

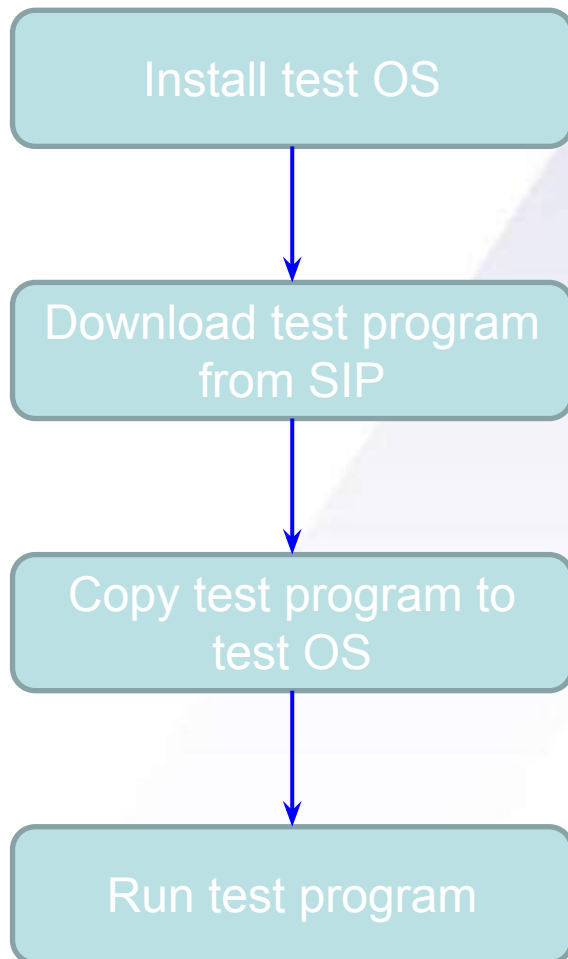
VGA Test 2019

By Maico
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Agenda

- 1. Install OS***
- 2. SIP Download***
- 3. Test Process***
- 4. Flash VBIOS& Memory Test***
- 5. Test Result Upload***
- 6. Notice& Common Problem***

Process Flow



Install OS

- a. For Nvidia VGA card need install Tiny_linux 18.07 OS.
- b. For AMD VGA card need install Ubuntu 64bit_linux 14.04 OS.

*Please refer to SOP for how to install OS.

OS&SOP Download Path:

*AMD

http://sip.asus.com/document/DisplayDocument.aspx?folder_type=PUB&doc_id=87276#

*Nvidia

http://sip.asus.com/document/DisplayDocument.aspx?folder_type=PUB&doc_id=95893#

SIP download

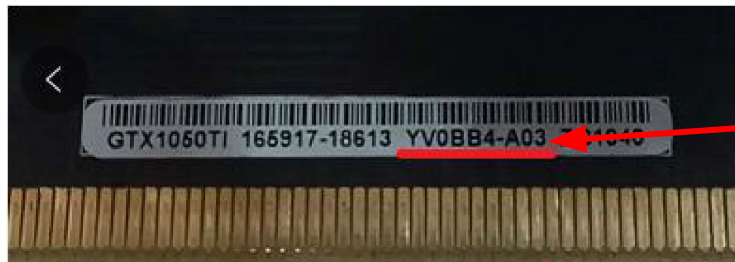
Input Model as GTX1050,GTX1060..., Click SEARCH INFO from SIP->GTSD Support Web->Support Download.

The screenshot shows a web browser window with the URL http://sip.asus.com/tcweb/download_rma.aspx?SLanguage=en-us. The page is titled "ASUS SIP" and has a navigation menu with items like ITRS, Support, Learning, Report, Project, SLM, Document, Admin, and Profile. The main content area is titled "DOWNLOAD" and "Location: RMA Download". A search bar contains the text "gtx1050". Below the search bar, there are several search options: "Select Category", "Input SN to Search", and "Show SW Info". A red arrow points to the "SEARCH INFO" button. The page also features a "General Download" section with dropdown menus for "Select Product", "Select Series", "Select Models", and "Select Parts". At the bottom, there is a "Weekly Download" table with columns for Type, Model, Version, Description, and Update.

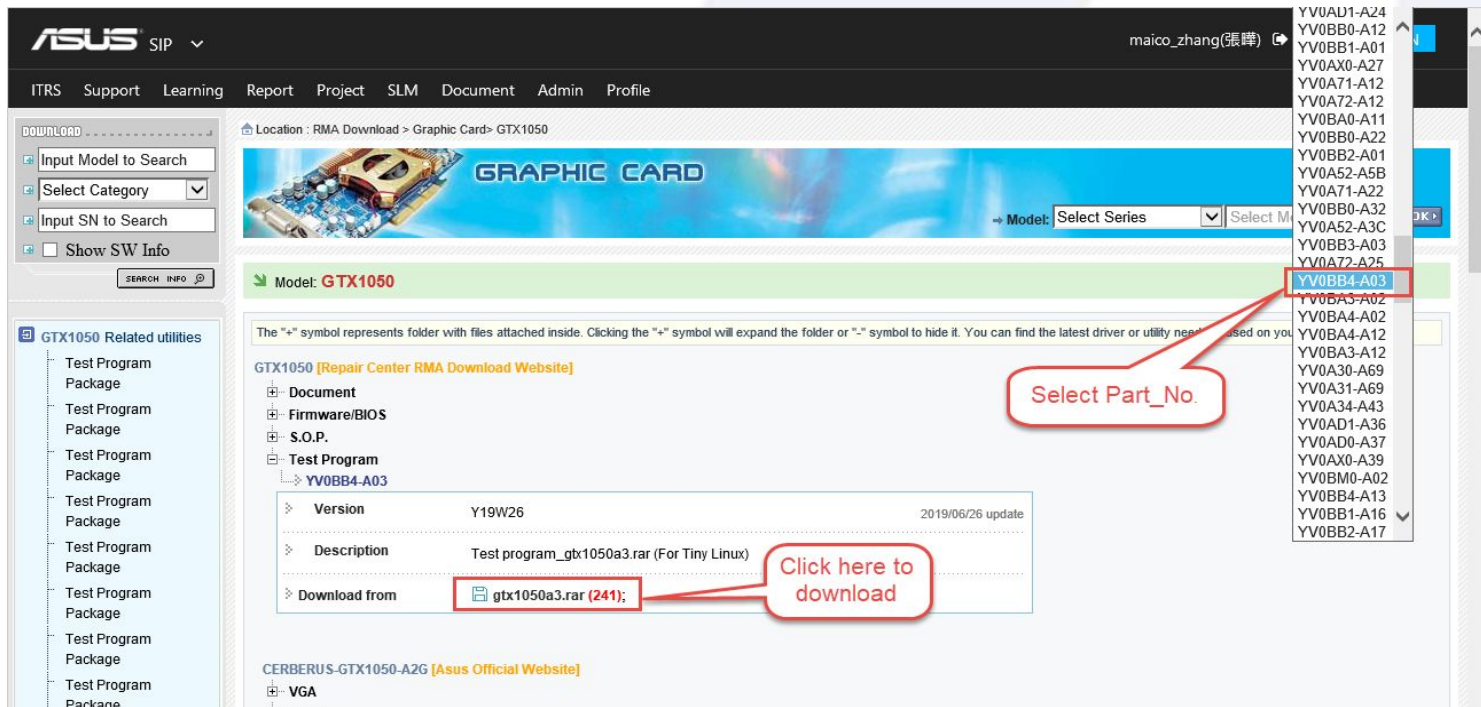
Type	Model	Version	Description	Update
------	-------	---------	-------------	--------

