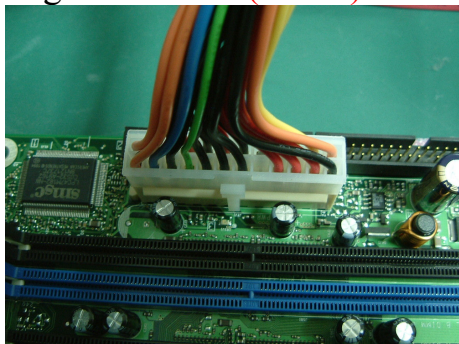


6.2.5 Connect IDE HDD with IDE CON.



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

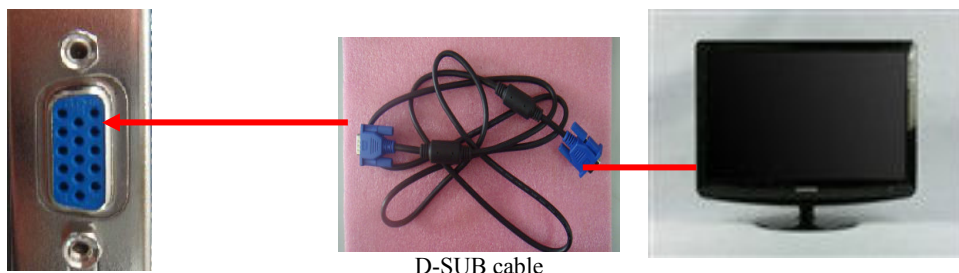
6.2.7 Plug ATX Power(**600W**) on Power Connector.



## 6.3 Certain test.

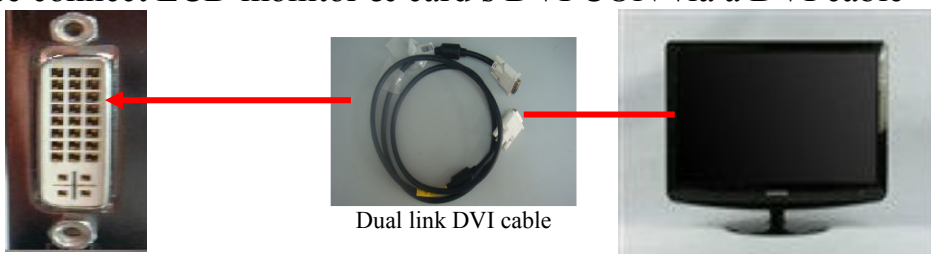
### 6.3.1 Diagnostic test in DOS

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



D-SUB cable

Or please connect LCD monitor & card's DVI CON via a DVI cable

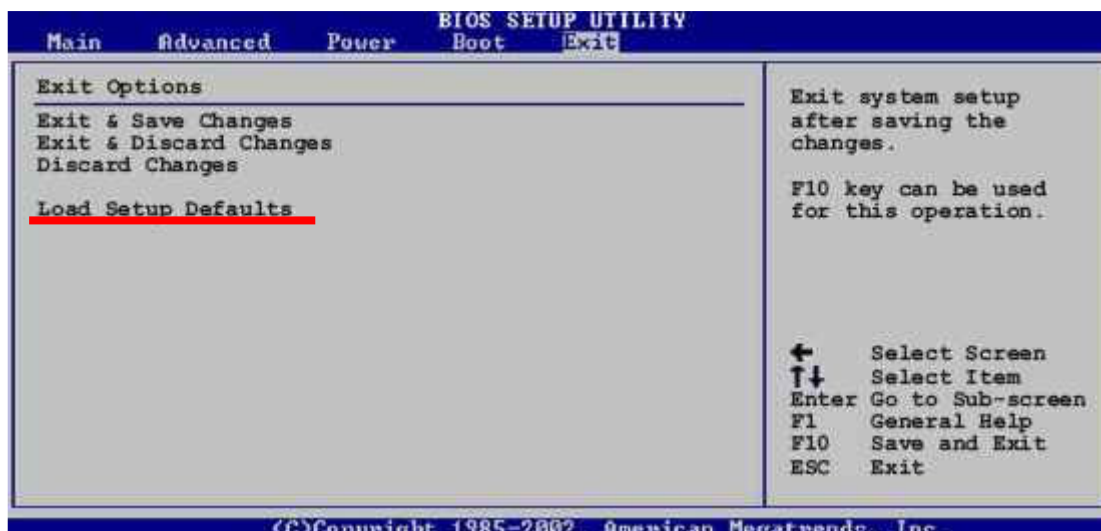


Dual link DVI cable

6.3.1.2 Press Power Switch then turn on power button.

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

**EXIT -> Load Setup Defaults.**



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

Path: VBAT\EAH4350\BATCH\

Run the test program refer to the prompt.

