

ASUSTeK COMPUTER INC.	GT610 Standard Operation Procedure	Doc. No:	
		Date: Feb.18.2016 Revision:1.53	
		Page: 9	Grade:

0Rev .	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.47		Add new PCBA(YV02U0-C01)	GRTD	Xiaoming_Lu	Feb.18.2016
1.48		Add new PCBA(YV0422-A43)	GRTD	Xiaoming_Lu	Feb.18.2016
1.49		Add new PCBA(YV0423-A42)	GRTD	Xiaoming_Lu	Feb.18.2016
1.50		Add new PCBA(YV0424-A21)	GRTD	Xiaoming_Lu	Feb.18.2016
1.51		Add new PCBA(YV0423-A52)	GRTD	Xiaoming_Lu	Feb.18.2016
1.52		Add new PCBA(YV02U0-B36)	GRTD	Xiaoming_Lu	Feb.18.2016
1.53		Add new PCBA(YV0423-A62)	GRTD	Xiaoming_Lu	Feb.18.2016

Authorize by		Review by		Originator By	Xiaoming_lu
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ASUSTeK COMPUTER INC	GT610 Standard Operation Procedure	Doc. No:
		Date: Feb. 18. 2016 Rev. : 1.53 Page: 1
<div data-bbox="86 250 312 297">1.Objectives</div> <div data-bbox="304 300 632 338">Create test procedure.</div> <div data-bbox="86 472 225 519">2.Scope</div> <div data-bbox="239 521 475 560">Model: GT720</div> <div data-bbox="239 562 1445 600">PN: YV02U0 (C01) YV0422(A43) YV0423(A42) YV0424(A21) YV0423(A52)</div> <div data-bbox="105 607 557 645">YV02U0(B36) YV0423(A62)</div> <div data-bbox="86 779 288 826">3.Test Item</div> <div data-bbox="309 828 841 866">3.1 Diagnostic test in Linux system</div> <div data-bbox="309 869 952 907">3.2 3DMark11(contain HDMI&DVI test)</div> <div data-bbox="309 909 616 947">3.3 Temperature test</div> <div data-bbox="86 1126 478 1173">4.Relevant Document</div> <div data-bbox="304 1176 395 1214">None.</div> <div data-bbox="49 1348 280 1395">5.Definition :</div> <div data-bbox="143 1397 667 1435">3.1Diagnostic test in Linux system</div> <div data-bbox="143 1438 766 1476">3.2 3DMark03(containHDMI&DVItest)</div> <div data-bbox="143 1478 438 1516">3.3 Temperaturetest</div> <div data-bbox="86 1910 545 1957">6. Operation Procedures:</div> <div data-bbox="113 2002 347 2049">6.1 Attention</div> <div data-bbox="122 2094 1418 2132">6.1.1 To avoid damaging devices or M/B, please turn off A/C power then unplug VGA</div>		

ASUSTeK COMPUTER INC	GT610 Standard Operation Procedure	Doc. No:
		Date: Feb. 18. 2016 Rev. : 1.53 Page: 1

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.

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 GT720 into PCIEX16.

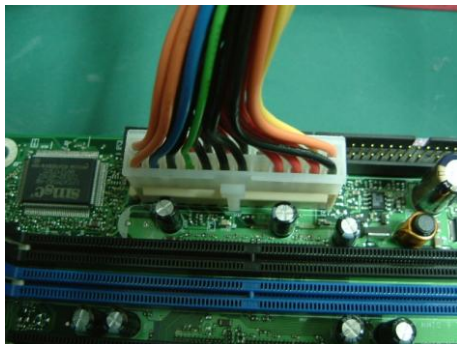
6.2.5 Connect power con of VGA card & Power supply via bundled power cable.

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.



6.3 Diagnostic test in linux system

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 linux to run test program.

Path:

GT6109\yv0422a4.sh or yv0423a4.sh or yv0424a2.sh or yv0423a5.sh or yv0423a6.sh

GT610a\yv02u0c0.sh or yv02u0b3.sh

Run the test program refer to the prompt.

6.3.5 Memory test

If you want to test memory, please run ./mats.

Path:GT610\

6.3.6 BIOS flash

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

Path:GT710\

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 or ./nvflash -r to unlock bios. And then, please use ./nvflash.exe /w or ./nvflash -w to lock bios after updating latest bios.

