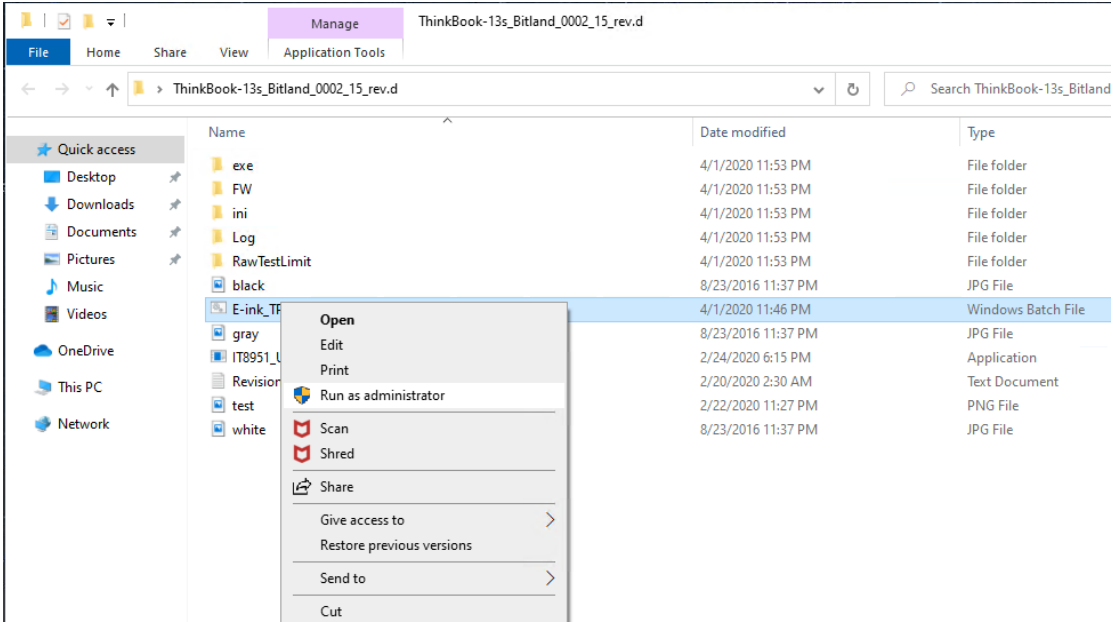
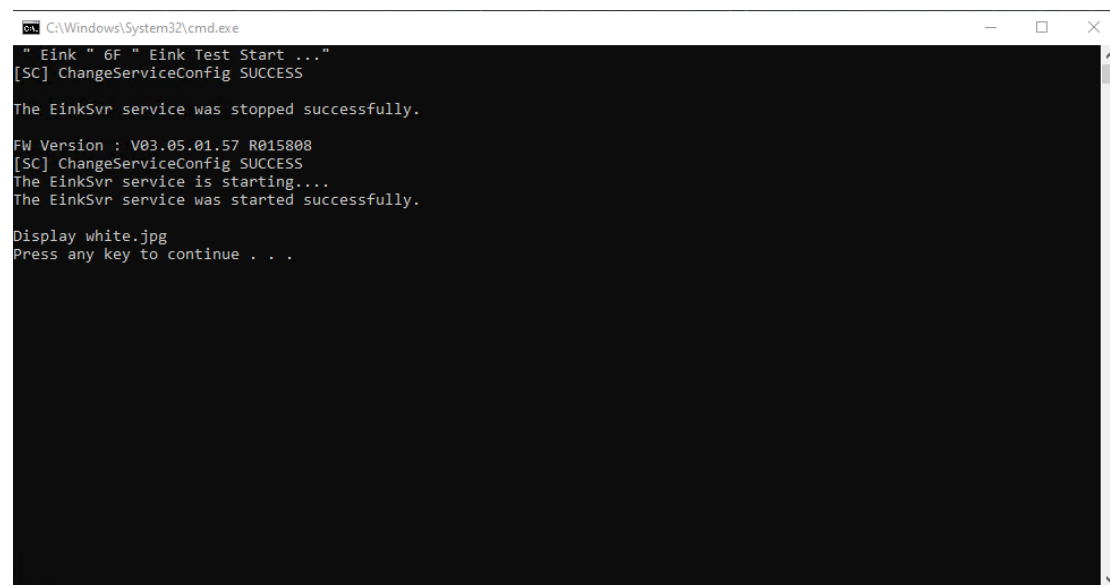


