| Rev. | Modified Chapters | Modification Description | Issued Dept. | Issued by | Revised Date |
|---|---|---|---|---|---|
| 1.00 | | First release | GTC | Robin_Jiang | May.07.2009 |
| 1.01 | | Add Fan Function Test | GTC | Robin_Jiang | Oct.29.2009 |
| 1.02 | | Unlock or lock bios | GTC | Robin_jiang | Nov.02.2009 |
| 1.03 | | Add new P/N(C1CMP5-A01) | GTC | Ariel_wang | Feb.24.2010 |

| Authorize by | | Review by | | Originator By | Robin |
|---|---|---|---|---|---|

# 1.Objectives

Create test procedure.

# 2.Scope

Model:  ENGTX285
PN:     C1CMN0    C1CMP0(A01) C1CMP5(A01)

# 3.Test Item

3.1 Diagnostic test in DOS
3.2 3DMark06**(contain HDMI test**)

# 4.Relevant Document

None.

# 5.Definition : 1. If the model name contains P, please test HDCP function.

eg: EN***/HTDP/512M/A
2. If you test HDMI already, it's unnecessary to test HDCP. The HDMI
contains HDCP function.

## 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.
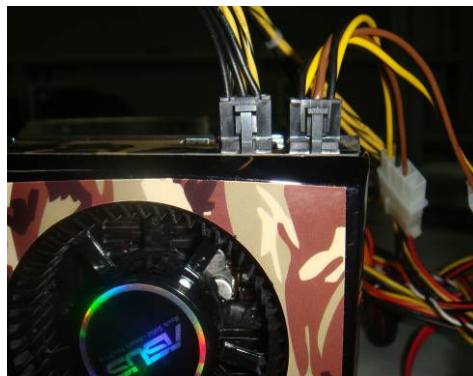6.2.2 Install DDR2 667/800 2GB Memory to DIMM1~2.
6.2.3 Plug USB Mouse and PS/2 Keyboard into MB.
6.2.4 Plug VGA Card ENGTX285 into PCIEX16_1.
6.2.5 Connect power con of VGA card & Power supply via bundled power cable.

C1CMN0

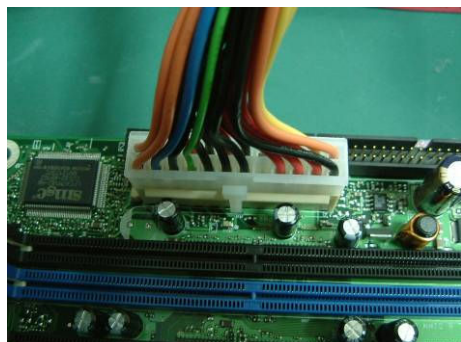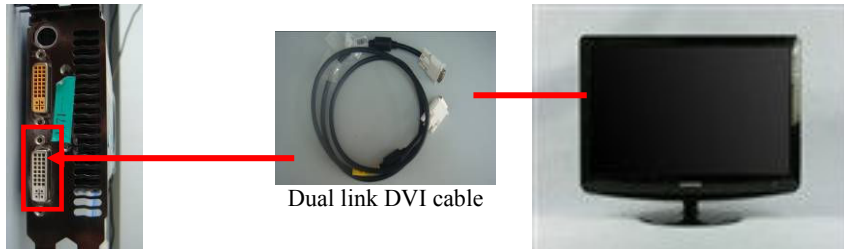6.2.6 Connect SATA HDD & SATA con via SATA cable

SATA

6.2.7 Plug 4PIN 12V power(600W) cable into CON12V.
6.2.8 Plug ATX Power on Power(600W) 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.

Path:VBAT\ENGTX285\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\ENGTX285\0177JX2\

6.3.6 BIOS flash

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

Path:VBAT\ENGTX285\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.