SIP download

Down load test program in SIP by Part_No.



Check Part_No. with VGA card



The screenshot shows the ASUS SIP website interface. The breadcrumb trail is "Location : RMA Download > Graphic Card> GTX1050". The main heading is "GRAPHIC CARD". The model dropdown is set to "GTX1050". A list of part numbers is shown on the right, with "YV0BB4-A03" selected and highlighted in a red box. A callout bubble points to this selection with the text "Select Part_No.". Below the model selection, there is a table of download links. The first row is expanded, showing details for "YV0BB4-A03":


Version	Y19W26	2019/06/26 update
Description	Test_program_gtx1050a3.rar (For Tiny Linux)	
Download from	gtx1050a3.rar (241);	

A callout bubble points to the download link with the text "Click here to download".

SIP download

Report Project SLM Document Admin Profile

Location : RMA Download > Graphic Card> GTX1050



Model: GTX1050

The "+" symbol represents folder with files attached inside. Clicking the "+" symbol will expand

GTX1050 [Repair Center RMA Download Website]

- Document
- Firmware/BIOS
- S.O.P.
 - YV0BB4-A03
 - Version 2.80
 - Description SOP_GTX1050.pdf
 - Download from [GTX1050.pdf \(124\)](#)
- Test Program

ASUSTeK COMPUTER INC	GTX1050 Standard Operation Procedure	Doc. No:
		Date: Jun.26.2019 Rev.:2.80 Page: 9
Path:GTX1050p\ yv0a81a2.sh Path:GTX1050q\ yv0a82a5.sh Path:GTX1050r\ yv0a80a3.sh Path:GTX1050s\ yv0a81a3.sh Path:GTX1050t\ yv0a32a0.sh or yv0a33a0.sh Path:GTX1050u\ yv0a56a0.sh or yv0a57a0.sh Path:GTX1050v\ yv0a30a2.sh or yv0a31a2.sh or yv0a34a0.sh or yv0a34a1.sh or yv0a34a3.sh or yv0a30a3.sh or yv0a31a3.sh or yv0a34a2.sh or yv0a30a6.sh or yv0a31a6.sh or yv0a34a4.sh or yv0a30b0.sh or yv0a31b0.sh or yv0a34b0.sh or yv0a30c0.sh or yv0a31c0.sh or yv0a30c1.sh or yv0a31c1.sh Path:GTX1050w\ yv0a71a0.sh or yv0a72a0.sh or yv0a72a1.sh or yv0a71a1.sh or yv0a71a2.sh or yv0a72a2.sh Path:GTX1050x\ yv0aa1a0.sh or yv0aa2a0.sh or yv0ba1a0.sh or yv0ba2a0.sh or yv0ba3a1.sh or yv0ba4a1.sh or yv0b12a0.sh or yv0b13a0.sh or yv0b13a1.sh Path:GTX1050y\ yv0a70b2.sh Path:GTX1050z\ yv0bb0a0.sh or yv0bb0a1.sh or yv0bb0a2.sh or yv0bb0a3.sh or yv0bm0a0.sh or yv0bb0a4.sh or yv0bm0a1.sh or yv0bb0a5.sh or yv0bb0a6.sh or yv0bb0a7.sh or yv0bm0a2.sh or yv0bm0a3.sh or yv0bm0a4.sh or yv0bm0a6.sh or yv0bm0a7.sh or yv0bm0a8.sh Path:GTX1050a1\ yv0ax1a1.sh or yv0ax2a1.sh Path:GTX1050a2\ yv0ad0a2.sh or yv0ad1a2.sh Path:GTX1050a3\ yv0bb1a0.sh or yv0bb2a0.sh or yv0bb3a0.sh or yv0bb4a0.sh or yv0bb1a1.sh or yv0bb2a1.sh or yv0bb3a1.sh or yv0bb5a0.sh or yv0bb5a1.sh or yv0bb4a2.sh or yv0bb3a2.sh or yv0bb3a3.sh or yv0bb4a3.sh or yv0bb4a4.sh or yv0bb5a3.sh or yv0bb5a4.sh or yv0bb3a5.sh or yv0bb4a8.sh or yv0bm1a0.sh or yv0bm2a0.sh or yv0bm3a0.sh or yv0bb5a5.sh or yv0bb4a7.sh or yv0bb5a8.sh or yv0bm1a1.sh or yv0bm2a1.sh or yv0bm3a1.sh or yv0bm1a2.sh or yv0bm2a2.sh or yv0bm3a2.sh or yv0bm1a3.sh or yv0bm2a3.sh or yv0bm3a3.sh or		

You can also download by model SOP and check which test program for usage. For example, the file named **yv0bb4a0.sh** could be used for VGA with PN from 60YV0BB4-A01 to 60YV0BB4-A0Z.



