

ASUSTeK COMPUTER INC.	P106 Standard Operation Procedure	Doc. No:	
		Date: Jun.21.2019	
		Revision:1.09	
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Rev.	Modified Chapters	Modification Description	Issued Dept.	Issued by	Revised Date
1.00		First release	GRTD	Maico_Zhang	Jun.22.2017
1.01		Add new PCBA(YV0A2B-A01)	GRTD	Maico_Zhang	Jul.12.2017
1.02		Add new PCBA(YV09XA-A01)	GRTD	Maico_Zhang	Aug.28.2017
1.03		Add new PCBA(YV0A2A-A17)	GRTD	Maico_Zhang	Aug.28.2017
1.04		Add new PN(YV0A2A-A28)	GRTD	Maico_Zhang	Mar.14.2018
1.05		Add new PCBA(YV0A2G-A01)	GRTD	Maico_Zhang	Apr.10.2018
1.06		Add new PCBA(YV0A2G-A12)	GRTD	Maico_Zhang	May.18.2018
1.07		Add new PCBA(YV0A2G-A23)	GRTD	Maico_Zhang	Jul.19.2018
1.08		Add new PN(YV0A2I-A01)	GRTD	Maico_Zhang	May.21.2019
1.09		Add new PN(YV09R1-A01)	GRTD	Maico_Zhang	Jun.21.2019

1.Objectives

Create test procedure.

2.Scope

Model:P106

PN: YV0A2A(A02)YV0A2B(A01) YV09XA(A01) YV0A2A(A17) YV0A2A(A28)
YV0A2G(A01) YV0A2G(A12) YV0A2G(A23) YV0A2I(A01)YV09R1(A01)

Authorize by		Review by		Originator By	Maico
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3.Test Item

3.1 Diagnostic test in Tiny Linux

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 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 P106 into PCIEX16.

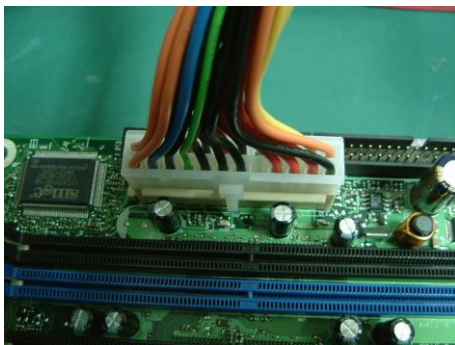
6.2.5 Connect power con of VGA card & Power supply via bundled power cable.

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 Tiny Linux.

6.3.1 Please connect LCD monitor to Mother board VGA\DVI port via a VGA\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.

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6.3.4 System will reboot, select Linux to run test program.

Path: p106\ yv0a2aa0.sh or yv0a2ba0.sh or yv09xaa0.sh or yv0a2aa1.sh

Path: p1061\ yv0a2aa2.sh or yv0a2ga0.sh or yv0a2ga1.sh or yv0a2ga2.sh

Path: p1062\ yv0a2ia0.sh

Path: p1063\ yv09r1a0.sh

Run the test program refer to the prompt.

6.3.5 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: P106\

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.

6.4 Simulate mining test (For spec mining card)

6.4.1 If you want to test mining card function in windows, please unpack **ANGPU**

Miner_P106 v9.5 and **run mining.bat** for test.

6.4.2 Wait for 65 seconds, it works out a hashrate to compare with the default value 19.

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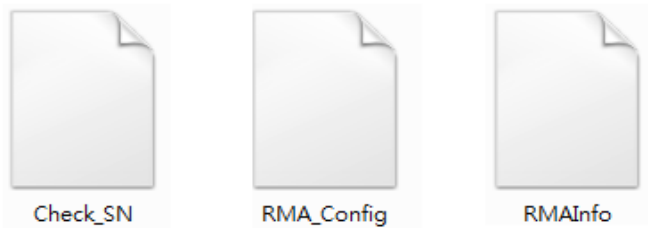
If higher than the default value, it will show pass, or it will be fail.

*Download site: SIP -> Public Folder -> GRMA -> Test program (Main program & Utilities) -> VGA -> MINING CARD TEST

6.5 Result upload to server (need connect to internet)

6.5.1 Download and copy RMA upload tool to diag folder by model (It don't need copy after 2018.5 uploaded model).

The tool of RMA upload tool include 3 files:



6.5.2 Edit **RMA_Config** file:

First line confirms the address of local sever, Second line is Tester ID.

