0Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First release	GTC	chongling	Jun.7.2010
1.01		Add new PCBA(C1CPI0-A11)	GRMA	chongling	Jul.9.2010

Authorize by		Review by		Originator By	Chongling

1.Objectives

Create test procedure.

2.Scope

Model: ENGTX 465
PN: C1CPI0(A01&A11)

3.Test Item

3.1 Diagnostic test in DOS
3.2 3DMark06(**contain HDMI test**)
3.3 Temperature test
3.4 Suspend 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.
3. Please use Nvidia platform (**P5Q**) to test in DOS**(For C1CPI0-A01).**
Please use x58 platform (**P6T**) to test in DOS(**For C1CPI0-A11**),see the
picture from 6.2.4 & 6.3.5.

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. **(For C1CPI0-A01)**
Install Intel P6 CPU & CPU Fan. **(For C1CPI0-A11)**

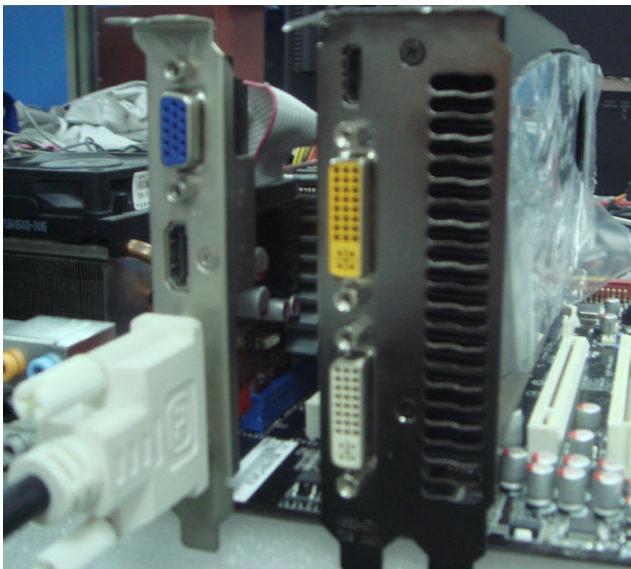6.2.2 Install DDR2 667/800 2GB Memory to DIMM1~4. **(For C1CPI0-A01)**
Install DDR3 2GB Memory to DIMM1~8. **(For C1CPI0-A11)**

6.2.3 Plug PS2 Mouse and PS/2 Keyboard into P5Q Motherboard. **(For C1CPI0-A01)**
Plug PS2 Mouse and PS/2 Keyboard into P6T Motherboard. **(For C1CPI0-A11)**

6.2.4 Plug VGA Card ENGTX 465 into PCIEX16. **(For C1CPI0-A01)**
Please plug any card into PCIEX16_1,and plug ENGTX 465(C1CPI0-A11) into
PCIEX16_2,then plug DVI cable into the port of DVI port of PCIEX16_1,please
see the following pic **(For C1CPI0-A11 tuning test)** .

6.2.5 This card has 6 PIN of Power supply,please connect power con of VGA card &
Power supply via bundled power cable. **(For C1CPI0-A01& A11 function test)** .
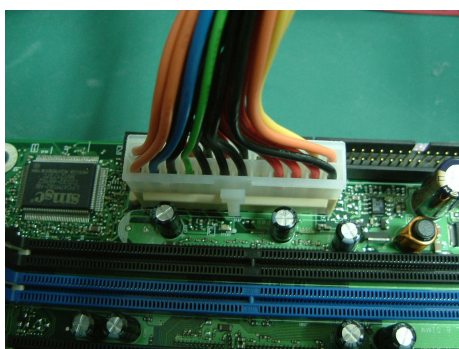(6 PIN of Power supply to 6 PIN of VGA card)

