

ASUSTeK COMPUTER INC.	EAH4670 Standard Operation Procedure	Doc. No:	
		Date: Sep. 03, 2009 Revision:1.12	
		Page: 9	Grade:

Rev.	Modified Chapter s	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First release	GTC	Kelvin_Cao	
1.01		Add New P/N	GTC	Kelvin_Cao	
1.02		Add New P/N	GTC	Kelvin_Cao	
1.03		Modify for new test structure	GTC	Janice_Pang	
1.04		Modify for new test structure	GTC	Janice_Pang	JAN.16,2009
1.05		Add New P/N	GTC	Kelvin_Cao	MAY.14,2009
1.06		Add New PCBA(C1CLPA-A32)	GTC	Kelvin_Cao	MAY.19,2009
1.07		Add New P/N(C1CLPU-A01/A11/A21)	GTC	Kelvin_Cao	JULY.24,2009
1.08		Add New PCBA (C1CLPF-A11)	GTC	Kelvin_Cao	JULY.27,2009
1.09		Add New P/N(C1CLPP-A01/A11)	GTC	Kelvin_Cao	JULY.28,2009
1.10		Add New PCBA (C1CLPU-A31)	GTC	Kelvin_Cao	AUG.26,2009
1.11		Add New PCBA(C1CLPF-A21)	GTC	Kelvin_Cao	SEP.02,2009
1.12		Add New P/N(C1CLPZ-A01)	GTC	Kelvin_Cao	SEP.03,2009

Authorize by		Review by		Originator By	Kelvin
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ASUSTeK COMPUTER INC	EAH4670 Standard Operation Procedure	Doc. No:
		Date: Sep. 03, 2009
		Rev. : 1.12 Page: 1

1.Objectives

Create test procedure.

2.Scope

Model: EAH4670

PN: C1CLP0(A01&A13) C1CLP5(A01&A02) C1CLPA(A01&A12&A32)
C1CLPF(A01&A11&A21) C1CLPU(A01&A11&A21&A31)
C1CLPP(A01&A11) C1CLPZ(A01)

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.

3. C1CLP0-A34

3.1 If first bios(9490.11.15.0.12.AS03) test fail, please flash the bios of second bios(9490.11.15.0.12.AS03.a) to test again.

3.2 If second bios(9490.11.15.0.12.AS03.a) test fail, please flash the bios of first bios(9490.11.15.0.12.AS03) to test again.

ASUSTeK COMPUTER INC	EAH4670 Standard Operation Procedure	Doc. No:
		Date: Sep. 03, 2009
		Rev. : 1.12 Page: 2

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.

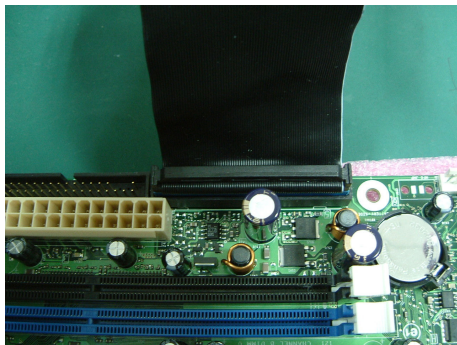
6.2.2 Install DDR2 **667/800M** 1GB Memory to DIMM1~2.

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

6.2.4 Plug VGA Card EAH4670 into PCIEX16

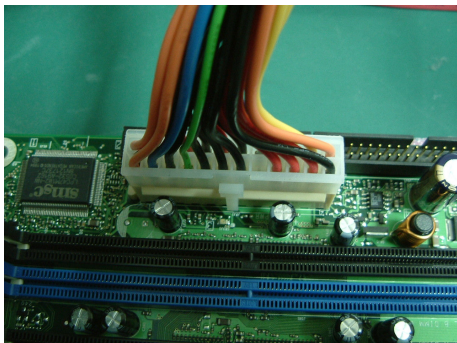


6.2.5 Connect IDE HDD with IDE CON.



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

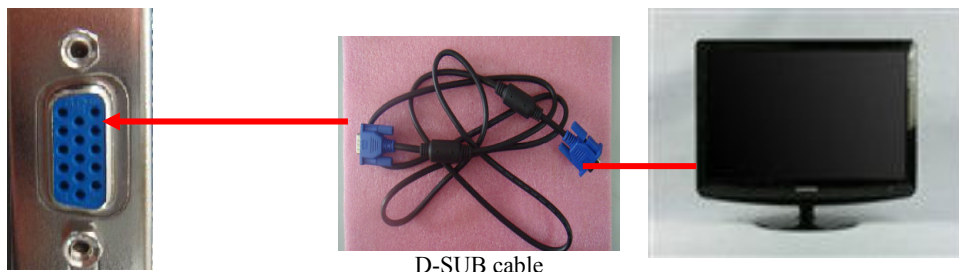
6.2.7 Plug ATX Power on Power(**600W**) Connector.