Test Process

Nvidia VGA card test process

- Download test program from SIP and unpack, copy test program to flash disk.
- Power on the test platform, Select “TinyLinux” go into Tinylinux.
- Type “mc” for go to MC interface.

```
GRUB4DOS 0.4.4 2009-03-31, Memory: 638K / 2907M, MenuEnd: 0x48360
-----boot select-----
1 DOS
2 TinyLinux
3 find and boot WINDOWS XP
4 find and root WIN7
5 reboot
6 shutdown
-----

Use the ↑ and ↓ keys to highlight an entry. Press ENTER or 'b' to boot
Press 'e' to edit the commands before booting, or 'c' for a command-li
```

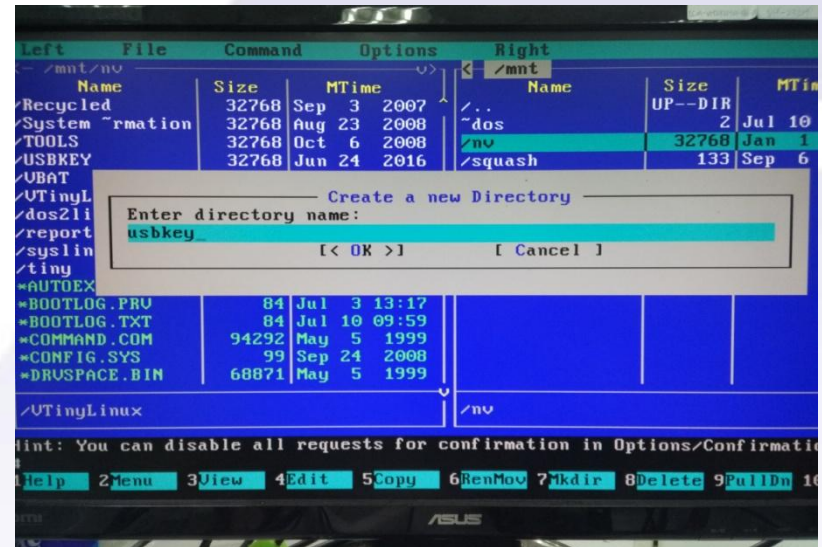
```
Starting mount... OK [0.0s]
Starting syslogd... OK [0.0s]
Starting hostname... OK [0.0s]
Starting net.lo... OK [0.0s]
Starting bash... OK [0.0s]
Starting mods... OK [0.0s]
Starting net... DHCP OK [0.2s]
Starting alsa... udhpcp: started, v1.28.0
udhpcp: sending discover
Found hardware: "HDA-Intel" "Realtek ALC892" "HDA:10ec0892,104385
x1043" "0x8573"
Hardware is initialized using a generic method
OK [0.3s]
[kernel 1.3s, init 0.4s, services 0.7s, total 2.5s]

[10:32:52] /home
# udhpcp: sending discover
udhpcp: sending select for 192.168.1.51
udhpcp: lease of 192.168.1.51 obtained, lease time 172800
route: SIOCDELRT: No such process

[10:32:57] /home
# nc
```


Test Process

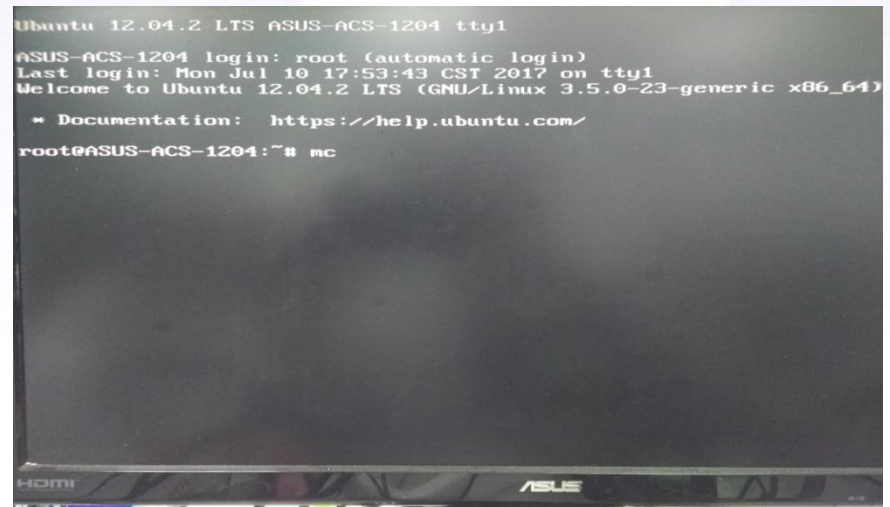
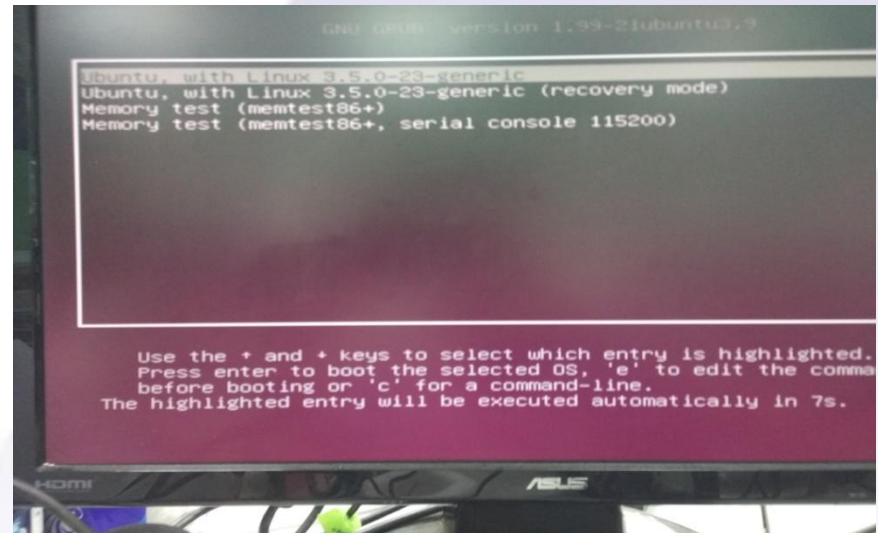
- d. Plug flash disk into USB port of Motherboard. Move cursor to right side. Go to “/mnt” folder. Press “F7” key and create “usbkey” folder.
- e. Type “mount /dev/sdb1 /mnt/usbkey” to mount USB flash.
- f. Copy test program into test HDD and run the executable file which named with PN* of your testing card to test. Test result will save to mods.log .



