0Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First release	GRTD	Maico_Zhang	Jan.23.2018
1.01		Add new PCBA (60PF01F0)	GRTD	Maico_Zhang	Dec.27.2019

1.Objectives

Create test procedure.

2.Scope

Model:GTX1050-2GD5

PN:　PD0290; PF01F0

3.Test Item

3.1 Diagnostic test in Tiny Linux

Authorize by		Review by		Originator By	Maico

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.

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).
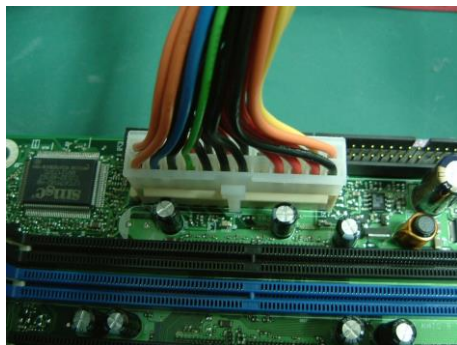
6.2 Fixture connect

6.2.1 Install Intel CPU & CPU Fan.

6.2.2 Install DDR Memory to DIMM1~4.

6.2.3 Plug USB Mouse and Keyboard into MB.

6.2.4 Plug VGA Card GTX1050 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.

SATA1

6.2.7 Plug 4PIN 12V power cable into CON12V.
6.2.8 Plug ATX Power on Power Connector.

6.3 Diagnostic test in Tiny Linux.

6.3.1 Please connect LCD monitor & card's first 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 Linux to run test program.
　　　Path: GTX1050-2GD5\ pd0290.sh or pf01f0.sh

　　　6.3.5 Memory test
　　　If you want to test memory, please run ./mats -e xx or ./mats –c xx
　　　Where,-c xx------- only xx% of frame buffer is detected.
　　　Path:GTX1050-2GD5\

6.3.7 BIOS flash
　　　If you want to check Vbios infor, Please run biosinfo
　　　Please use the following command to flash bios and notice the size of character.
　　　Path: Path: GTX1050-2GD5\
　　　Command: nvflash xxx.rom -6 -A or iromflsh xxx.rom
　　　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 the other DVI CON via a DVI cable.
　　　(Please refer to step 6.3.2&6.3.4)

Dual link DVI cable

6.3.9 If test OK, please NTF test.

7 Appendix

NO#	Equipment Description	ASUS Part#	Supplier	Quantity	Remarks
1	**SAMSUNG 2232MW**		**local**	**1**	
2	**USB MOUSE**		**local**	**1**	
3	**KEYBOARD**		**local**	**1**	
4	**ATX POWER SUPPLY (a minimum power of 500W)**		**local**	**1**	
5	**Intel CPU Intel(R) I5 7500 CPU**		**local**	**1**	
6	**Heat sink + FAN**		**local**	**1**	
7	**DDR4 4G**		**local**	**2**	
8	**TEST HDD**		**local**	**1**	
9	**SATA HDD Cable**		**local**	**1**	
10	**Dual link DVI cable (Buying a local DVI cable by yourself)**		**local**	**1**	
11	**HDMI extend cable (Buying a local HDMI cable by yourself)**		**local**	**1**	
12	**ASUS PRIME B250-PLUS MB**		**local**	**1**	