

ASUSTeK COMPUTER INC.	EN9800GT Standard Operation Procedure	Doc. No:	
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Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First release	GTC	Janice_Pang	
1.01		Add New P/N(C1CLE5)	GTC	Janice_Pang	
1.02		Add New P/N(C1CLB0)	GTC	Janice_Pang	
1.03		Add New P/N(C1CM30)	GTC	Janice_Pang	
1.04		Add New P/N(C1CM40)	GTC	Janice_Pang	
1.05		Add New PCBA(C1CLE0-A15)	GTC	Janice_Pang	
1.06		Modify for new test structure	GTC	Janice_Pang	
1.07		Add New P/N(C1CM45)	GTC	Janice_Pang	
1.08		Add New PCBA(C1CM45-A14)	GTC	Janice_Pang	
1.09		Add New P/N(C1CM4A)	GTC	Janice_Pang	
1.10		Add New P/N(C1CM4F)	GTC	Janice_Pang	
1.11		Add New PCBA(C1CLB0-A14)	GTC	Janice_Pang	MAY.12,2009
1.12		Add New PCBA(C1CM4F-A23)	GTC	Janice_Pang	JUL.2,2009
1.13		Add New PCBA(C1CM4A-A12)	GTC	Janice_Pang	JUL.9,2009
1.14		Add New PCBA(C1CM4A-A24)	GTC	Janice_Pang	AUG.14,2009
1.15		Add New PCBA(C1CM4F-A36)	GTC	Janice_Pang	AUG.20,2009
1.16		Add New P/N(C1CM4K)	GTC	Janice_Pang	SEP.23,2009
1.17		Add New PCBA(C1CM4K-A11)	GTC	Janice_Pang	OCT.19,2009
1.18		Add New PCBA(C1CM4K-A11) & Add New P/N(C1CM4P)	GTC	Ariel_wang	Nov.12,2009
1.19		Add New PCBA(C1CM4K-A32) &(C1CM4P-A22)	GTC	Ariel_wang	Dec.4,2009
1.20		Add New PCBA(C1CM4P-A32)	GTC	Ariel_wang	Dec.30,2009

Authorize by		Review by		Originator By	Janice
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1.Objectives

Create test procedure.

2.Scope

Model: EN9800GT

PN: C1CLE0 C1CLE5 C1CLB0 C1CM30 C1CM40

C1CLE0-A1 C1CM45 C1CM4A C1CM4F C1CLB0-A14

C1CM4F-A23/A36 C1CM4A-A12/24 C1CM4K C1CM4K-A11

C1CM4K-A21/A32 C1CM4P-A11/A22/A32

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 test environment by yourself).

6.2 Fixture connect

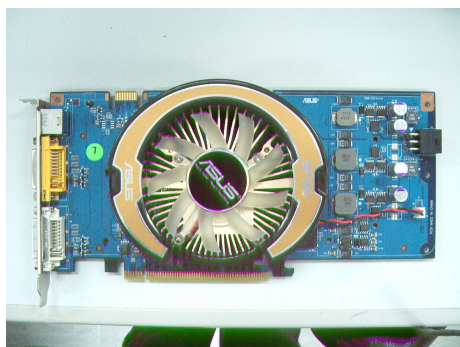
6.2.1 Install Intel P5 CPU & CPU Fan.

6.2.2 Install DDR3 1GB Memory to DIMM1~2.

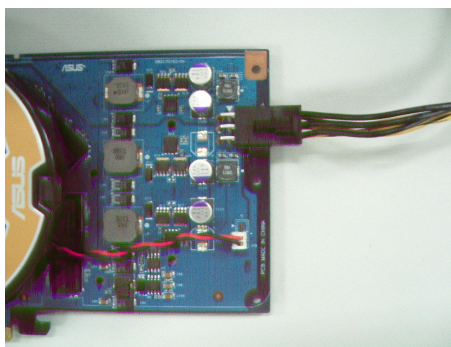
6.2.3 Plug PS/2 Mouse and PS/2 Keyboard into MB.

6.2.4 Plug VGA Card EN9800GT into PCIEX16.

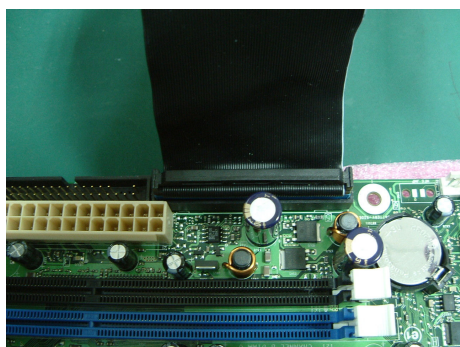
6.2.5 Connect power con of VGA card & Power supply via bundled power cable.