Test Process

AMD VGA card test process

- Download test program from SIP and unpack, copy test program to flash disk.
- Power on the test platform into system and select first item go into Ubuntu OS.
- Type “mc” for go to MC interface.



Test Process

d. Plug flash disk into USB port of Motherboard. Move cursor to right side. Go to “/mnt” folder.

e. Type “mount /dev/sdb /mnt/usbkey” to mount USB flash.

f. Copy test program into test HDD and run the executable file which named with PN of your testing card to test. Test result will save to log.txt .

```
Left File Command Options Right
< n Name Size Modify time > < /mnt
< . Name Size
< .cache UP--DIR 4096 Jun 28 2016
< .config 4096 Aug 22 2016
< .local 4096 Jun 28 2016
< .pulse 4096 Jun 28 2016
< hd64503 4096 Dec 8 2016
< r52304 4096 Nov 30 2016
< r72404 4096 Oct 18 2016
< r72405 4096 Nov 29 2016
< r72506 4096 Nov 29 2016
< r7250x 4096 Sep 6 2016
< r7250x1 4096 Oct 18 2016
< r9255 4096 Oct 18 2016
< r92551 4096 Sep 8 2015
< r9270 4096 Sep 8 2015
< r92701 4096 Sep 8 2015
< r9270x 4096 Sep 8 2015
< r9270x1 4096 Sep 8 2015
< r9280 4096 Sep 8 2015
< r92801 4096 Aug 16 2015
UP--DIR 284G/457G (62%) UP--DIR 284G/
Hint: Key frequently visited ftp sites in the hotlist: type C-
root@ASUS-ACS-1204:/mnt#
1|help 2|Menu 3|View 4|Edit 5|Copy 6|RenMov 7|kdir 8|Delete 9|
```

```
Left File Command Options Right
< /rx5B04 < /mnt
< n Name Size Modify time < n Name Size
< driver.zip 54433 Feb 15 13:37
< egpu.zip 270871 Feb 15 13:38
< logging_dme.txt 3118 Feb 15 13:38
< media.zip 41126K Feb 15 13:37
< menfa.cf 130 Feb 15 13:38
< params.xml 115022 Feb 15 13:37
< pn_config.ini 5206 Feb 15 13:38
< pn128_2013 12970 Mar 3 14:13
< powertune.cf 83 Feb 15 13:38
< pppreg.dat 27 Feb 28 17:22
< slit.cf 17 Feb 15 13:38
< stutter.cf 109 Feb 15 13:38
< suite_bp.pl 15277 Feb 28 13:13
< tid.pl 4003 Feb 15 13:38
< tserver 4667338 Feb 15 13:37
< tserver.cf 114 Mar 3 11:09
< tserver.xml 3402 Feb 15 13:37
< tserverlite 114870K Feb 15 13:37
< tserverapp.pl 39518 Feb 15 13:38
< yu0aq1a0 9035 Mar 3 14:12
< yu0aq1a1 9035 Mar 3 14:12
UP--DIR 284G/457G (62%) UP--DIR
Hint: UFS coolness: tap enter on a tar file to examine its con
root@ASUS-ACS-1204:~/rx5B04#
1|help 2|Menu 3|View 4|Edit 5|Copy 6|RenMov 7|kdir 8|Delete
```


Flash VBIOS& Memory Test

Flash VBIOS -- AMD Card

1. Please sure the *atiflash.exe* or *amdvbflash.exe* file is in your folder.
2. If the *atiflash.exe* or *amdvbflash.exe* file can't flash your card ,please find the newest version to try.
3. If the VBIOS was locked, please use command “**./atiflash -unlockrom 0**” to unlock, and use command “**./atiflash -lockrom 0**” to lock after flash.
4. You can use command “**./atiflash -ai 0**” to show VBIOS version.

```
./atiflash -p -f 0 *.rom          ---- Flash BIOS  
□ -p          ; Write BIOS image  
□ -f          ; Force flashing, used while writing eeprom
```

```
./atiflash -unlockrom 0          --- Unlock  
./atiflash -lockrom 0           --- Lock  
./atiflash -ai 0                --- Show version  
./atiflash -s *.rom             --- Save BIOS
```

Flash VBIOS& Memory Test

Memory Test (For Debug) -- AMD Card

- Runs the memory failure analysis tool on the graphics board under test. Please check with PCB repair to find the fail chip.

□ ./tserver -boardtest=memfa

□ Log file: memfa.log

Memory Failure Analysis

```
nChannels: 4
channelByteWidth: 4
nRankBits: 0
current MCLK: 300
MCLK step: 0.00
current SCLK: 214
SCLK step: 0.00
```

Basic analysis

```
          00000000 00111111 11112222 22222233
Mclk      01234567 89012345 67890123 45678901
=====
          ChB0
300      .....
          ChB1
300      .....
          ChA0
300      .....
          ChA1
300      .....
```

LEGEND

```
"." - no error
"1" - error count < 10
"2" - error count < 100
"3" - error count < 1000
"4" - error count < 10000
"5" - error count >= 10000
```


