

ASUSTeK COMPUTER INC.	GT630 Standard Operation Procedure	Doc. No:	
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0Rev .	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First release	GRMA	Ariel_wang	May.17.2012
1.01		Add new P/N(YV02X1-A01)	GRMA	Ariel_wang	May.18.2012
1.02		Add new PCBA(YV02X1-U04)	GRMA	Ariel_wang	Sep.6.2012
1.03		Add new PCBA(YV02X0-U05)	GRMA	Ariel_wang	Sep.6.2012
1.04		Add new P/N(YV03D0-A01)	GRMA	Ariel_wang	Sep.18.2012
1.05		Add new P/N(YV03C0-A01)	GRMA	Ariel_wang	Sep.19.2012
1.06		Add new PCBA(YV03D0-A13)	GRMA	Ariel_wang	Oct.22.2012
1.07		Add new P/N(YV03G0-A03)	GRMA	Ariel_wang	Nov.7.2012
1.08		Add new P/N(YV03D1-A03)	GRMA	Ariel_wang	Nov.7.2012
1.09		Add new P/N(YV02X2-A02)	GRMA	Ariel_wang	Nov.9.2012
1.10		Add new PCBA(YV03C0-A13)	GRMA	Ariel_wang	Nov.26.2012
1.11		Add new PCBA(YV02X0-A36)	GRMA	Ariel_wang	Dec.5.2012
1.12		Add new PCBA(YV03D1-U04)	GRMA	Ariel_wang	Dec.10.2012
1.13		Add new PCBA(YV03D0-U13)	GRMA	Ariel_wang	Dec.10.2012
1.14		Add new PCBA(YV03M0-A02)	GRMA	Ariel_wang	Dec.25.2012
1.15		Add new PCBA(YV02X0-U37)	GRMA	Ariel_wang	Jan.9.2013
1.16		Add new PCBA(YV03G0-U05)	GRMA	Ariel_wang	Jan.23.2013
1.17		Add new PCBA(YV03D1-A16)	GRMA	Ariel_wang	Mar.11.2013
1.18		Add new PCBA(YV03M1-A01)	GRMA	Ariel_wang	Mar.11.2013
1.19		Add new PCBA(YV03C0-A26)	GRMA	Ariel_wang	Apr.16.2013
1.20		Add new P/N(YV03D1-U16)	GRMA	Jory_yuan	May.14.2013
1.21		Add new P/N(YV04J0-A01)	GRMA	Jory_yuan	May.29.2013
1.22		Add new P/N(YV03D2-A01)	GRMA	Jory_yuan	Jun.26.2013
1.23		Add new P/N(YV04P0-A01)	GRMA	Jory_yuan	July.25.2013
1.24		Add new P/N(YV03D2-A12)	GRMA	Jory_yuan	Oct.16.2013
1.25		Add new PCBA(YV02X2-A26)	GRMA	Jory_yuan	Oct.23.2013
1.26		Add new PCBA(YV03D2-A22)	GRMA	Jory_yuan	Nov.6.2013
1.27		Add new PCBA(YV02X2-A37)	GRMA	Jory_yuan	Nov.20.2013
1.28		Add new PCBA(YV04J0-A11)	GRMA	Jory_yuan	Dec.18.2013
1.29		Add new PCBA(YV02X2-A48)	GRMA	Jory_yuan	Jan.8.2014
1.30		Add new PCBA(YV03D2-A42)	GRMA	Jory_yuan	Jan.8.2014
1.31		Add new PCBA(YV04J0-Q12)	GRMA	Jory_yuan	Mar.26.2014
1.32		Add new PCBA(YV02X2-A58)	GRMA	Jory_yuan	Jul.24.2014

Authorize by		Review by		Originator By	Ariel
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1.Objectives

Create test procedure.

2.Scope

Model: GT630

PN: YV02X0(A01&U05&A36&U37)YV02X1(A01&U04)

YV03D0(A01&A13&U13)YV03C0(A01&A13&A26)YV03G0(A03&U05)YV03D1(A03
&U04&A16)YV02X2(A02&A26&A37&A48&A58)YV03M0(A02)YV03M1(A01)YV03D
1(U16)YV04J0(A01&A11&Q12)YV03D2(A01&A12&A22&A42)YV04P0(A01)

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).