6.3.7 FAN Test

If you want to test FAN, please run fantest.bat.
Path:VBAT\ENGTX285\BATCH\FANTEST.BAT

Notice:
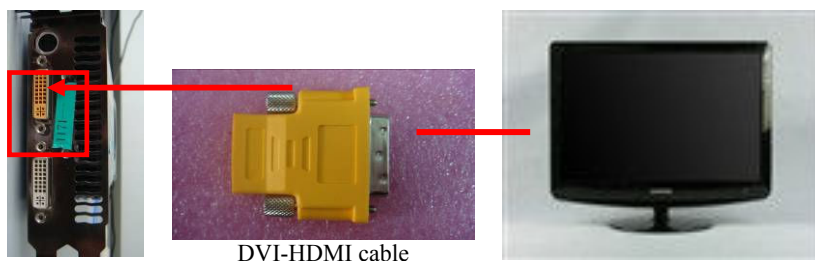FANTEST.BAT apply the following Part Number
C1CMN0-A03/A13    C1CMP0-A03/A13

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

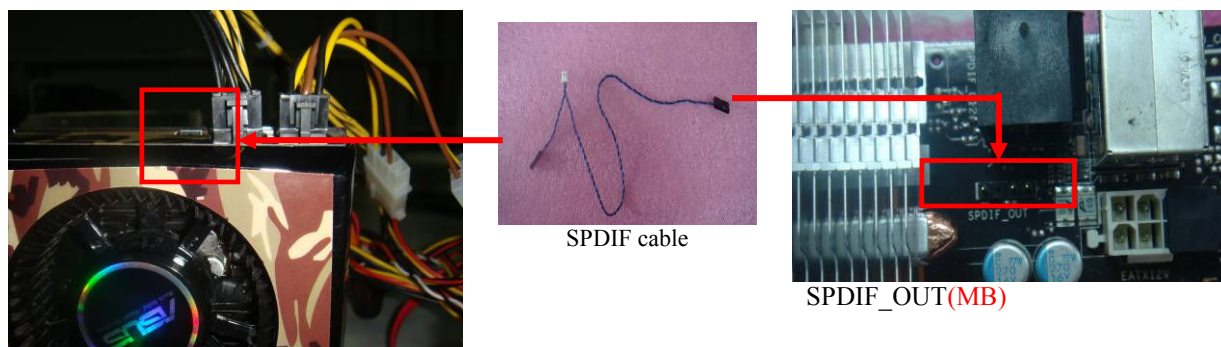**6.4 3DMark test(contain HDMI test)**

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