Flash VBIOS& Memory Test

Flash VBIOS -- NVIDIA Card

1. Please sure the *nvflash.exe* file is in your folder.
2. If the *nvflash.exe* file can't flash your card ,please find the newest version to try.
3. If the VBIOS was locked, please use command “**nvflash -r**” to unlock, and use command “**nvflash -w**” to lock after flash.
4. You can use command “**nvflash -v**” to show VBIOS version.

```
nvflash *.rom -6 -A ---- Flash BIOS  
□ -6 ; Ignore PCI device SSID mismatch  
□ -A ; Run without user intervention
```

```
nvflash -r ---- Unlock  
nvflash -w ---- Lock  
nvflash -v ---- Show version  
nvflash -a ---- List all NVIDIA display adapters  
nvflash -b *.rom ---- Save BIOS  
nvflash -k *.rom ---- Compare BIOS
```

Flash VBIOS & Memory Test

Memory Test (For Debug) -- NVIDIA Card

mats.exe – Stand-alone memory test

- This utility will do a rudimentary test of the framebuffer.
- It prints its results to a file named “report.txt”.
- You need check with PCB repair to find the fail chip.

```
GNU nano 2.8.7 File: /mnt/nv/UTinyLinux/gtx10704/report.txt
mats version 370.42. Testing GP104 with 20 MB of memory starting
Read Error Count: 0
Write Error Count: 0
Unknown Error Count: 0

=== MEMORY ERRORS BY SUBPARTITION ===
SUBPART READ ERRORS WRITE ERRORS UNKNOWN ERRS
-----
FBIOA0          0          0          0
FBIOA1          0          0          0
FBIOB0          0          0          0
FBIOB1          0          0          0
FBIOC0          0          0          0
FBIOC1          0          0          0
FBIOD0          0          0          0
FBIOD1          0          0          0

Failing Bits:
None

^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^T To Linter
^X Exit ^R Read File ^N Replace ^U Uncut Text ^C Cur Pos
```

• Usage

mats -e xx

-e xx — forces endpoint of test to megabyte xx .

Flash VBIOS& Memory Test

How to flash VBIOS when VGA card can't display?

- Please use onboard VGA for display and flash BIOS.
- For AMD card, Please run `./atiflash -i` to check BIOS first.
For Nvidia card, Please run `nvflash -c` to check BIOS first.
It couldn't be flashed when the BIOS spec can't be checked.

```
# nvflash -c
NVIDIA Firmware Update Utility (Version 5.199)
Simplified Version For OEM Only

Adapter: Graphics Device      (10DE,1401,1043,8520) H:--:NRM S:00,B:
F:00

The display may go *BLANK* on and off for up to 10 seconds during access
EEPROM depending on your display adapter and output device.

Identifying EEPROM...
EEPROM ID (EF,3012) : WBond W25X20A 2.7-3.6V 2048Kx1S, page
Press any key to continue..._
```

N卡运行: `nvflash -c`

```
root@terry-desktop:~/BIOS# ./atiflash -i
Adapter  bn  dn  did  asic  flash  romsize test  bios p/n
-----  -  -  -  -  -  -  -  -  -
0  01  00  68BF Juniper  W25P10/c  20000 pass 113-AD15200-103
Press any key to continue...
```

A卡运行命令: `./atiflash -i`

Flash VBIOS& Memory Test

For Nvidia RTX series, you can use diag test for debug memory.

- . If the diagnostic could be executed, run it (you need add “-run_on_error” at the end of the *.arg* file) and check mods.log, you can find GPU or memory fails.
- . If test cannot get the directional result, use the below commands for test, and you can disable or hold one partition or more partition at a time. The command below are for disable or hold FB partition with Diag, it can help you identify this channel is pass or fail.

Disable partition

Disable partition FB_A: -floorsweep fbio_disable:0x01:fbp_disable:0x01

Disable partition FB_B: -floorsweep fbio_disable:0x02:fbp_disable:0x02

Disable partition FB_C: -floorsweep fbio_disable:0x04:fbp_disable:0x04

Disable partition FB_D: -floorsweep fbio_disable:0x08:fbp_disable:0x08

Disable partition FB_E: -floorsweep fbio_disable:0x10:fbp_disable:0x10

Disable partition FB_F: -floorsweep fbio_disable:0x20:fbp_disable:0x20

Flash VBIOS& Memory Test

Hold partition

Hold partition FB_A: -floorsweep fbio_disable:0x3E:fbp_disable:0x3E

Hold partition FB_B : -floorsweep fbio_disable:0x3D:fbp_disable:0x3D

Hold partition FB_C: -floorsweep fbio_disable:0x3B:fbp_disable:0x3B

Hold partition FB_D : -floorsweep fbio_disable:0x37:fbp_disable:0x37

Hold partition FB_E : -floorsweep fbio_disable:0x2F:fbp_disable:0x2F

Hold partition FB_F: -floorsweep fbio_disable:0x1F:fbp_disable:0x1F

Hold partition FB_A/B: -floorsweep fbio_disable:0x3C:fbp_disable:0x3C

Hold partition FB_C/D: -floorsweep fbio_disable:0x33:fbp_disable:0x33

Hold partition FB_E/F: -floorsweep fbio_disable:0x0F:fbp_disable:0x0F

You can use disable or hold partition flexibly by yourself for reference.

Flash VBIOS& Memory Test

For example:

First please check **PN.sh** in diag like `yv0c90a0.sh` as your test model.

```
./mods -mle_nv gputest.js -readspec gp104_pg411_sku10_cr.spc @std.arg || exit $?  
./mods -a -mle_nv gputest.js @t275.arg -bg_int_temp_flush 5000 1000 || exit $?
```

So if you want to hold partition A , please edit **std.arg** as below, add two command lines at the end :

```
-adc_cal_check_ignore  
-nvlink_force_disable  
-timeout_ms 5000  
-power_cap_policy 3 74000  
-power_cap_policy 4 93000  
-power_cap_policy 5 167000  
-power_cap_tgp_mw 258000  
-dramclk +2pct,0.all  
-dramclk +2pct,3.all  
-testarg 0 FailIfCapped false  
-testarg 1 IgnoreRgbMcuFwCheck true  
-testarg 171 SkipSerialNumCheck 1  
-skip 78
```

```
-floorsweep fbio_disable:0x3E:fbp_disable:0x3E  
-run_on_error
```

