Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First release	GTC	Janice_Pang	JUN.25,2009
1.01		Add New PCBA(C1CN00-A11)	GTC	Janice_Pang	SEP.11,2009
1.02		Add New PCBA(C1CN00-B01)	GTC	Janice_Pang	SEP.29,2009
1.03		Unlock or lock bios	GTC	Janice_Pang	SEP.29,2009
1.04		Add New PCBA(C1CN00-A24)	GTC	Ariel_wang	Jun.21,2010

Authorize by		Review by		Originator By	Janice

1.Objectives

Create test procedure.

2.Scope

Model: BRAVO9500

PN: C1CN00(A01&A24&A11&B01)

3.Test Item

3.1 Diagnostic test in DOS

3.2 3DMark05(**contain HDMI test**)

3.3 Temperature 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.

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.
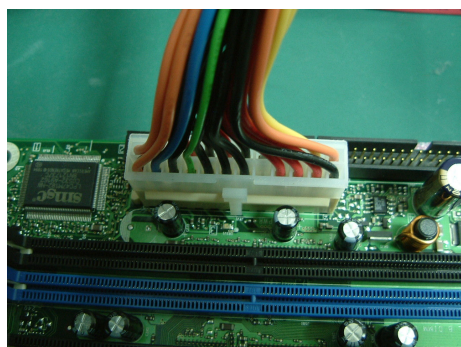6.2.4 Plug VGA Card BRAVO9500 into PCIEX16.
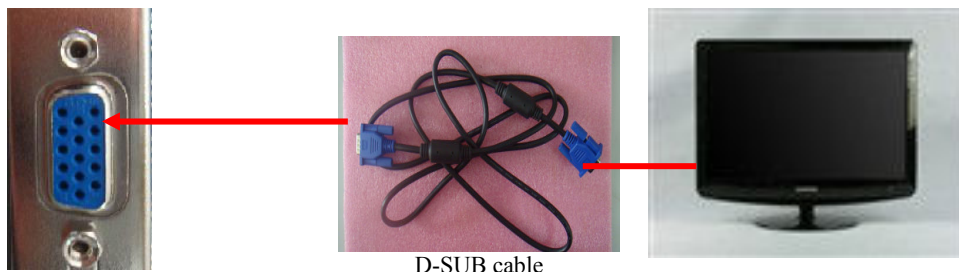

6.2.6 Connect SATA HDD & SATA con via SATA cable

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 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\ BRAVO9500\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\ BRAVO9500\ 0171HX1\

6.3.6 BIOS flash

    Please use the following command to flash bios and notice the size of character.
Path:VBAT\ BRAVO9500\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.

6.3.7 After finish DOS testing, please enter Windows environment to test 3DMark.
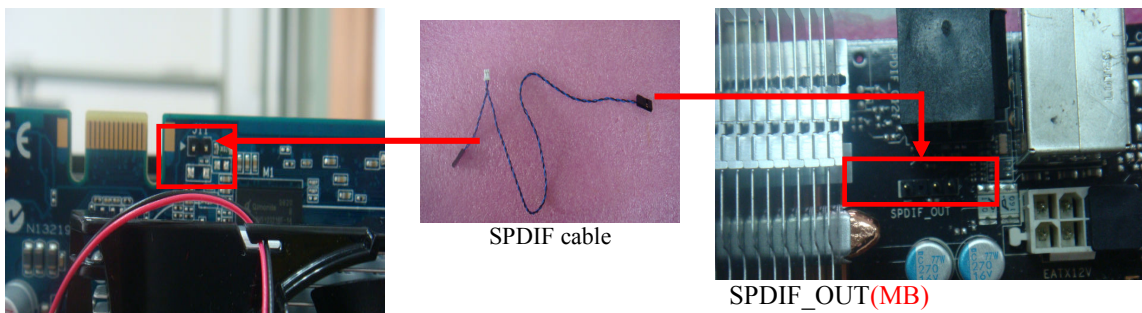
6.4 3DMark test(contain HDMI test)

6.4.1 Please install 3DMark program by yourself.
6.4.2 Please connect VGA card to LCD via HDMI cable.

DVI-HDMI cable
YELLOW DVI CON

HDMI cable
HDMI CON

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).

SPDIF cable
SPDIF_OUT(MB)

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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 3DMark05 base on this card (please test 1 cycle).