C1CK90

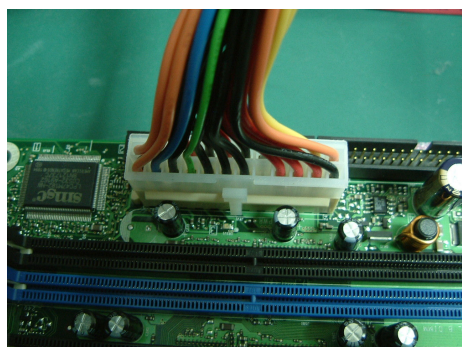


6.2.6 Connect IDE HDD with IDE CON.



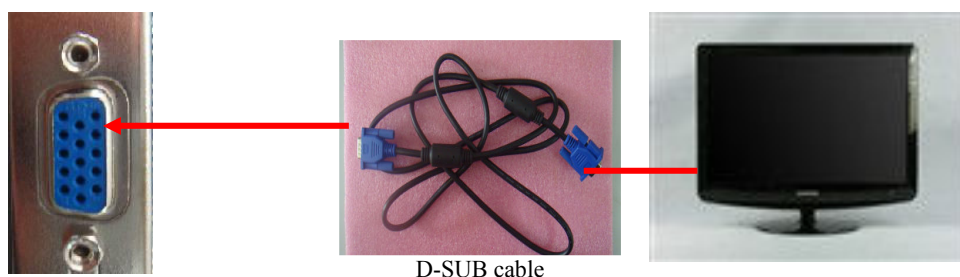
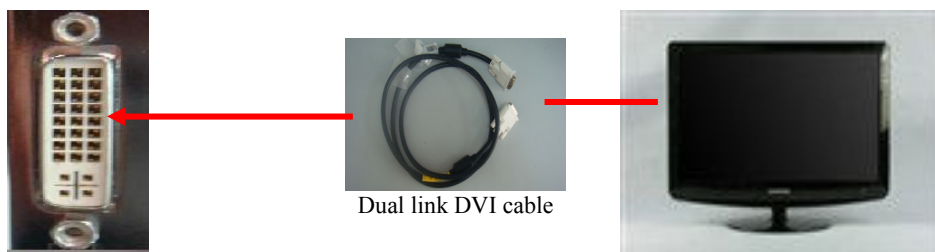
6.2.7 Plug 4PIN 12V power cable into CON12V.

6.2.8 Plug ATX Power on Power Connector.



6.3 Diagnostic test in DOS

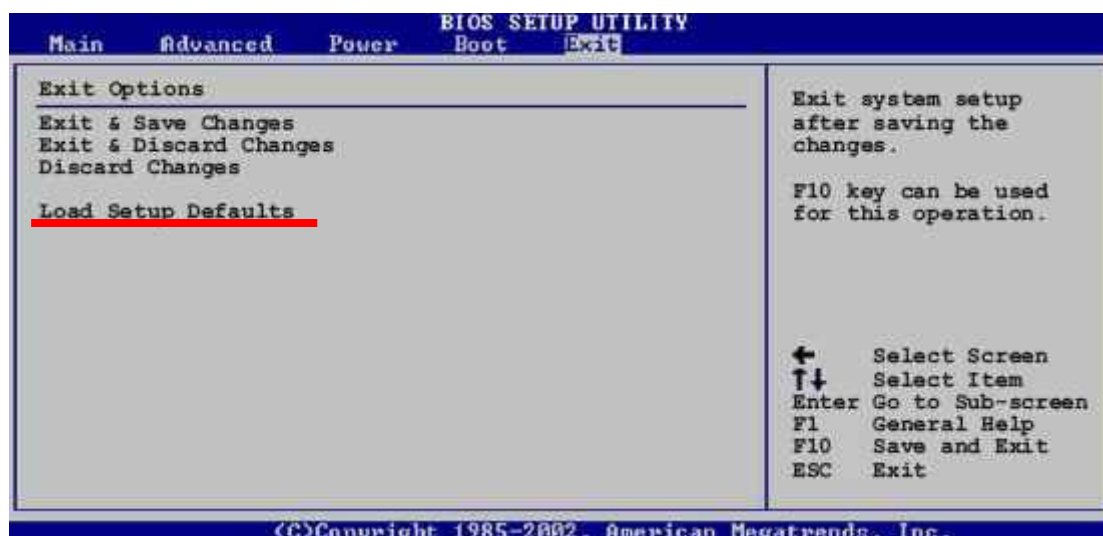
6.3.1 Please connect LCD monitor & card's DVI CON via a DVI cable.