The **RMA_Config** only need modify one time.

```

CN ← Server Select
1150231 ← Test ID

-----
# First Line : Server Select.
# Second Line : Test ID

Server Select :

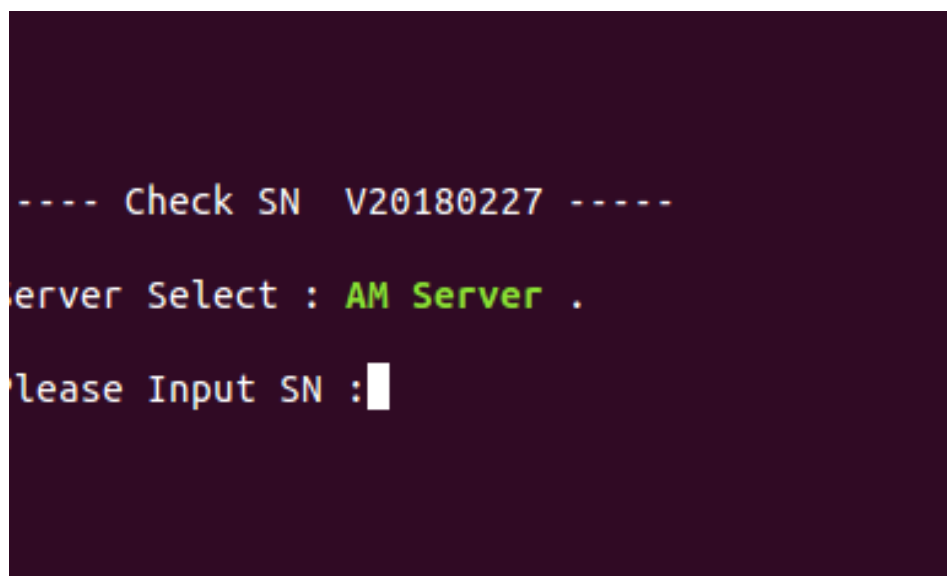
1. AS --> https://as.eservice.asus.com
2. CN --> https://cn.eservice.asus.com
3. AM --> https://am.eservice.asus.com
4. AU --> https://au.eservice.asus.com
5. EU --> https://eu.eservice.asus.com

Test ID : RMA Tester ID

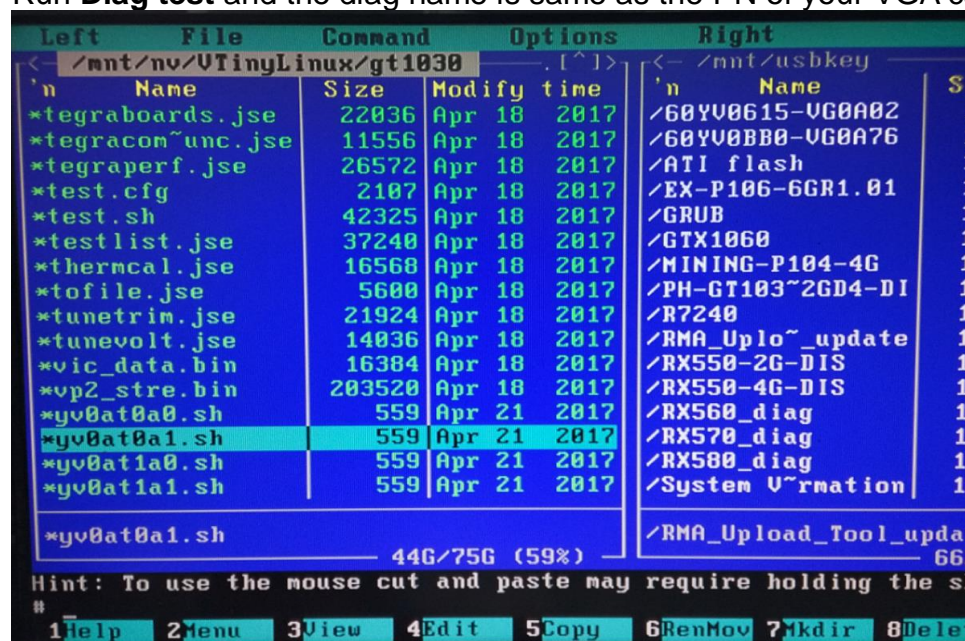
```

6.5.3 Run **Check_SN** and type in your VGA SN which need to be testing. The SN must be in repair status.

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6.5.4 Run **Diag** test and the diag name is same as the PN of your VGA card.



6.5.5 After Diag test is finished, run **RMAInfo** and the test result will be sent to server.

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```

=====
=      ASUS VGA RMA Infomation      =
=      Rev2018.02.27                =
=====

Tester ID = 11502YQ
Addr = AM Server .
Problem Code : MNTF01
NV Test Result = PASS
NV Error Code = 000000000000

Update Data To ASUS VGA Server.....

Update Data:  HAC0YZ268879 PASS 06/03/2018 08:51:59 11502YQ








Please Wait For Ther Return Status:





Result:
SUCCESS
-----

```

6.6 If test OK, please NTF test.

7. Appendix

NO#	Equipment Description	ASUS Part#	Supplier	Quantity	Remarks
1	LCD Monitor with HDMI/Display Port 4096 x 2304 @ 60 Hz		local	1	
2	USB MOUSE		local	1	
3	KEYBOARD		local	1	
4	ATX POWER SUPPLY(a minimum power of 600W)		local	1	
5	Intel CPU Intel(R) I5 7500 CPU		local	1	
6	Heat sink + FAN		local	1	
7	DDR4 2400 4G		local	2	

8	TEST HDD		local	1		
9	SATA HDD Cable		ASUS	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		
13	Display port cable (Buying a local Display port cable by yourself)		local	1	