6.3.2.5 Press "Select" to enter Select test menu. You can choose "GT3" for default setting.
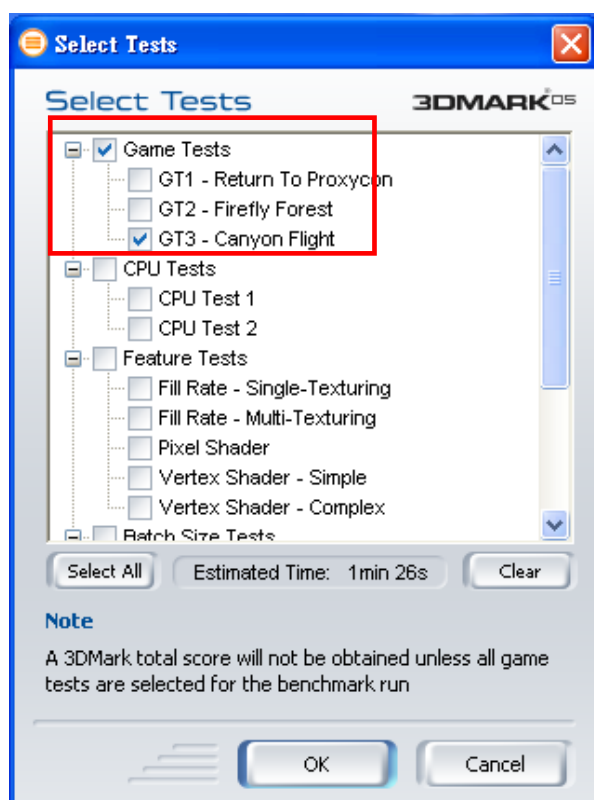
6.4.9 Press "Demo" to enter Demo menu. You can choose "Sounds" for default setting(for HDMI function).
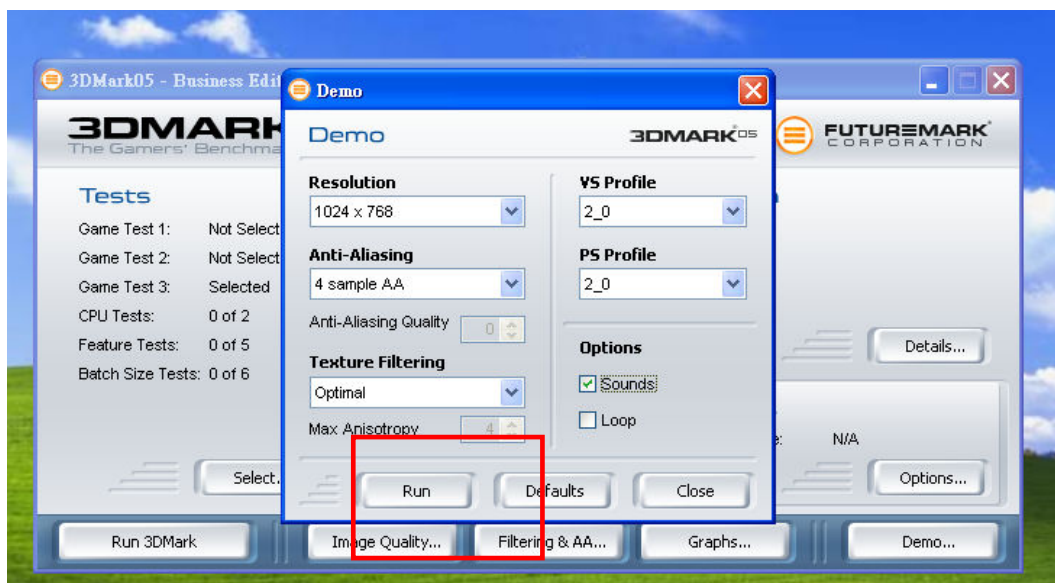
6.4.10 Please pay attention to check if there is flickering, discolor, crash and so on. If there's no problem, it can be judged OK!