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 GT630 into PCIEX16.

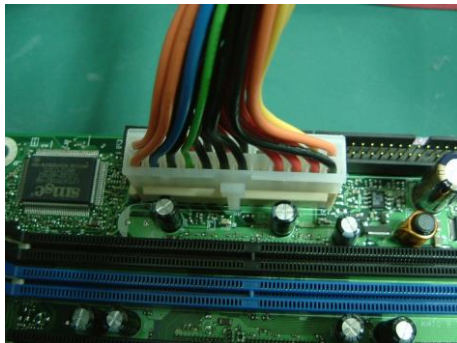
6.2.5 Connect power con of VGA card & Power supply via bundled power cable.

6.2.6 Connect SATA HDD with SATA CON.



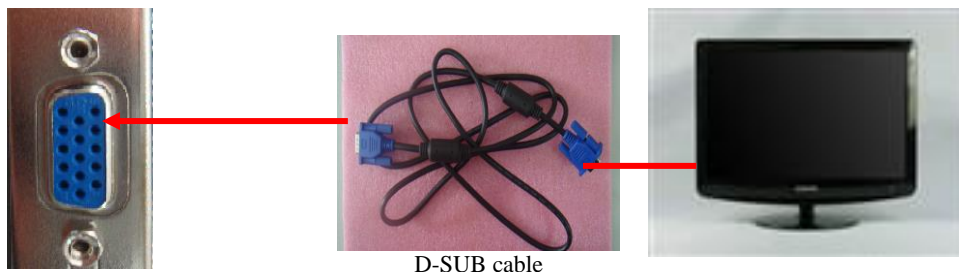
6.2.7 Plug 4PIN 12V (1200W) power cable into CON12V.

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



6.3 Diagnostic test in DOS

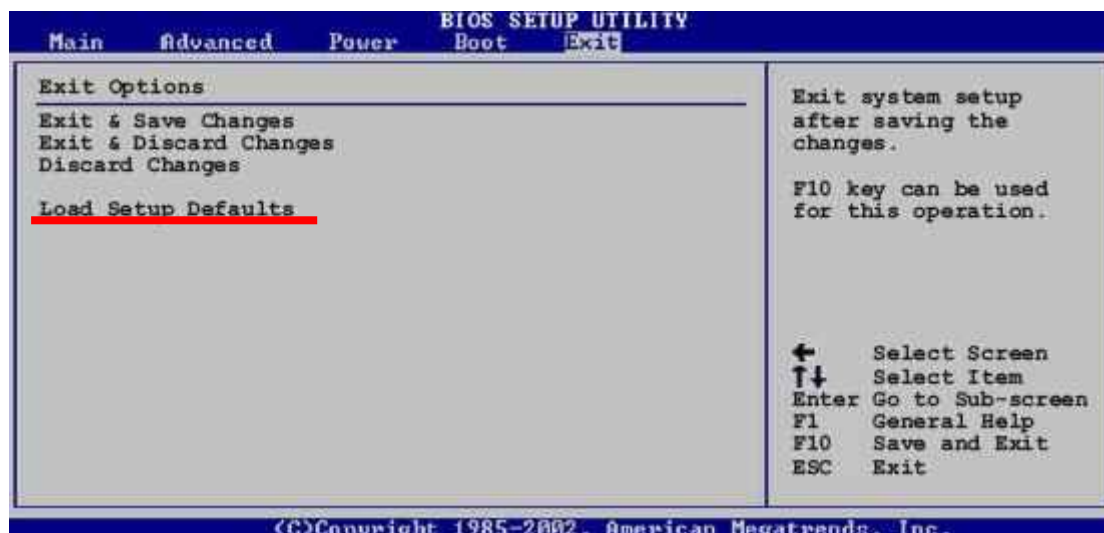
6.3.1 Please connect LCD monitor & card's D-SUB CON via a D-SUB cable.