6.2.6 Connect SATA HDD with SATA CON.

SATA1

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   DVI CON via a DVI cable.
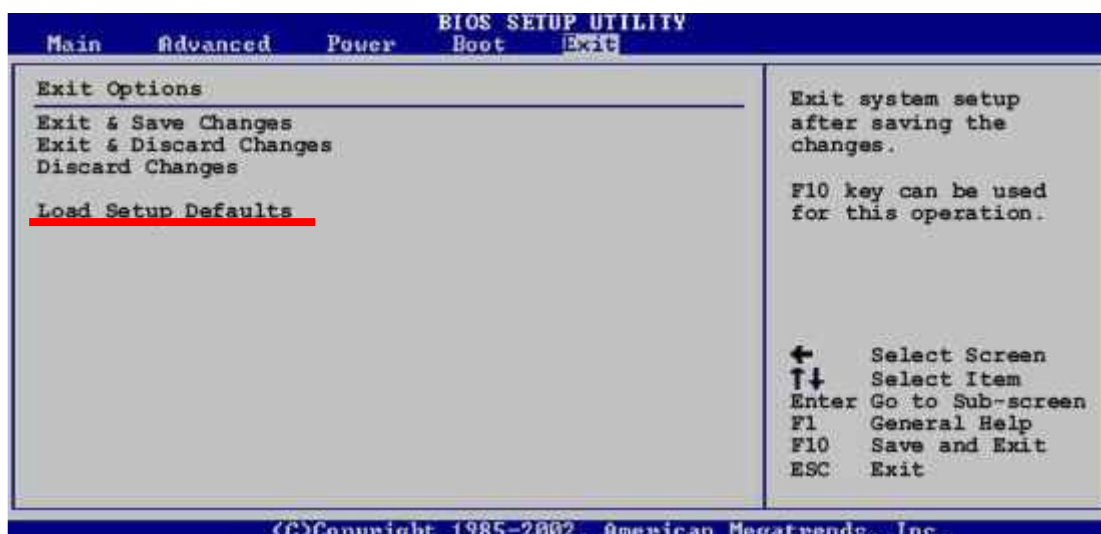

Dual link DVI cable

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.

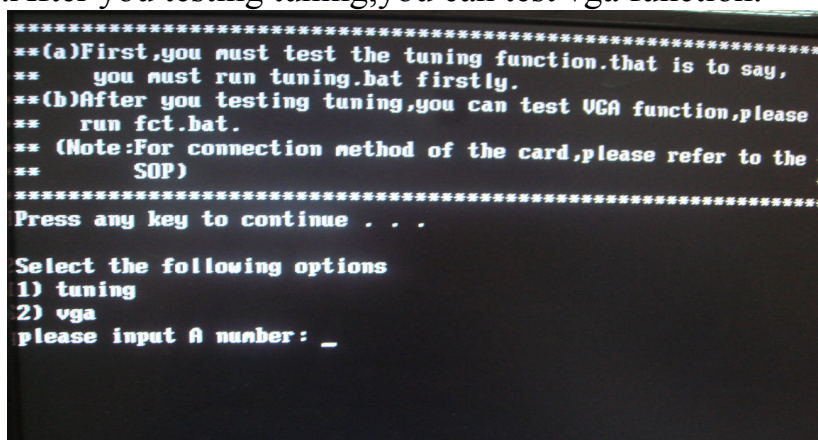6.3.4 System will reboot, select DOS to run test program. **(For C1CPI0-A01)**
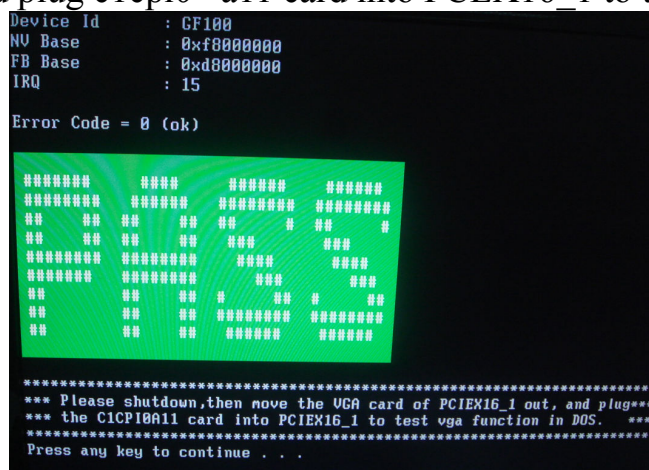 Path:VBAT\ENGTX465\BATCH\
 Run the test program refer to the prompt.
6.3.5 System will reboot, select DOS to run test program. **(For C1CPI0-A11)**
 Path:VBAT\ENGTX465\BATCH\
 (1) You must test the tuning function.that is to say,you must running.bat firstly.After you testing tuning,you can test vga function.