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.
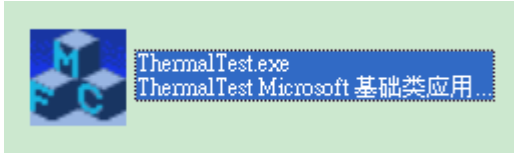
6.5.3 If test ok, show pass.
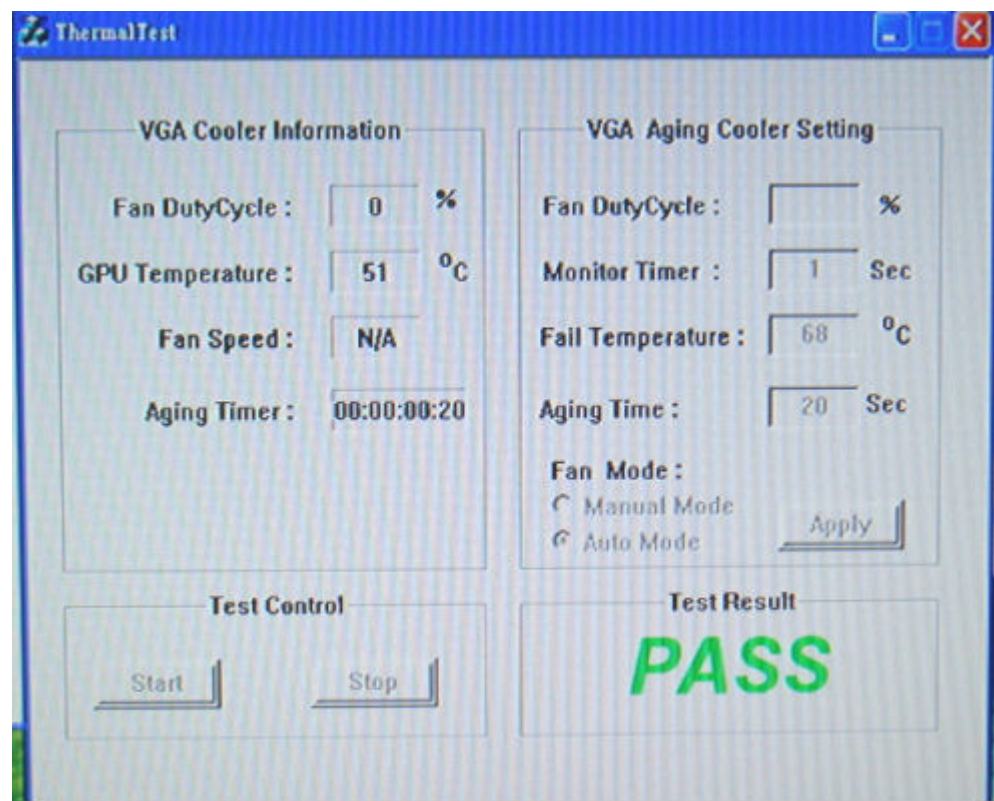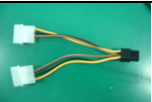
6.5.4 If test fail, show fail.
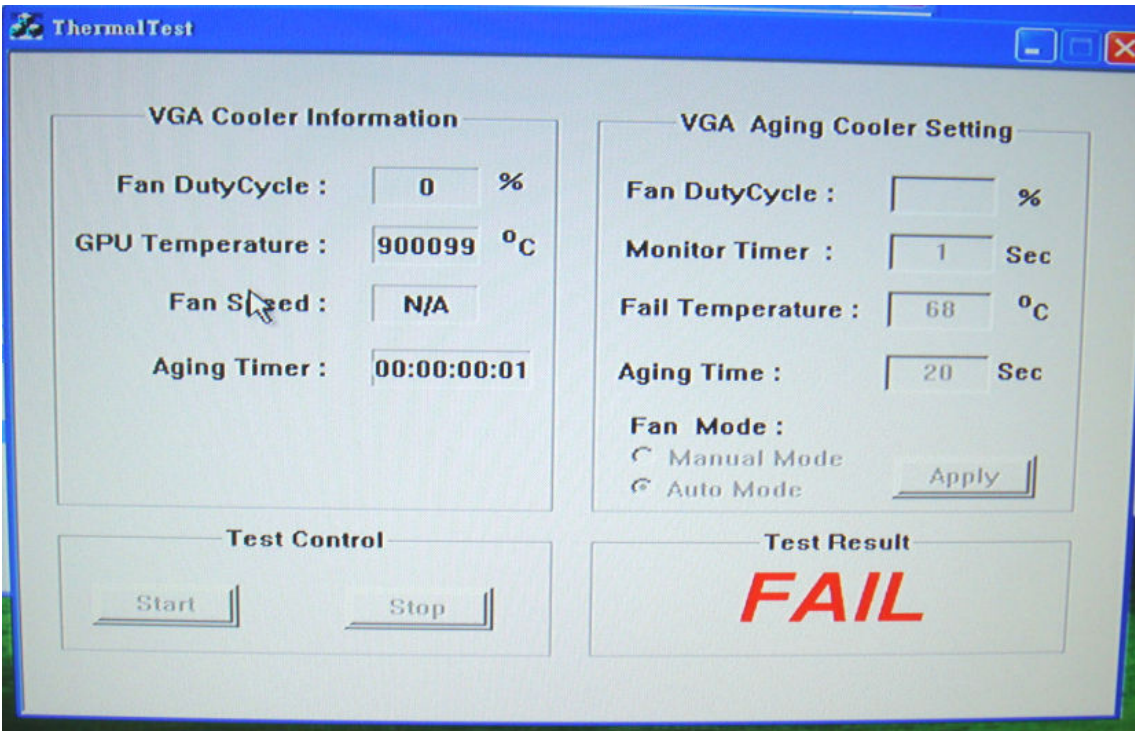
6.5.5 If test OK, NTF test.

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	**Heat sink + FAN**	**22-240000160**		1	
8	**DDR2(667/800)512M**	**04G0016169A9NE /22-T00642404**		2	
	SATA HDD			1	
9	**SATA HDD Cable**	**14-000107070**	**ASUS**	1	
10	**PCIEX16 VGA CARD**			1	
11	**D-SUB extend cable (Buying a local D-SUB cable by yourself)**			1	
12	**S CABLE(NVDIA)**	**14G010005113 /14G010005100**		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	**DVI-HDMI**	**04G460002400 /04G460002450**		1	

17	Power Cable	14G000602510 /14G000602502		1	
18	SPDIF CABLE	14G003200813 /14G003200810		1	
19	SUPREME FX II	80-C1BHK5-0C01		1	
20	LCD "Y" Cable	14-010230000		1	
21	P5E	80-MBB7X0-G0A01		1	