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\EN9800GT\BATCH\

Run the test program refer to the prompt.

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6.3.5 Memory test

If you want to test memory, please run mats.exe.
Path: VBAT\EN9800GT\DIAG

6.3.6 FAN test

If you want to test FAN, please run fantest.bat.
Path: VBAT\EN9800GT\BATCH\FANTEST.BAT

Notice:

FANTEST.BAT apply the following Part Number
C1CM4P-A01 C1CM4K-A01/A11 C1CM4F-A05/A13/A27/A37
C1CM4A-A05/A15/A25

6.3.7 BIOS flash

Please use the following command to flash bios and notice the size of character.
Path: VBAT\EN9800GT\BIOS
Command: **nvflash xxx.rom -4 -5 -6 -A -y**

Notice:

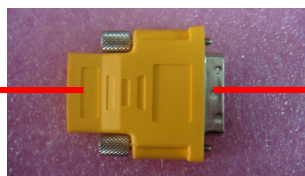
If you can not flash bios because of the bios locked, please use **nvflash.exe /r** to unlock bios. And then, please use **nvflash.exe /w** to lock bios after updating latest bios.

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

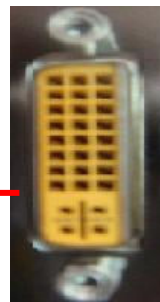
6.4 3DMark test(contain HDMI test)

6.4.1 Please install 3DMark program by yourself.

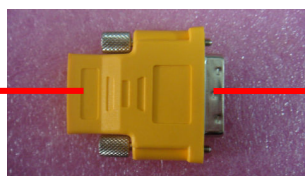
6.4.2 Please connect VGA card to LCD via HDMI cable.



DVI-HDMI cable



YELLOW DVI CON



DVI-HDMI cable



White DVI CON

white DVI CON of a part cards has sound out, please test 3DMark.



HDMI cable

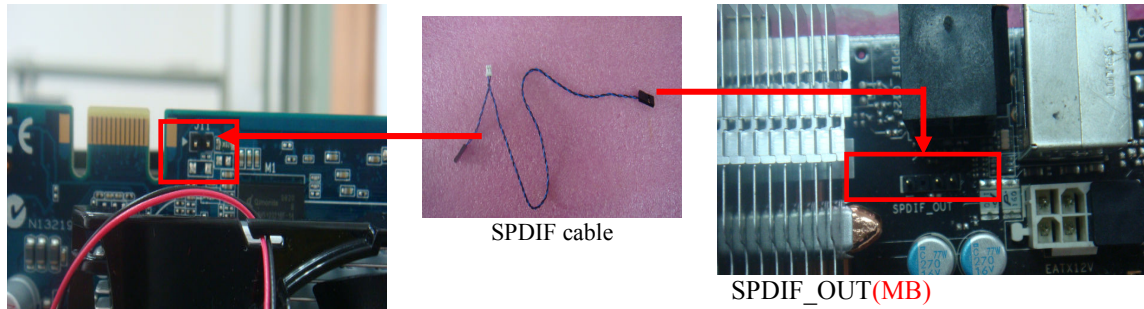


HDMI CON

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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.