6.3.7 After finish linux testing, please enter Windows 7 environment to test 3DMark.

6.4 3DMark test(contain HDMI test)

6.4.1 Please install 3DMark program by yourself.

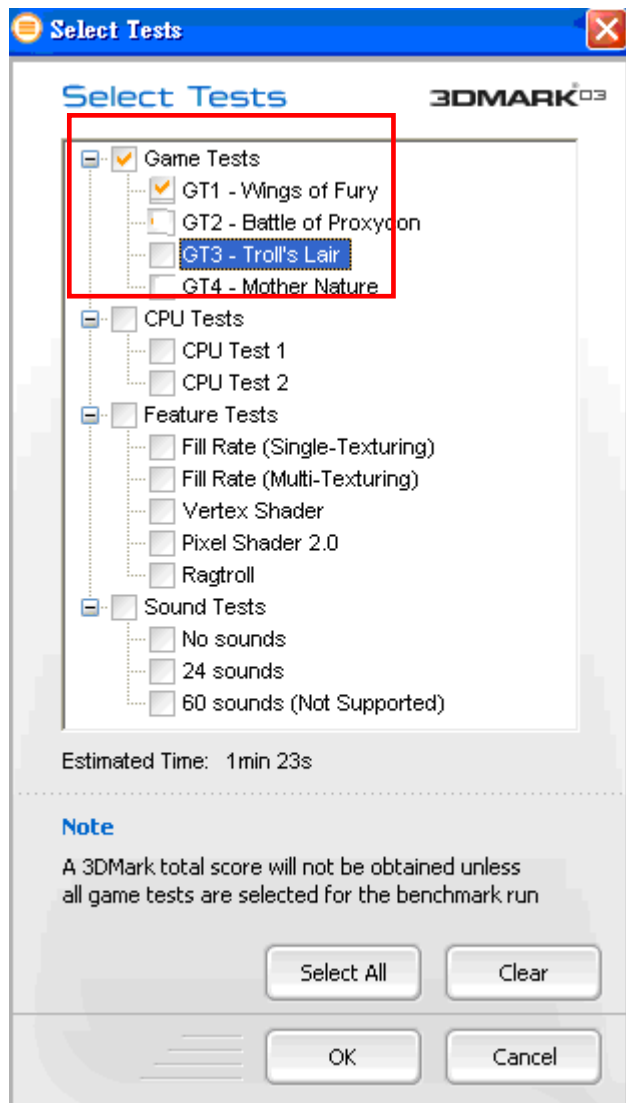
6.4.2 Please connect VGA card to LCD via HDMI cable.



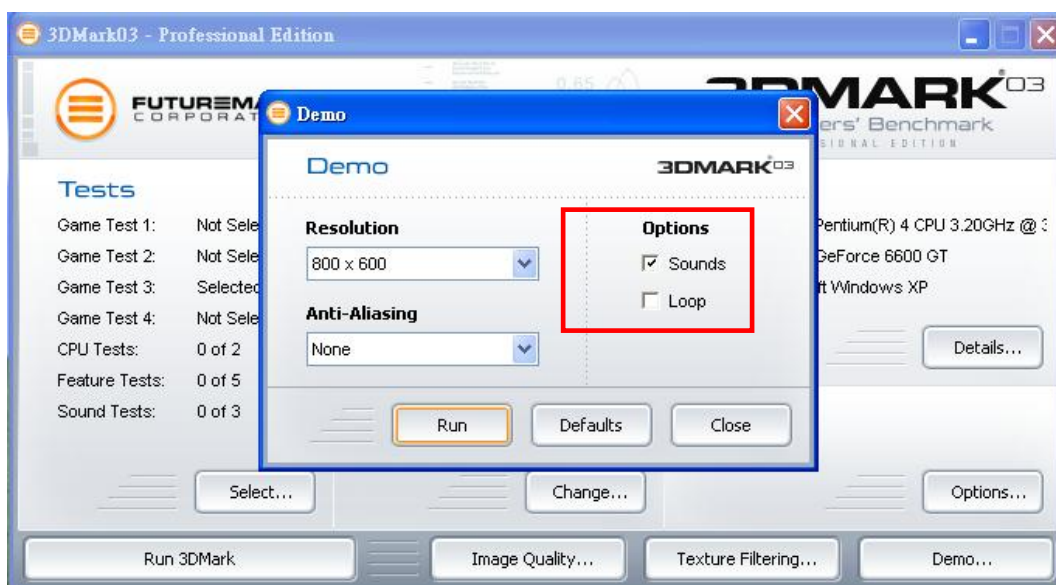
6.4.3 Please install VGA card driver in Windows (You must use individual driver of this card).