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.

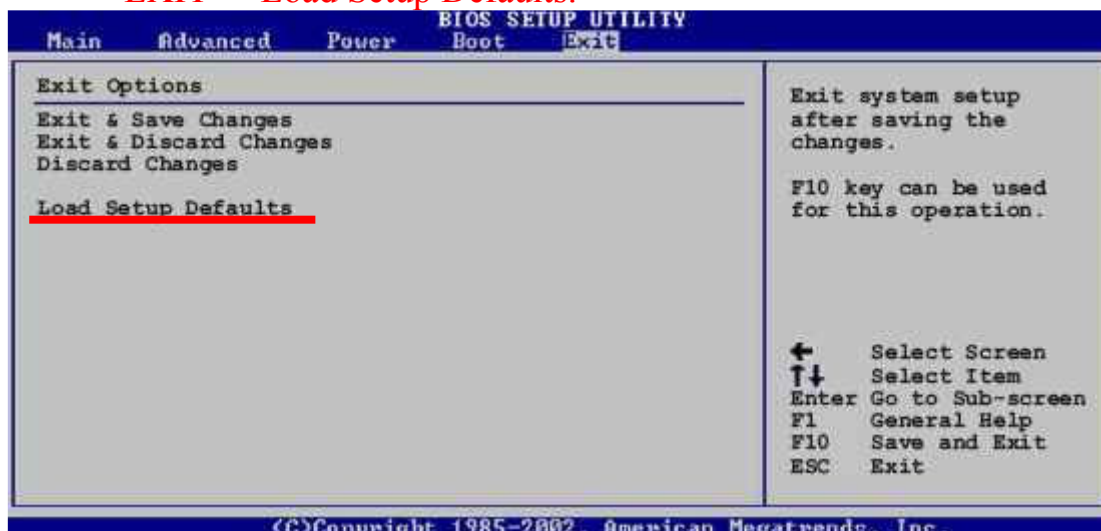


D-SUB cable

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\EAH4670\BATC\

Run the test program refer to the prompt.

6.3.1.5 Memory test

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

Path: VBAT\EAH4670\DIAG (For C1CLP0-A01&A13)

Path: VBAT\EAH4670\DIAG2\MEMFA (For C1CLPA-A01,C1CLPU-A01)

Path: VBAT\EAH4670\DIAG3 (For C1CLPA-A12,C1CLPU-A11)

Path: VBAT\EAH4670\DIAG4 (For C1CLP5-A01&A02)

Path: VBAT\EAH4670\DIAG5\MEMFA2 (For C1CLPF-A01&A11,C1CLPZ-A01)

Path: VBAT\EAH4670\DIAG6\MEMFA2 (For C1CLPA-A32,C1CLPU-A21)

Path: VBAT\EAH4670\V730P122\MEMFA2 (For C1CLPP-A01/A11,C1CLPU-A31)

Path: VBAT\EAH4670\V730P127\ (For C1CLPF-A21)

6.3.1.6 BIOS flash

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

Path: VBAT\EAH4670\BIOS

Command: **atiflash -p -f 0 xxx.rom**

ASUSTeK COMPUTER INC	EAH4670 Standard Operation Procedure	Doc. No:
		Date: Sep. 03, 2009 Rev. : 1.12 Page: 5

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 **Please connect VGA card to LCD via HDMI cable.**