 (2) After tuning test is pass,please shutdown ,move the VGA card of PCIEX16_1 out,and plug c1cpi0 –a11 card into PCEX16_1 to test vga function in DOS.

6.3.6 Memory test

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

    Path:VBAT\ENGTX465\0195KP1**(For C1CPI0-A01)**

    Path:VBAT\ENGTX465\DOWN0518**(For C1CPI0-A11)**

6.3.7 BIOS flash

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

    Path: VBAT\ENGTX465\BIOS
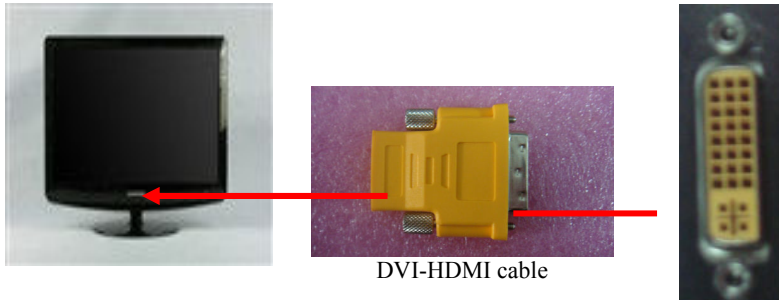
    Command:nvflash xxx.rom -4 -5 -6 -A -y

    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.

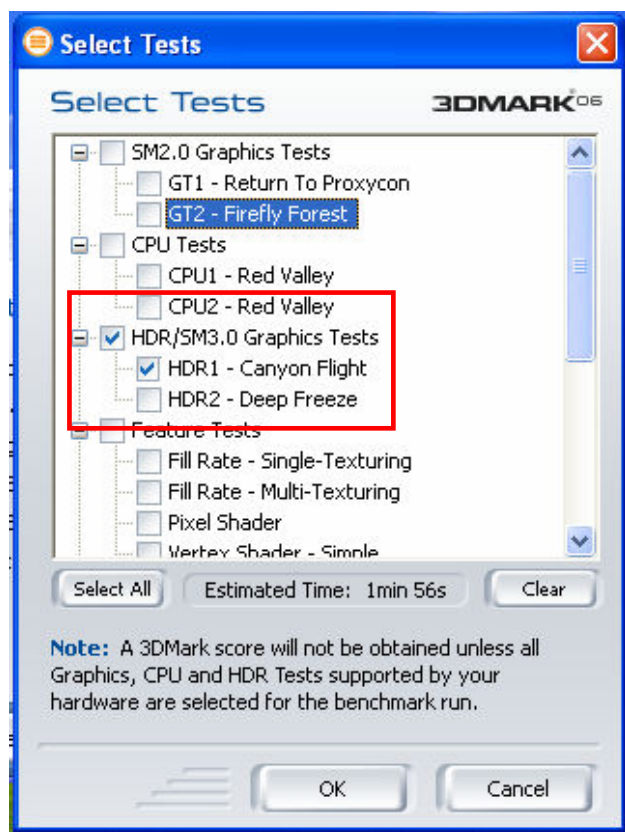6.4.2 Please connect VGA card to LCD via HDMI cable.
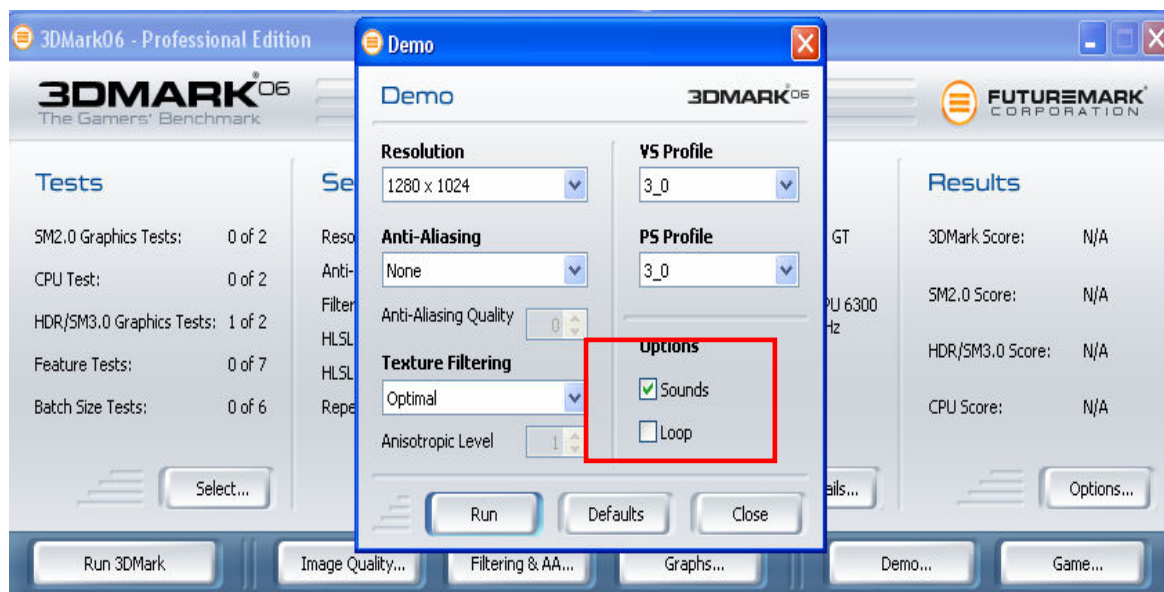