6.4.4 Please run 3DMark11 base on this card (please test 1 cycle).

6.4.5 Press “Select” to enter Select test menu. You can choose “GT1” for default setting.



6.4.6 Press “Demo” to enter Demo menu. You can choose “Sounds” for default setting.



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.



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&6.4.6&6.4.7&6.4.8)



Dual link DVI cable

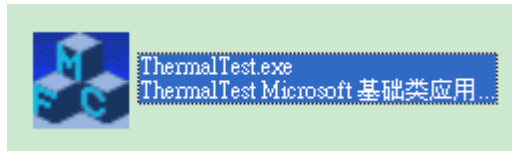


6.4.10 If test OK, please test **Temperature test**.

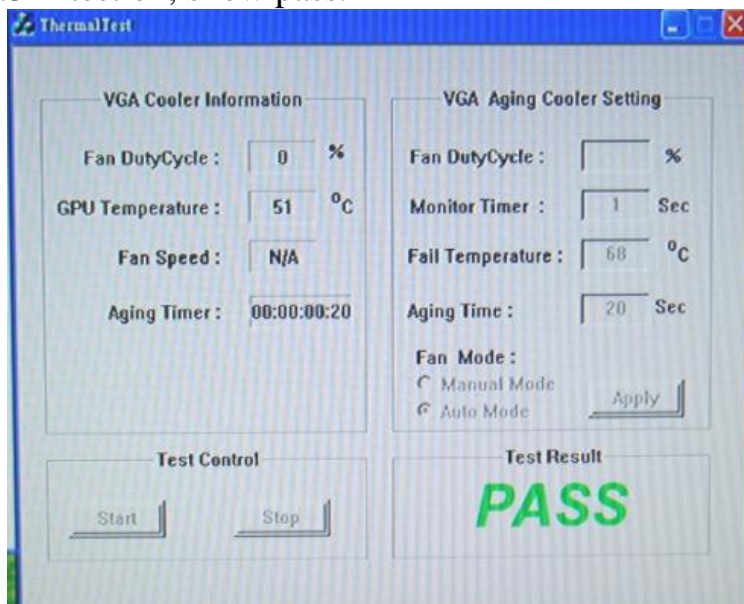
6.5 Temperature test

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

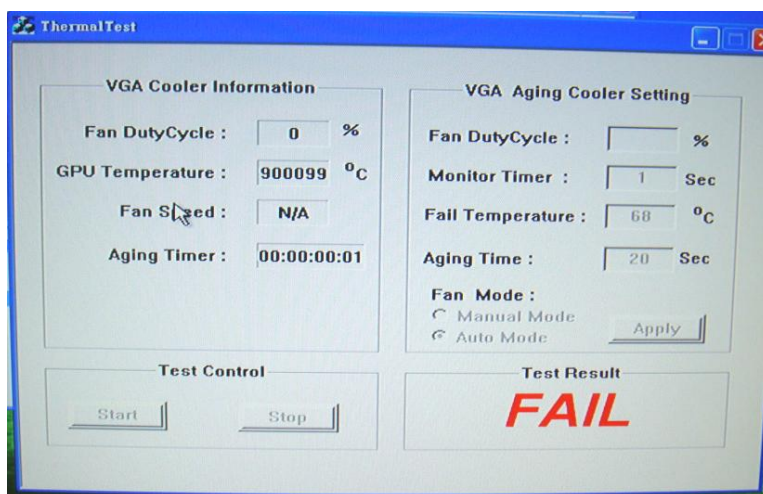
6.5.2 Please run ThermalTest.exe.



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	SAMSUNG 2232MW			1	
2	USB MOUSE			1	
3	PS/2 KEYBOARD			1	
4	ATX POWER SUPPLY (1200W)			1	
5	Intel CPU Intel(R) Core(TM)2 CPU		local	1	
6	Heat sink + FAN	22-240000160	local	1	
7	DDR3 1333 2G	20-TT2605618	local	4	
8	SATA HDD			1	
9	SATA HDD Cable	14-000107070		1	
10	PCIEX16 VGA CARD			1	
11	D-SUB extend cable (Buying a local D-SUB cable by yourself)			1	
13	HDMI extend cable (Buying a local HDMI cable by yourself)			1	
15	DVI-HDMI	04G460002400 /04G460002450		1	
17	P7H55-M/USB3	80-MIBBKA-G0*	ASUS	1	