DVI-HDMI cable

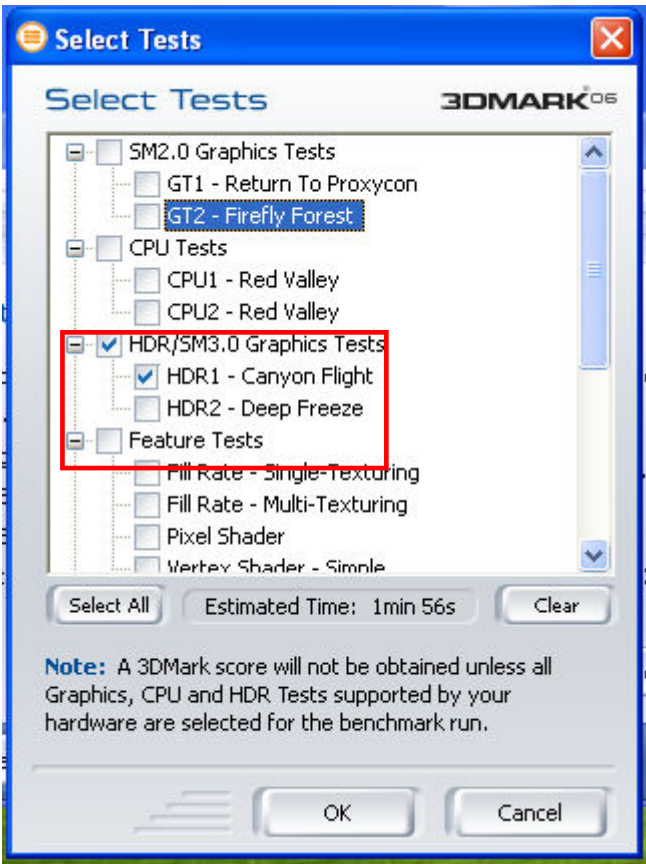6.4.3 Please install VGA card driver in Windows(You must use individual driver of this card).
6.4.4 Plug 4 Pin black cable into SPDIF_OUT of MB. Plug another 2 Pin white cable into SPDIF_IN of VGA card.
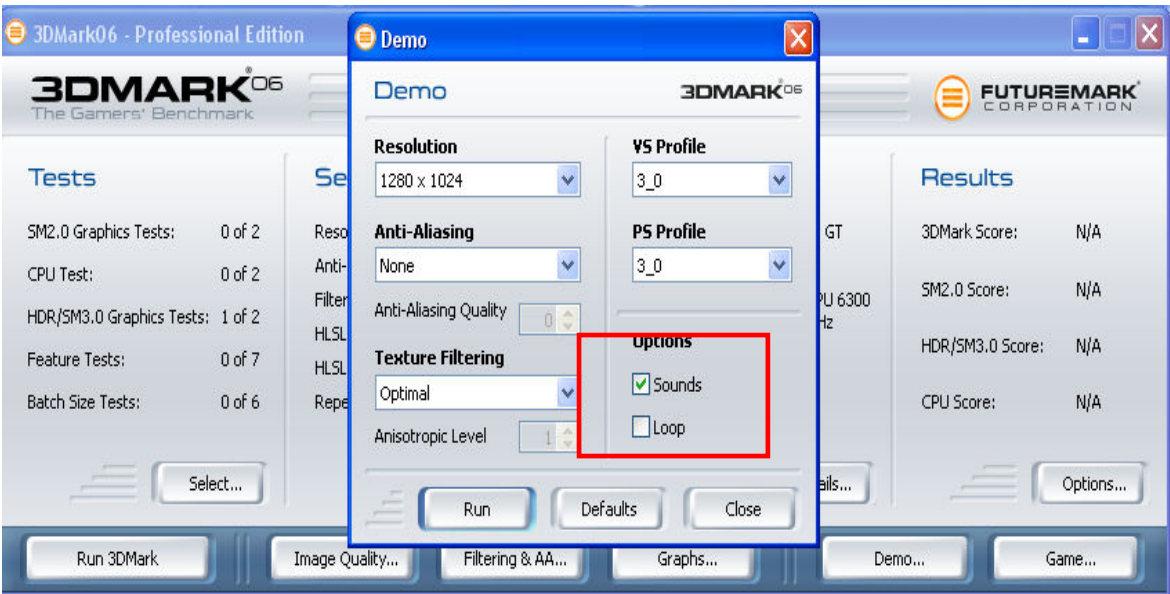


SPDIF cable

SPDIF_OUT(MB)

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.



