ASUSTeK	COMPUTER
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# $\begin{array}{c} \textbf{G505} \\ \textbf{Standard Operation Procedure} \end{array}$

Doc. No:

Date: Mar. 11. 2013

Revision:1.02

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0Rev	Modified Chapters	Modification Description	eription Issued Dept. Issued by Rev		Revised Date
1.00		First release	GRMA	Ariel_wang	Apr.6.2012
1.01		Add new PCBA(YV02N0-A21)	GRMA	Ariel_wang	Sep.10.2012
1.02		Add new PCBA(YV02N0-A32)	<b>GRMA</b>	Ariel wang	Mar.11.2013

Authorize by		Review by		Originator By	Ariel
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Form No: T2-009-01 Rev.01

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## 1.Objectives

Create test procedure.

## 2.Scope

Model: G505

YV02N0(A01&A21&A32) PN:

#### 3.Test Item

- 3.1 Diagnostic test in DOS
- 3.2 3DMark06(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.

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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 7 test environment by yourself).

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#### **6.2** Fixture connect

6.2.1 Install Intel P7 CPU & CPU Fan.

6.2.2 Install DDR3 Memory to DIMM1~4...

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

6.2.4 Plug VGA Card G505 into PCIEX16.

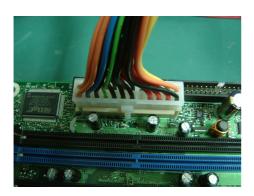
6.2.5 Connect power con of VGA card & Power supply via bundled power cable.

6.2.6 Connect SATA HDD with SATA CON.



6.2.7 Plug 4PIN 12V (1200W) power cable into CON12V.

6.2.8 Plug ATX Power (1200W) on Power Connector.



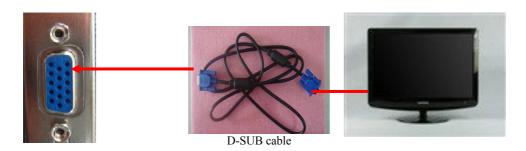
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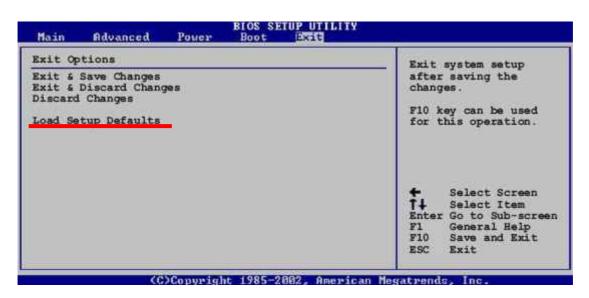
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## 6.3 Diagnostic test in DOS

6.3.1Please connect LCD monitor & card's D-SUB CON via a 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\G505\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\G505\18567 (For YV02N0-A0\*/A2\*)

Path: VBAT\G505\18567A(For YV02N0-A3\*)

6.3.7 BIOS flash

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

Path: VBAT\G505\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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6.3.8 Please connect LCD monitor & card's DVI CON via a DVI cable.

(Please refer to step 6.3.2&6.3.4)



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

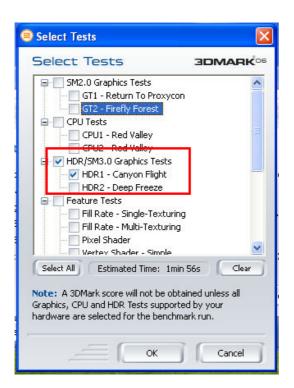
## 6.4 3DMark test(contain HDMI test)

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



#### **HDMI CON**

- 6.4.3 Please install VGA card driver in Windows (You must use individual driver of this card).
- 6.4.4 Please run 3DMark06 base on this card (please test 1 cycle).
- 6.4.5 Press "Select" to enter Select test menu. You can choose "HDR1" for default setting.

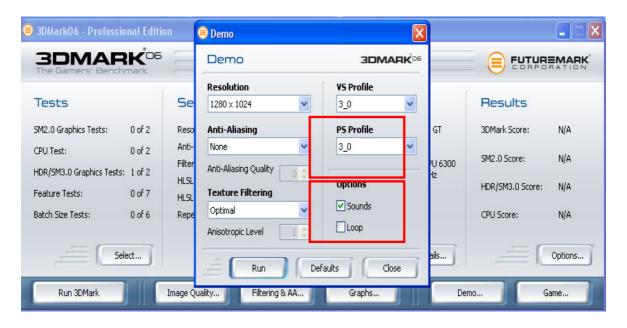


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6.4.6 Press "Demo" to enter Demo menu. You can choose "Sounds" for default setting(for HDMI function).



- 6.4.7 Please pay attention to check if there is flickering, discolor, crash and so on. If there's no problem, it can be judged OK!
- 6.4.8 Please listen to voice carefully to check whether it outputs sounds. If not, HDMI test fail(for HDMI function).



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6.4.9 Please connect LCD monitor & card's DVI CON via a DVI cable. (Please refer to step 6.4.4&6.4.5&)



6.4.10 Press "Run 3DMark" to enter 3DMark, Please pay attention to check if there is flickering, discolor, crash and so on. f there's no problem, it can be judged OK!



6. 4.11 If test OK, please test **Temperature test**.

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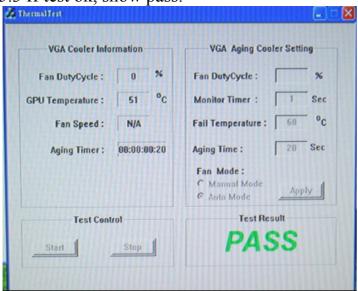
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## 6.5 Temperature test

- 6.5.1 Please copy Thermaltool(1.0.05) to Windows by yourself.
- 6.5.2 Please run ThermalTest.exe.



6.5.3 If test ok, show pass.



6.5.4 If 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	SAMSUNG 2232MW		Tri	1	
2	USB MOUSE			1	Profession of
3	PS/2 KEYBOARD			1	
4	ATX POWER SUPPLY(a minimum power of 500W)			1	
5	Intel CPU Intel(R) Core(TM)2 CPU		local	1	E1100
6	Heat sink + FAN	22-240000160		1	
7	DDR3 1333 2G	20-TT2605618	local	4	
8	TEST HDD			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	O
12	HDMI extend cable (Buying a local HDMI cable by yourself)			1	O
13	P7H55-M/USB3 MB	80- MIBBKA-*		1	
14	TV extend cable (Buying a local TV cable by yourself)			1	
15	LCD "Y" Cable	14-010230000		1	
16	D-SUB extend cable (Buying a local D-SUB cable by yourself)			1	