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\GT630\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\GT630\0256MP1

(For YV02X0(A01&U05&A36&U37) YV02X1(A01&U04) YV02X2(A02))

Path: VBAT\GT630\DIAG (For YV03D0(A01&A1*&U1*))

Path: VBAT\GT630\25648 (For YV03C0(A01))

Path: VBAT\GT630\3G0A0 (For YV03G0(A0*&U0*))

Path: VBAT\GT630\DIAG1 (For YV03D1(A0*&U0*&A1*))

Path: VBAT\GT630\25648A (For YV03C0(A13&A2*))

Path: VBAT\GT630\25648B (For YV03M0(A02))

Path: VBAT\GT630\25648C (For YV03M1(A01))

Path: VBAT\GT630\25648D (For YV03D1(U16))

Path: VBAT\GT630\25648E (For YV04J0(A01))

Path: VBAT\GT630\25648F (For YV03D2(A01))

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Path: VBAT\GT630\25648G(For YV04P0(A01))

Path: VBAT\GT630\25648I(For YV03D2-A12)

6.3.7 BIOS flash

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

Path: VBAT\GT630\BIOS

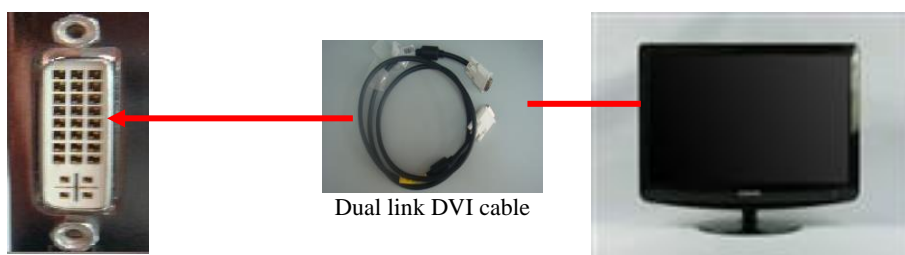
Command: `nvflash xxx.rom -4 -5 -6 -A -y`

Notice:

If you can not flash bios because of the bios locked, please use `nvflash.exe /r` or `nvflash.exe -r` to unlock bios. And then, please use `nvflash.exe /w` or `nvflash.exe -w` to lock bios after updating latest bios.

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.