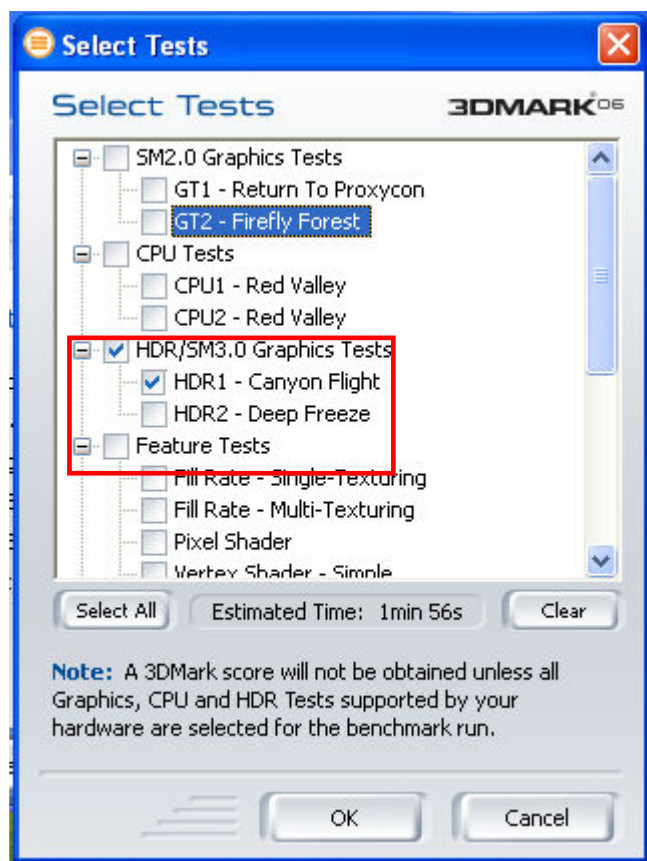
6.4.5 Plug SUPREME FX II card into PCIEX1 of MB.



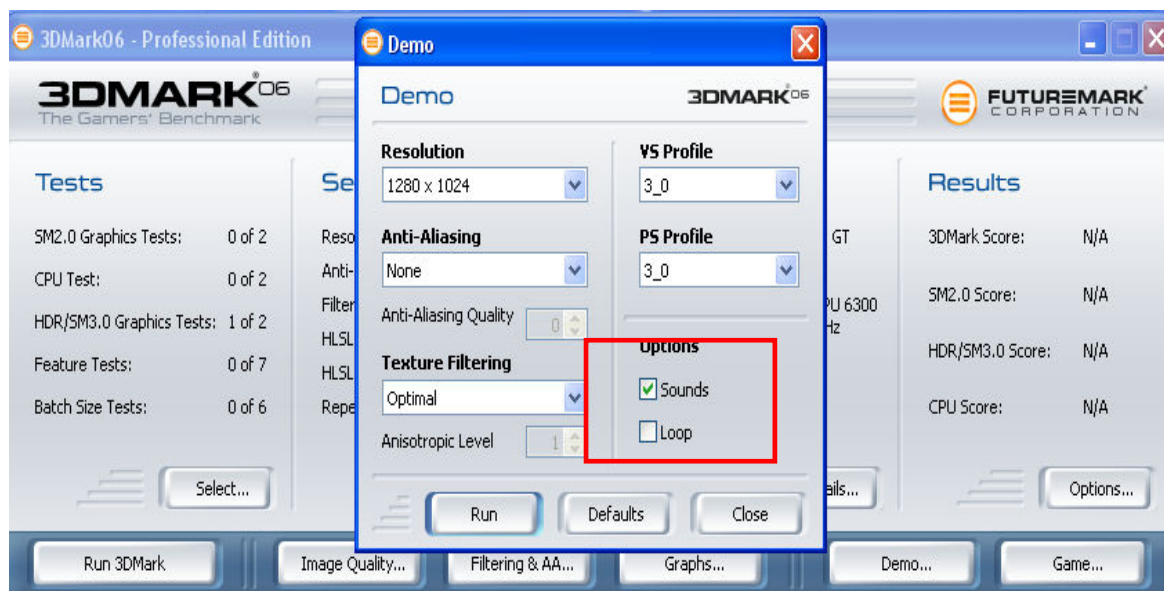
6.4.6 Please install SUPREME FX II card driver in Windows and enter Windows to test HDMI.

6.4.7 Please run 3DMark06 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.



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



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!

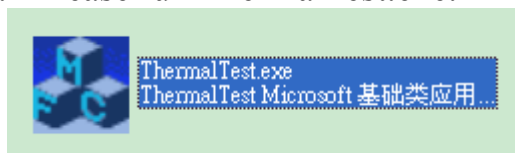
6.4.11 Listen to voice carefully to check whether it outputs sounds. If not, HDMI test fail.