6.3.1.5 Memory test

If you want to test memory, please run memfa.bat.

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Path:VBAT\ EAH4350\DIAG

#### 6.3.1.6 BIOS flash

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

Path:VBAT\EAH4350\BIOS

Command:[atiflash -p -f 0 xxx.rom](#)

**Notice:**

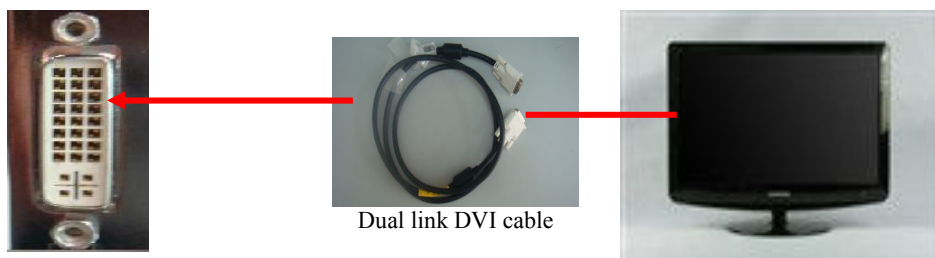
If you can not flash bios because of the bios locked, please use [nvflash.exe /r](#) to unlock bios. And then, please use [nvflash.exe /w](#) to lock bios after updating latest bios.

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

### 6.3.2 3DMark test(contain HDMI test)

6.3.2.1 Please install 3DMark program by yourself.

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



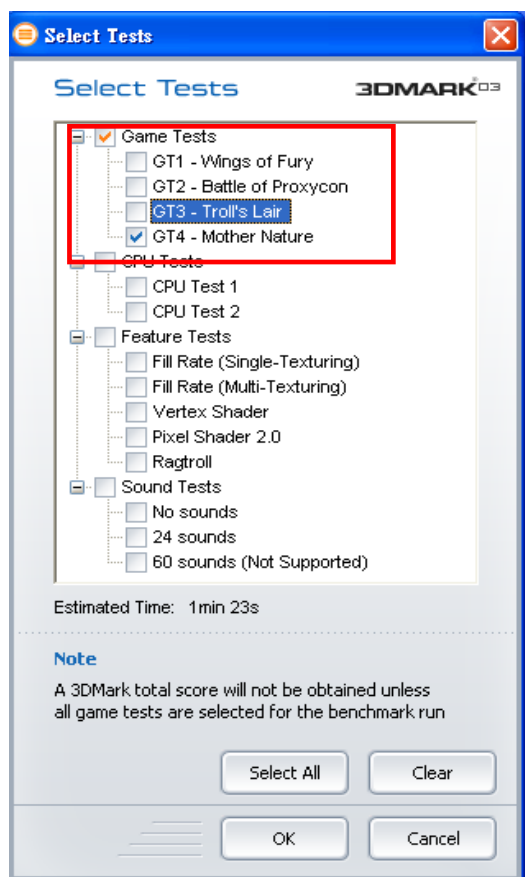
Or connect VGA card to LCD via HDMI cable(for HDMI function).