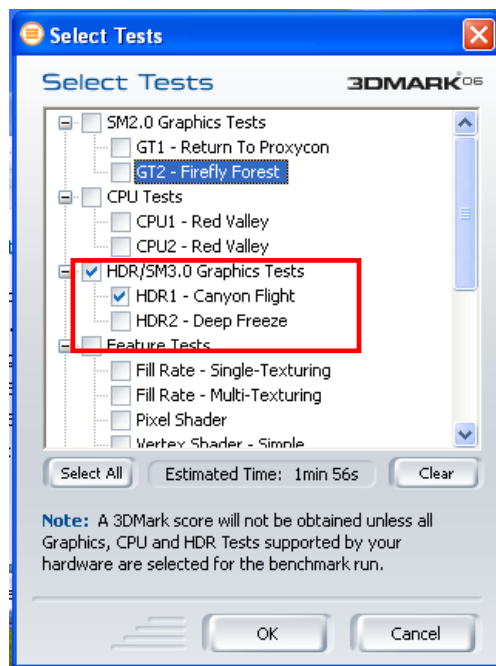


HDMI CON

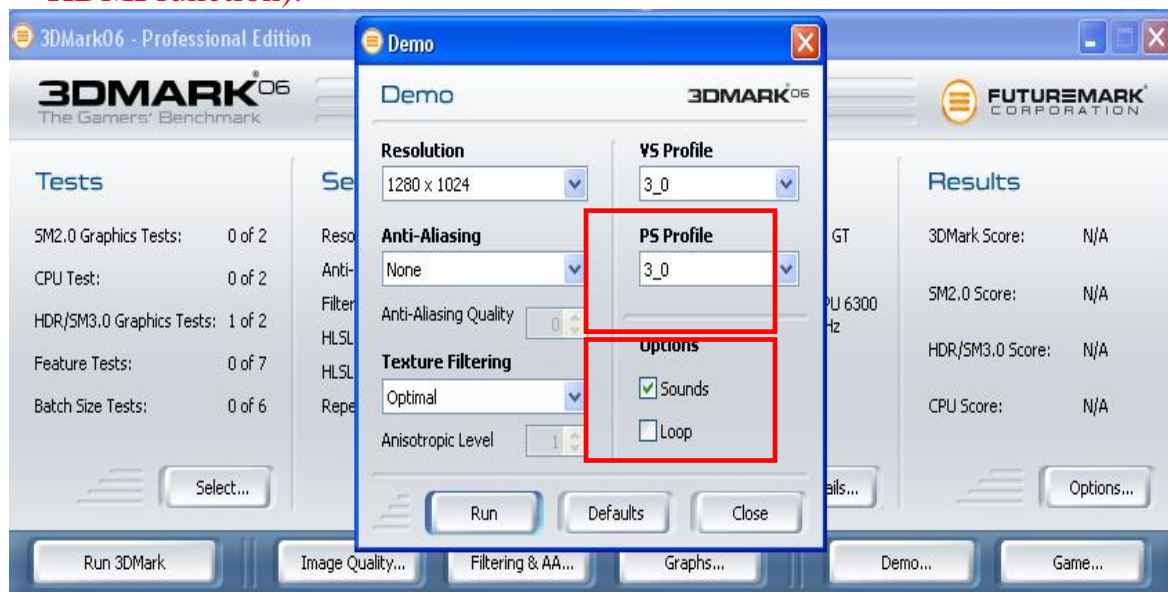
6.4.3 Please install VGA card driver in Windows(You must use individual driver of this card).

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.



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 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**.

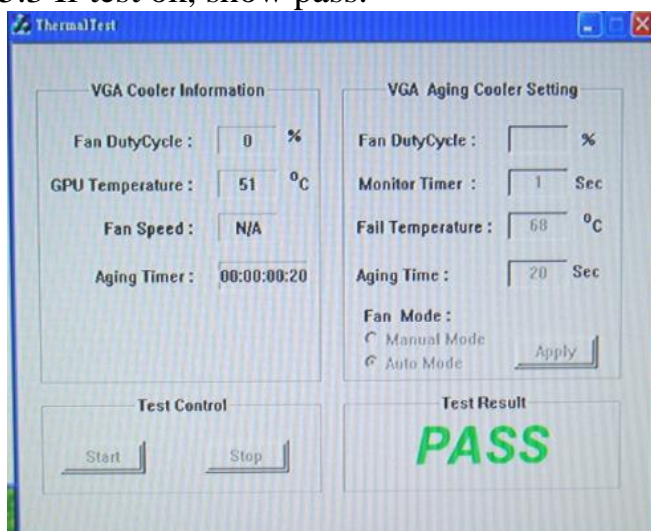
6.5 Temperature test

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

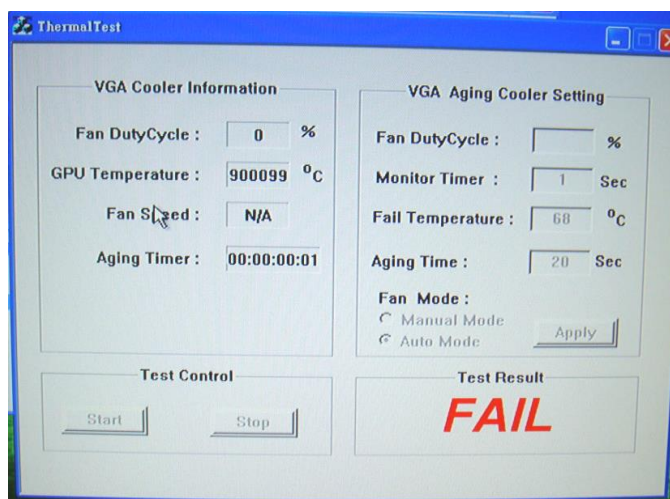
6.5.2 Please run ThermalTest.exe.



6.5.3 If test ok, show pass.



6.5.4 If test fail, show fail.



6.5.5 If test OK, NTF test.

6.4.6 3D Temperature limit data.

YV03D0-A0*&A1*&U1*/ YV03C0-A0*&A1*/&A2* YV03G0-A0*&U0* is 75 degrees.

YV03D1-A0*&U0*&A1* is 78 degrees.

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(a minimum power of 500W)			1	
5	Intel CPU Intel(R) Core(TM)2 CPU		local	1	
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	
12	HDMI extend cable (Buying a local HDMI cable by yourself)			1	
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	