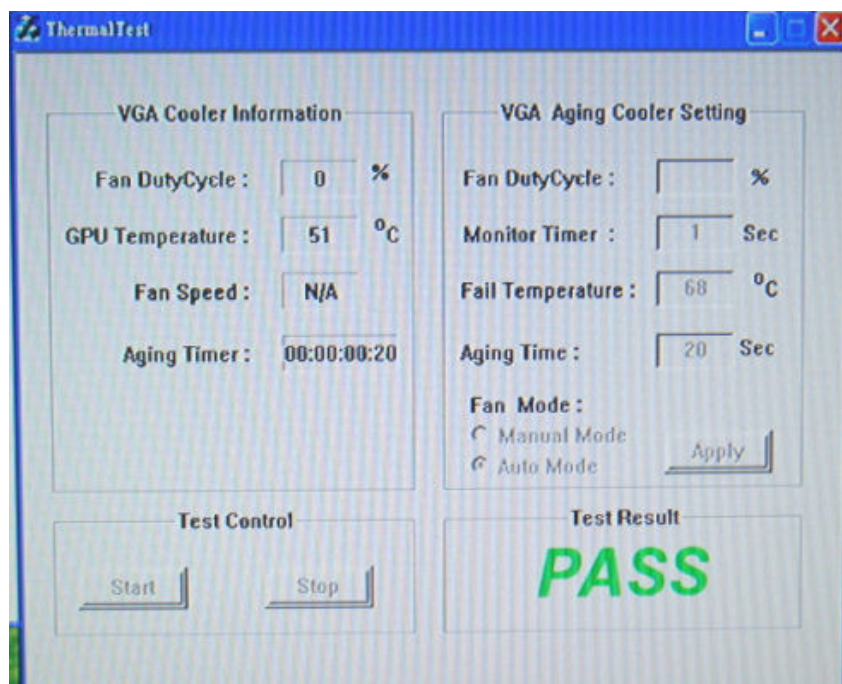
6.5 Temperature test

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

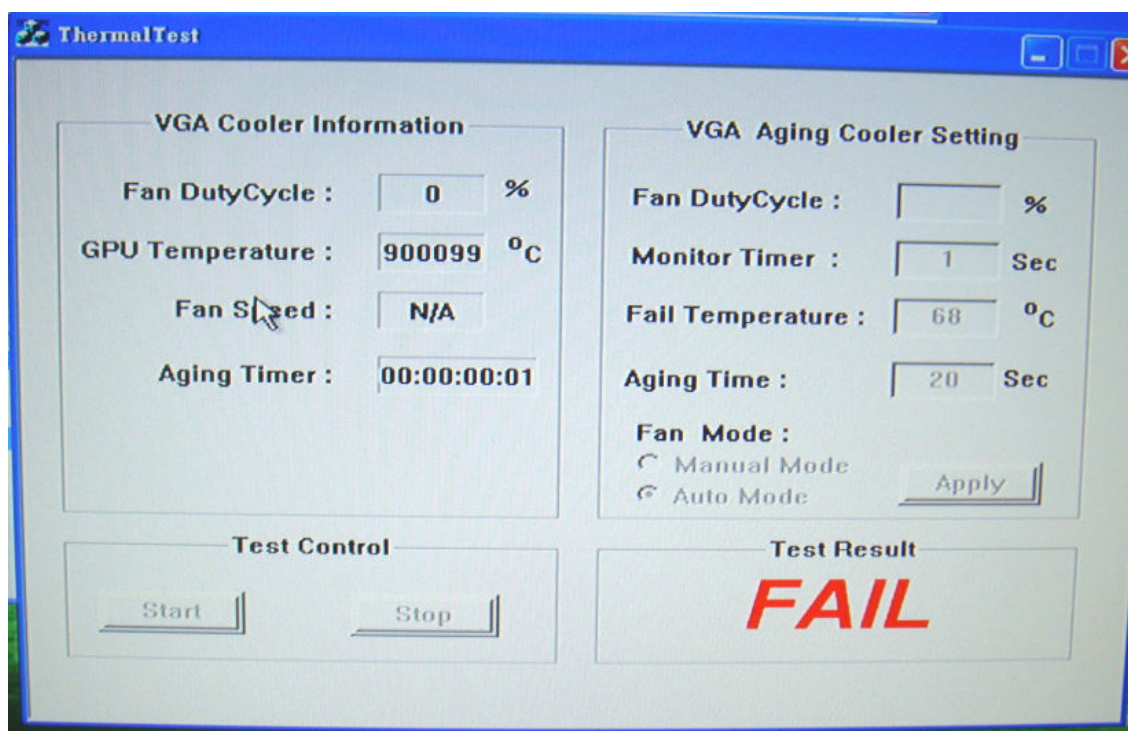
6.5.2 Please run ThermalTest.exe.



6.5.3 If test ok, show pass.










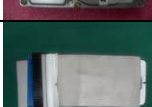





6.5.4 If test fail, show fail.








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			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(NVIDIA)	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	

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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		