Hold partition FB_A

Flash VBIOS& Memory Test

It's could be show other error, example error code "***** 818". It's means the selected partition could be failure.

```
GNU nano 2.8.7 File: a.log
NURM: _threadNodeCheckTimeout: Timeout was set to: 4000 msecs!
NURM: pmuInstBlkUnbind_GK104: Error 0x00000065 returned from pmuContextSwitchWait_HAL(pGpu
NURM: pmuInstBlkUasUpdate_IMPL: Error 0x00000065 returned from pmuInstBlkUnbind_HAL(pGpu,
pmuEnableHw_GP102: PMU secure reset priv level mask does not permit reset
NURM: bp @ ...../resman/kernel/pmu/pascal/pmugp102.c:63

ERROR: ** ModsDruBreakPoint **
pmuEnableHw_GP102: PMU secure reset priv level mask does not permit reset
NURM: bp @ ...../resman/kernel/pmu/pascal/pmugp102.c:63

ERROR: ** ModsDruBreakPoint **

----- END ASSERT INFO DUMP -----
Error 000000000818 : Gpu.ShutDown Mods detected an assertion failure [116.937 seconds]

Failure(s) :
LOOP TEST CODE MESSAGE
-----
1 ValidSkuCheck2 020000217254 MemSize detected an invalid framebuffer size
1 CudaLinpackIgemm 020000212009 cannot allocate memory
1 CudaLinpackHMMAgemm 020000310009 cannot allocate memory
1 CudaLinpackHMMAgemm 020000310009 cannot allocate memory
1 CudaLinpackHMMAgemm 020000310097 unexpected device interrupts
1 CudaLinpackHMMAgemm 520008312818 Mods detected an assertion failure
1 PerfPunish 520008312818 Mods detected an assertion failure
1 PerfPunish 020008006818 Mods detected an assertion failure
1 PerfPunish 020008006818 Mods detected an assertion failure

Error Code = 020000217254 (MemSize detected an invalid framebuffer size.)

#####
#####
##
##
#####
#####
##
##
##
##
#####
#####
#####
#####

MODS end : Fri Jan 11 16:59:17 2019 [1805.681 seconds (00:30:05.681 h:m:s)]
```

Test Result Upload

Public Folder → GRMA → Test Program (Main Program & Utilities) → VGA

Document Name:	VGA Result Upload Tool				
Publisher:	maico_zhang	Last Published:	2018.04.02 13:18:32	Hits:	37
Product Type:		Model Series:	N/A	Model:	
Attachment:	Result_Upload_Tool_2.0.rar(12) VGA Upload Tool_SOP_English.docx(19) ResultSearcher.zip (9) VGA Upload Tool_SOP_Chinese.docx(4)				
Remark:	🔔 If you cannot install ActiveX component of FTP from IE, please click here to download and execute setup.exe.				
Content:					

1. Download VGA Upload Tool from SIP and unpacked. Copy to USB flash. Download site: http://sip.asus.com/document/DisplayDocument.aspx?folder_type=PUB&doc_id=208968#

Test Result Upload

- The tool of RMA info upload tool include 3 files:



Check_SN



RMA_Config



RMAInfo

Test Result Upload

2. Power on the test platform. And into Linux OS. Type "mc" go to MC interface. Plug USB flash Into USB port, then mount USB flash.

```
Left      File      Command      Options      Right
<- /mnt/nv/UTinyLinux [^> <- ...ey/RMA_Upload_Tool_up
'n      Name      Size      Modify time  'n      Name      Size      M
/..      UP--DIR   Jan 1 1970
/210     32768    Sep 19 2016
/EN210   32768    Aug 29 2016
/GTX1050-2GD5 32768    Jan 23 07:09
/GTX1060-3GD5 32768    Jan 23 06:07
/GTX1060-6GD5 32768    Jan 23 06:13
/GTX1070-8GD5 32768    Jan 23 07:45
/GTX1080-8GD5X 32768    Jan 23 06:10
/N_BIOS  32768    Aug 3 2015
/RMAInfo 32768    Aug 3 2015
/a.report 32768    Jan 1 2108
/engt5202 32768    Aug 3 2015
/gt1030  32768    Jan 31 05:52
/gt10301 32768    Dec 12 16:23
/gt10302 32768    Apr 9 16:06
/gt10303 32768    Apr 9 15:56
UP--DIR
44G/75G (59%)

Right
UP--DIR
6625M/749
*Check_SN 17424 M
*RMAInfo 24192 M
*RMA_Config 207 M

Hint: To look at the output of a command in the viewer, use M-!
1Help 2Menu 3View 4Edit 5Copy 6RenMov 7Mkdir 8Delete 9Pul
```