DVI-HDMI cable

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.

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.
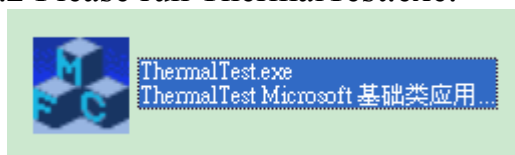
6. 4.9 If test OK, please test MINI HDMI port.
6. 4.10 Connect VGA card to LCD via MINI HDMI to HDMI cable test HDMI function.
(Please refer to step 6.4.4&6.4.5&6.4.6&6.4.7&6.4.8)

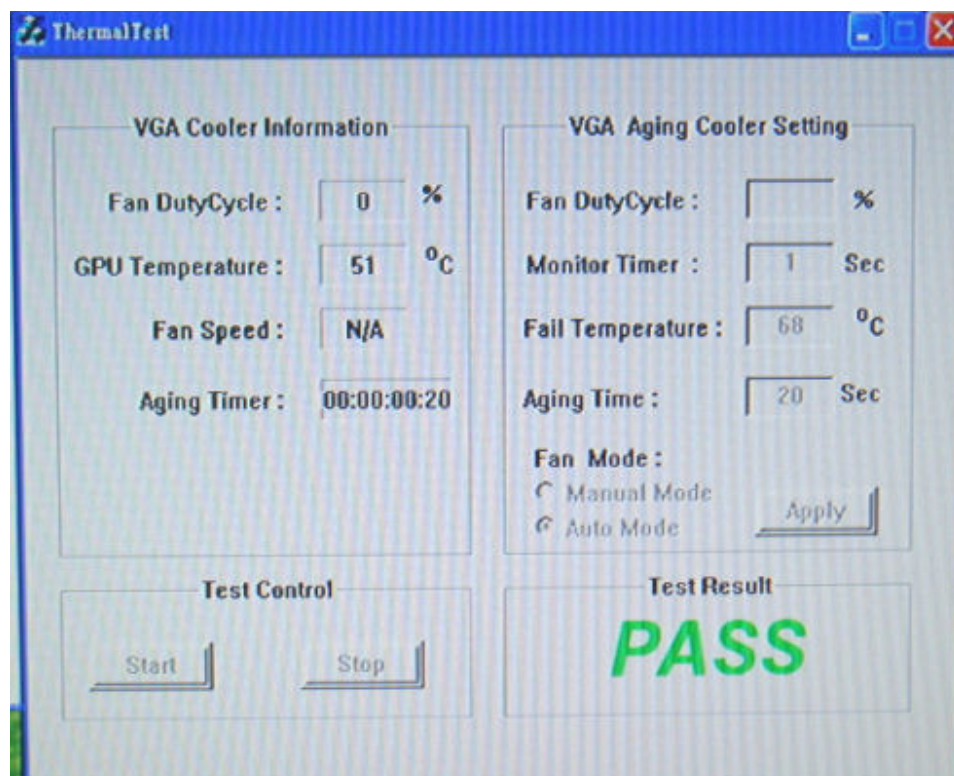HDMI –MINI HDMI Cable

MINI HDMI CON

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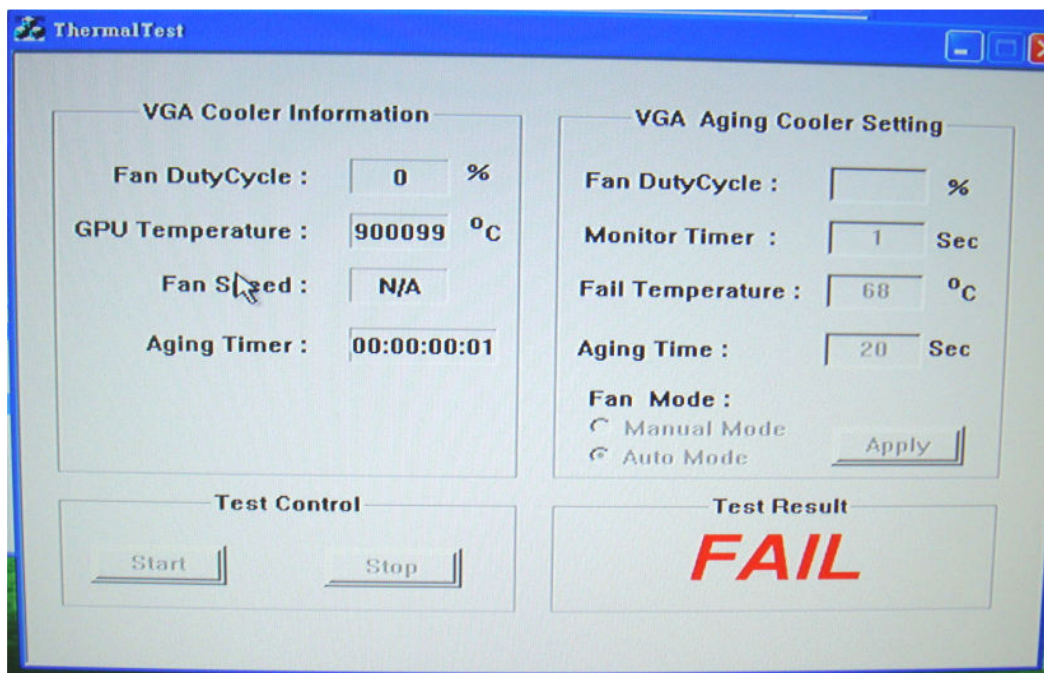6.5.1 Please copy Thermaltool(1.0.05) to Windows by yourself.
6.5.2 Please run ThermalTest.exe.

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 Celeron E1200**			**1**	
6	**Heat sink + FAN**	**22-240000160**		**1**	
7	**APACER 800MHz 1G**			**2**	
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**	
12	**Dual link DVI cable (Buying a local DVI cable by yourself)**			**1**	
13	**HDMI extend cable (Buying a local HDMI cable by yourself)**			**1**	
14	**TV extend cable (Buying a local TV cable by yourself)**			**1**	
15	**DVI-HDMI**	**04G460002400 /04G460002450**		**1**	
16	**HDMI to MINI HDMI cable (Buying a local cable by yourself)**			**1**	
17	**LCD "Y" Cable**	**14-010230000**		**1**	
18	**P5Q(FOR C1CPI0-A01)**	**80-MIB4P0-G0A01**		**1**	
19	**P6T (FOR C1CPI0-A11)**	**80-MIB720-G0B01**		**1**	

20	Intel bloomfield LGA1366(socket B) 2.93G (FOR C1CPI0-A11)		Intel	1		
21	DDRIII 1333 DIMM REG 2G (FOR C1CPI0-A11)			1		