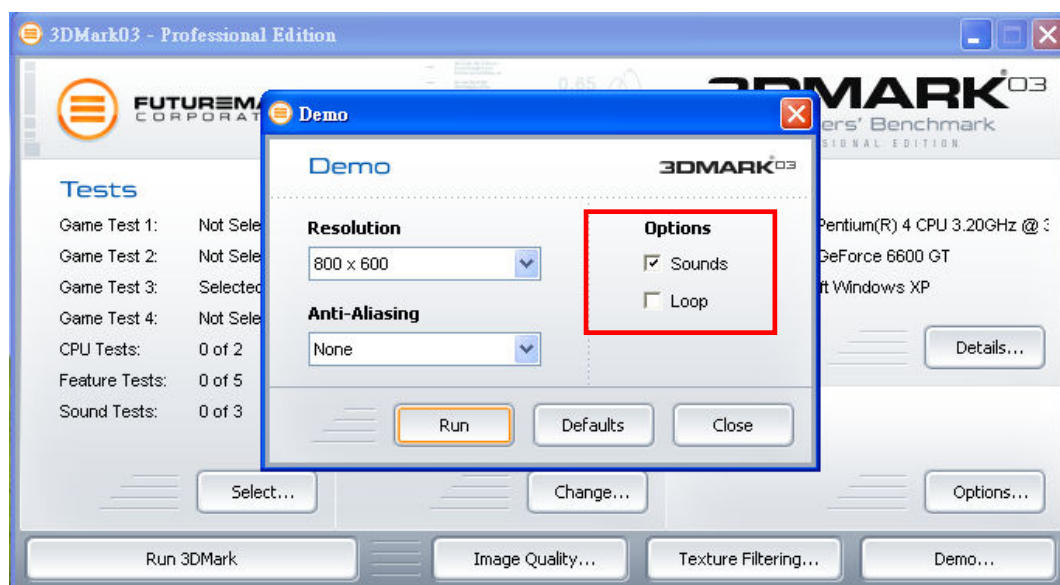
6.3.2.3 Please install VGA card driver in Windows(You must use individual driver of this card).