Test Result Upload

3. Press “F4” to edit the **RMA_Config** file when using the tool first time. First line confirms the address of local sever, Second line is Tester ID. The **RMA_Config** only need modify once.

```
CN ← Server Select
1150231 ← Test ID

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

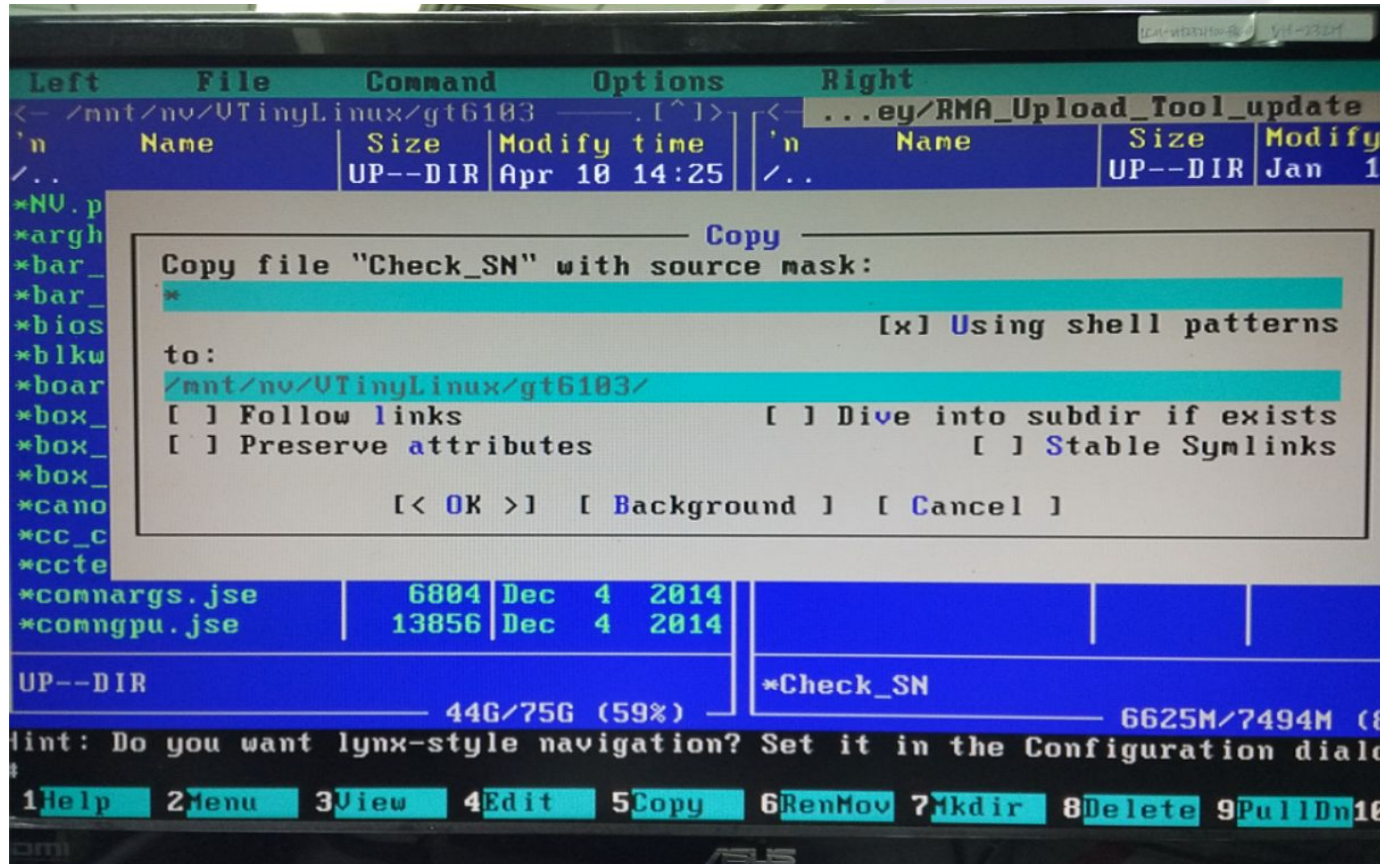
Server Select :

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
```


Test Result Upload

4. Press "F5" to copy 3 file of the tool to the test program folder by model.



Test Result Upload

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

```
---- Check SN  V20180227  ----  
Server Select : AM Server .  
Please Input SN : █
```

Test Result Upload

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

```
Left      File      Command  Options  Right
< /mnt/nv/UTinyLinux/gt1030 . [^]> < /mnt/usbkey
'n      Name      Size      Modify   time
*tegraboards.jse      22036    Apr 18   2017
*tegracom~unc.jse     11556    Apr 18   2017
*tegraperf.jse       26572    Apr 18   2017
*test.cfg             2107     Apr 18   2017
*test.sh              42325    Apr 18   2017
*testlist.jse        37240    Apr 18   2017
*thermal.jse         16568    Apr 18   2017
*tofile.jse           5600     Apr 18   2017
*tunetrim.jse        21924    Apr 18   2017
*tunevolt.jse        14036    Apr 18   2017
*vic_data.bin         16384    Apr 18   2017
*vp2_stre.bin        203520   Apr 18   2017
*yv0at0a0.sh           559      Apr 21   2017
*yv0at0a1.sh           559      Apr 21   2017
*yv0at1a0.sh           559      Apr 21   2017
*yv0at1a1.sh           559      Apr 21   2017

*yv0at0a1.sh
44G/75G (59%)
Hint: To use the mouse cut and paste may require holding the s
#
1 Help  2 Menu  3 View  4 Edit  5 Copy  6 RenMov  7 Mkdir  8 Dele
```


Test Result Upload

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

```
=====
=      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
-----
```

Notice&Common Problem

1. If the screen show “permission denied” error when run AMD diag test, Please check if the Ubuntu OS installation was correct.

```
Return Device ID Value = 67DF
=====
Check DID Pass.
=====
Return SSID Value = 0527
=====
Check SSID Pass.
=====
PCIE : GEN3
Run Quickmfg
./tserver -boardtest=quickmfg -nw -noctf -suitemargin=2X,2XError: Permission denied
CHD001:
No command to execute, probably cannot find device
CHD002:
No command to execute, probably cannot find device
CHD003:
No command to execute, probably cannot find device
./tserverlite -cf=baco.cf -q -nw -tf=tserver.tmp.tf
conf:
-nw
-log
-eofe
-d-gpu.*
-linkspeed=3
tests:
=====
Error: Permission denied
=====
```

Notice&Common Problem

2. Please use Nvidia Graphic card with DVI port when you run Nvidia diag test. If the Graphic Card hasn't DVI port, you can use HDMI port for test. If you haven't use DVI port for test, it could be display error as below.

```
Failure(s) :
LOOP          TEST          CODE          MESSAGE
-----
1   CudaLinpackSgemm      007500200083  CRC/Checksum mismatch

Error Code = 007500200083 (CRC/Checksum mismatch)

#####          #####          #####          ###
#####          #####          #####          ###
##             ##          ##          ##
##             ##          ##          ##
#####          #####          ##          ##
#####          #####          ##          ##
##             ##          ##          ##
##             ##          #####          #####
##             ##          #####          #####

MODS end   : Tue Sep  4 22:31:21 2018 [99.846 seconds (00:01:39.846 h:m:s)]
[22:31:21] /mnt/nv/gtx9807
# yv08j0a0.sh_
```