Dual link DVI cable



DVI CON



HDMI cable

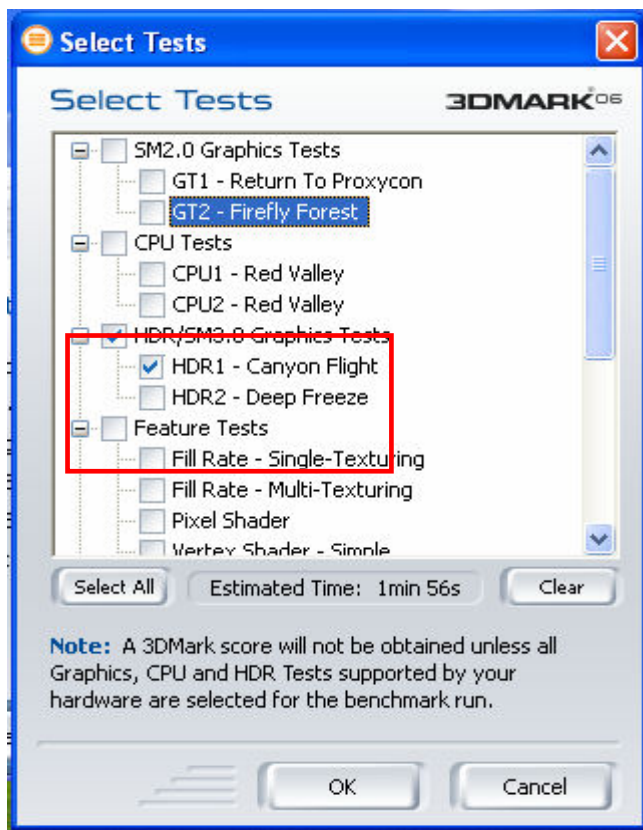


HDMI CON

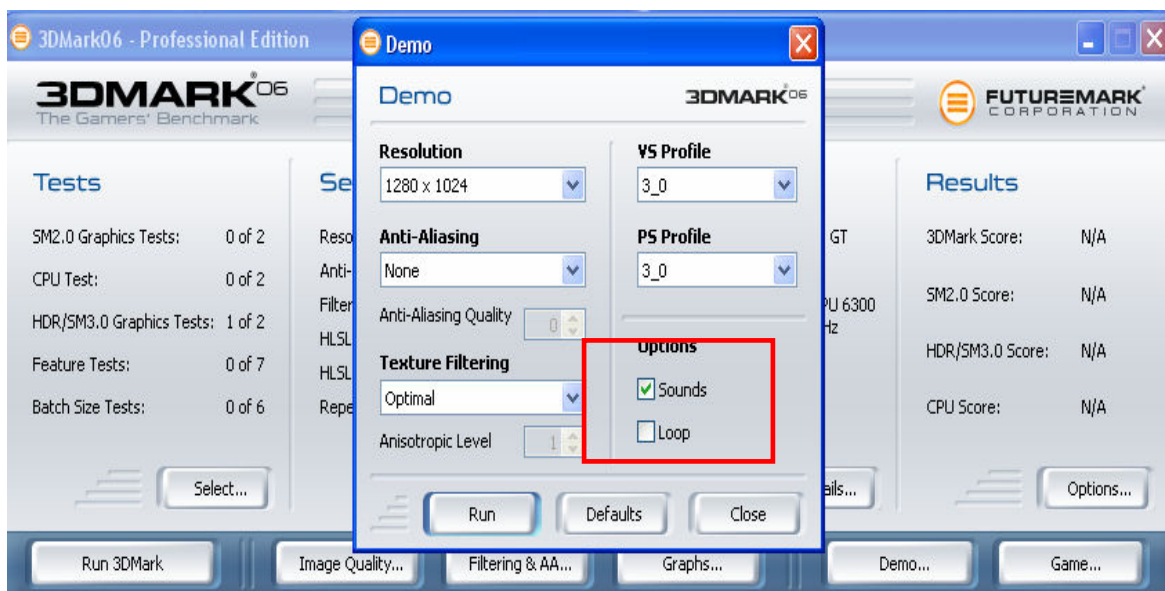
6.3.2.3 Please install VGA card driver in Windows(**You must use individual driver of this card**).

6.3.2.4 Please run 3DMark**06** base on this card (**please test 1 cycle**).

6.3.2.5 Press "Select" to enter Select test menu. You can choose "HDR1" for default setting.



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



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).



6.3.2.9 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(600W)			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	TEST HDD			1	
9	40Pins IDE Cable ATA66		ASUS	1	
10	PCIEX16 VGA CARD			1	
11	D-SUB extend cable (Buying a local D-SUB cable by yourself)			1	
12	S CABLE(ATI)	14G001801801		1	
13	Dual link DVI cable (Buying a local DVI cable by yourself)			1	
14	HDMI extend cable (Buying a local HDMI cable by yourself)			1	
15	TV extend cable (Buying a local TV cable by yourself)			1	

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