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

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



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





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

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

6.3.2.8 Please listen to voice carefully to check whether it outputs sounds. If not, HDMI test fail(for HDMI function).





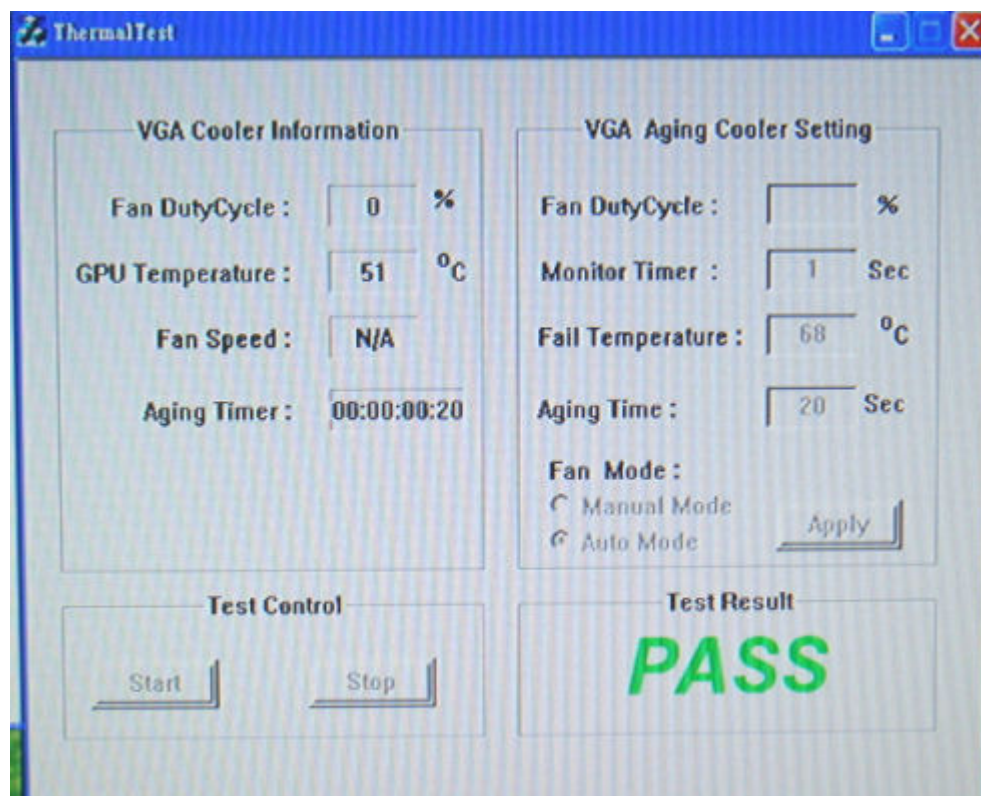
## 6.4 Temperature test

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

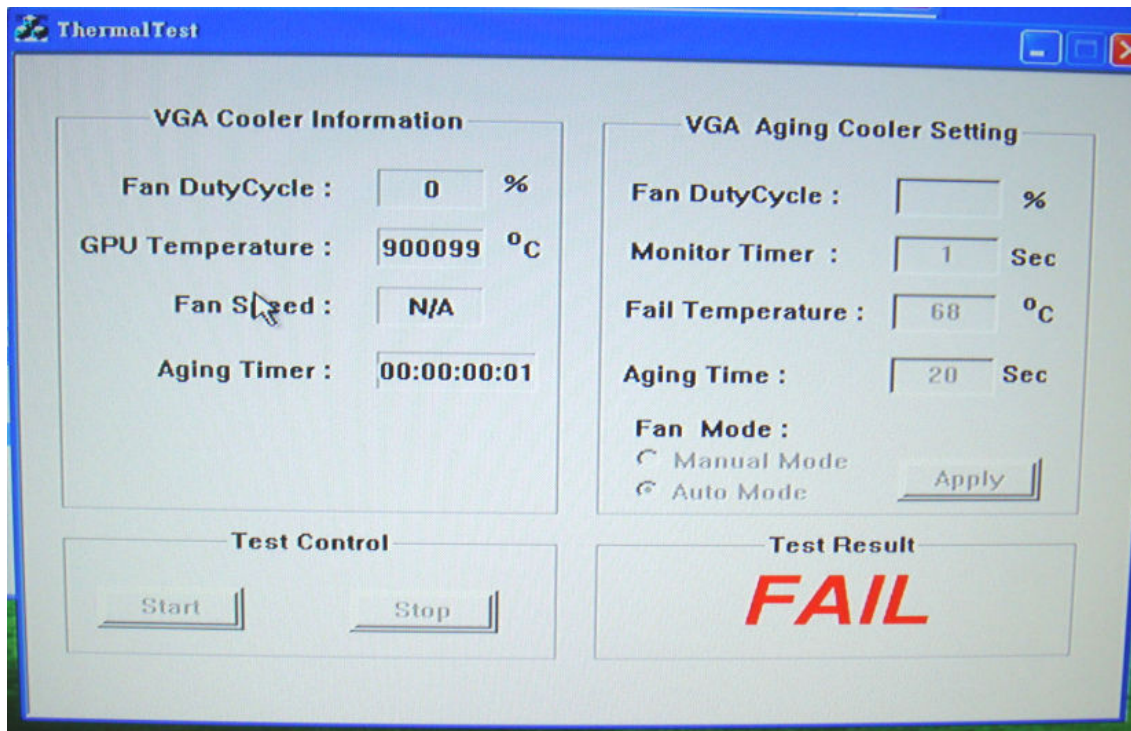
6.4.2 Please run ThermalTest.exe.



6.4.3 If test ok, show pass.




6.4.4 If test fail, show fail.




6.4.5 If test OK, please NTF test.

## 7.Appendix

NO#	Equipment Description	ASUS Part#	Supplier	Quantity	Remarks
1	SAMSUNG 2232MW			1	
2	PS/2 MOUSE			1	
3	PS/2 KEYBOARD			1	
4	ATX POWER SUPPLY( <b>600W</b> )			1	
5	INTEL Celeron E1200			1	
6	Heat sink + FAN	22-240000160		1	
7	APACER 800MHz 512M or 800MHz 1G			512M 2 or 1G 1	
8	SATA HDD			1	
9	SATA HDD Cable	14-000107070	ASUS	1	
10	PCIEX16 VGA CARD			1	
11	D-SUB extend cable ( <b>Buying a local D-SUB cable by yourself</b> )			1	
12	S CABLE( <b>ATI</b> )	14G001801801		1	
13	Dual link DVI cable ( <b>Buying a local DVI cable by yourself</b> )			1	
14	HDMI extend cable ( <b>Buying a local HDMI cable by yourself</b> )			1	
15	TV extend cable ( <b>Buying a local TV cable by yourself</b> )			1	

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16	LCD “Y” Cable	14-010230000		1	
17	P5E	80-MBB7X0-G0A01		1	