Notice&Common Problem

3. If you see “Check SSID Fail” as below, Please confirm the PN your VGA card is matching test diag.

```
=====
ASUS FCT
Rev 0.2 . Changed 2016-10-18
=====

----- Config File Data Info -----
GEN = ECS
DeviceID = 67DF
SSID = 0402
ModelName = DUAL-RX580-08G-D2I2S(D009P13)//R1.00M#
FullFan = 0
OverClock = 0
ENG GB = 2K
MEM GB = 2K
Return Device ID Value = 67DF

=====  
Check DID Pass.  
=====  
Return SSID Value = 056A  
=====  
Check SSID Fail !  
=====

FFFFFFFF      AAA      IIIIIIII      LLL  
FFFFFFFF      AAAAA      IIIIIIII      LLL  
FFF          AAA AAA      III          LLL  
FFF          AAA AAA      III          LLL  
FFF          AAA AAA      III          LLL  
FFFFFFFF      AAA AAA      III          LLL  
FFFFFFFF      AAA AAA      III          LLL  
FFF          AAAAAAAAAA      III          LLL  
FFF          AAAAAAAAAA      III          LLL  
FFF          AAA AAA      III          LLL  
FFF          AAA AAA      IIIIIIII      LLLLLLLLLL  
FFF          AAA AAA      IIIIIIII      LLLLLLLLLL

root@ASUS-ACS-1204:~# _
```


Notice&Common Problem

4. Please check your MB could support PCIE3.0 standard when test result show PCI express fail .

```
GNU nano 2.8.7 File: /mnt/nv/UTinyLinux/gtx1050d/mods.log
-----
LOOP          TEST          CODE          MESSAGE
-----
0  CheckLinkWidth  000000000665  wrong number of PCI
ErrorLogger finishing with log buffer overflow

Error Code = 000000000665 (wrong number of PCI express lanes detect

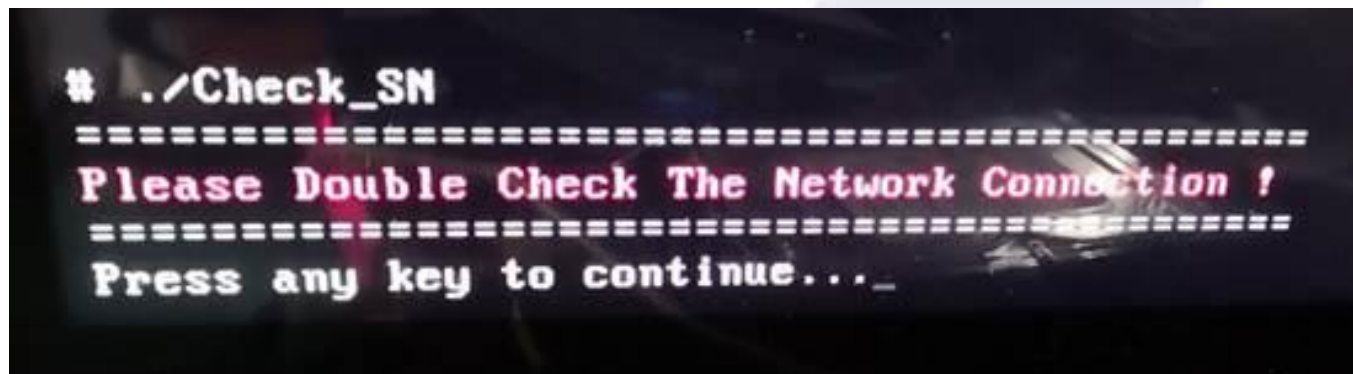
#####      ####      #####      ###
#####      #####      #####      ###
_##         ##      ##      ##      ###
_##         ##      ##      ##      ###
#####      #####      ##      ###
#####      #####      ##      ###
##         ##      ##      ##      ###
##         ##      ##      #####      #####
##         ##      ##      #####      #####

MODS end   : Wed Dec 12 06:26:02 2018 [7.586 seconds (00:00:07.586
^G Get Help   ^O Write Out  ^W Where Is   ^K Cut Text   ^T To Linter  ^M
^X Exit       ^R Read File  ^_ Replace    ^U Uncut Text ^C Cur Pos   ^M
```

Notice&Common Problem

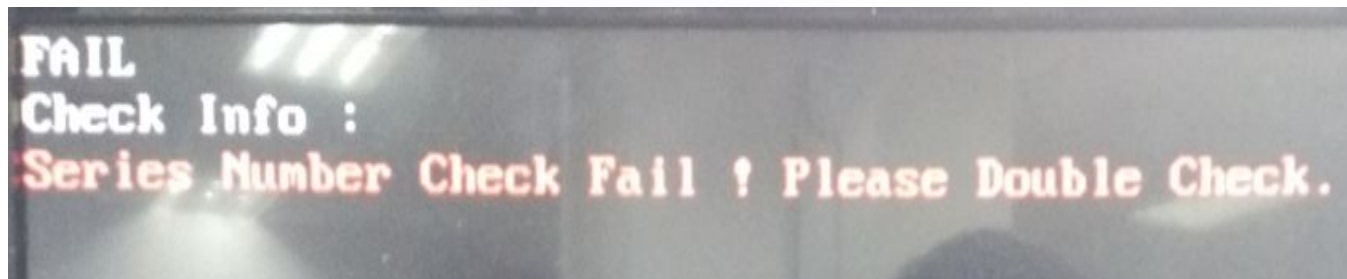
5. Test result can't be upload to server.

- a. Please run ifconfig to check you Linux OS could link to network when you see below screen.



```
# ./Check_SN
=====
Please Double Check The Network Connection !
=====
Press any key to continue..._
```

- b. Please confirm your VGA SN is in repair status when you see below screen.



```
FAIL
Check Info :
Series Number Check Fail ! Please Double Check.
```

Notice&Common Problem

6. Power supply request for VGA test:

We suggest the power supply spec to follow below list.

Extend Power Port	Power Supply
No	>500W
6PIN	>550W
8PIN	>600W
6+6PIN	>600W
6+8PIN	>800W
8+8PIN	>900W



Extend Power Port

Thank You!