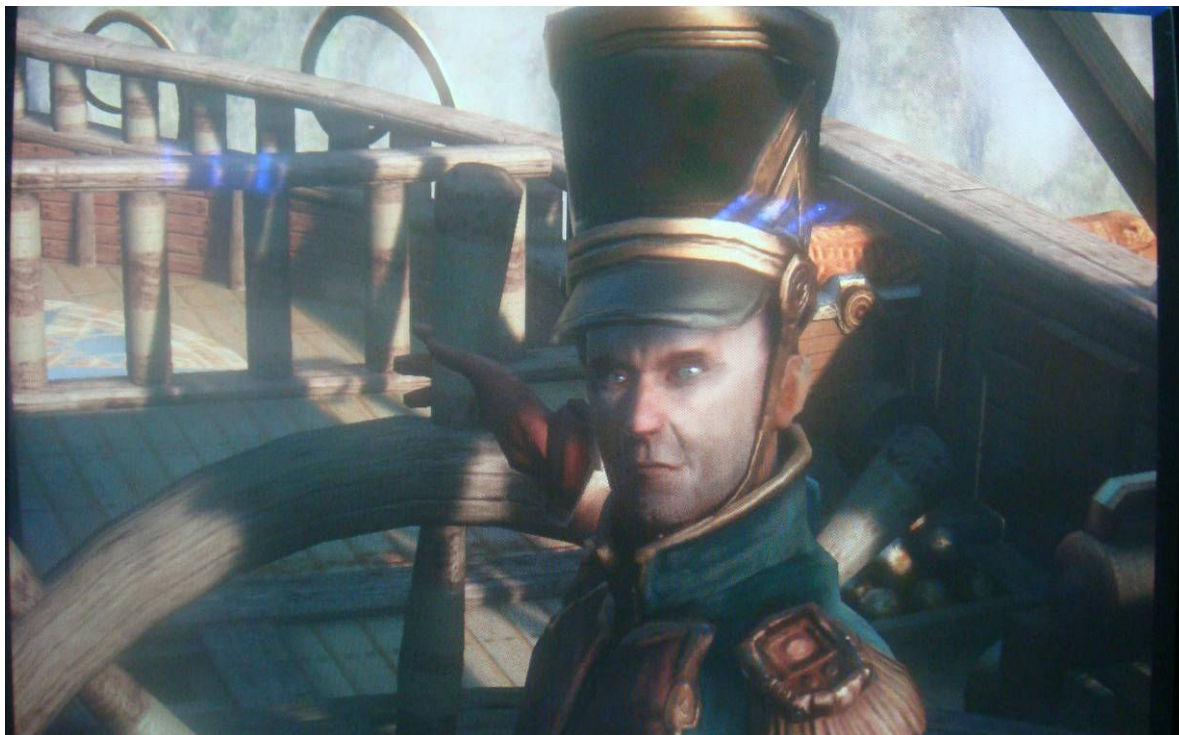6.4.9 Press "Demo" to enter Demo menu. You can choose "Sounds" for default setting.

6.4.10 Please pay attention to check if there is flickering, discolor, crash and so on.
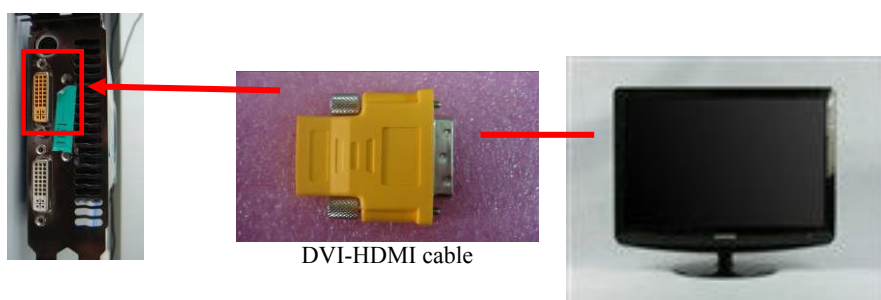        If there's no problem, it can be judged OK!
6.4.11 Listen to voice carefully to check whether it outputs sounds. If not, HDMI test fail.



6.4.12 If test OK, please test other HDMI port.
6.4.13 Connect VGA card to LCD via HDMI cable test HDMI function.
        (Please refer to step 6.3.2.7&6.3.2.8&6.3.2.9&6.3.2.10&6.3.2.11)



DVI-HDMI cable

6.4..14 If test OK, please 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(600W) | | | 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 | ASUS | 1 |  |
| 10 | PCIEX16 VGA CARD | | | 1 | |
| 11 | D-SUB extend cable (Buying a local D-SUB cable by yourself) | | | 1 |  |
| 12 | S CABLE(NVDIA) | 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 |  |

| 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 | |