E-ink_TP Test SOP

1. right-click and select to run e-ink_tp.bat as administrator



2. The program will automatically run to read the FW version. The current machine version is v03.05.01.57. (the FW version can be opened or closed according to the demand, and it is not recommended to update directly after sales.) press any key to brush in the white picture for screen display test

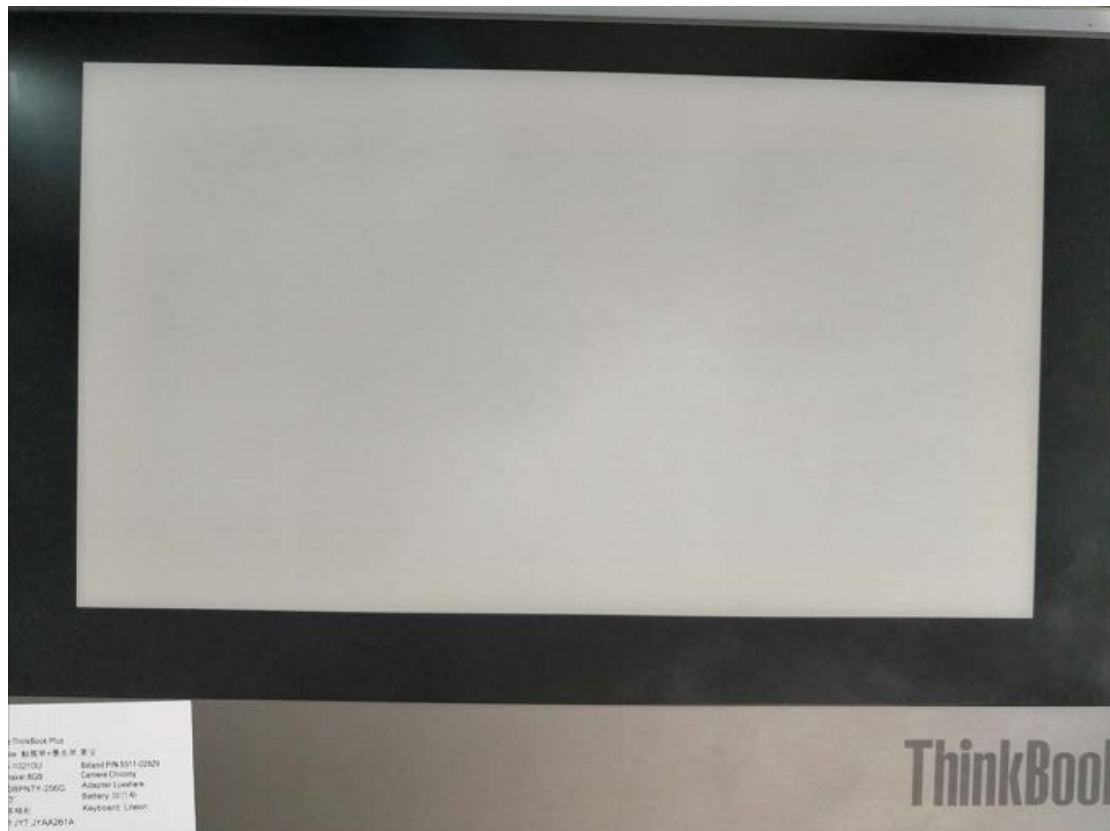


```
C:\Windows\System32\cmd.exe
" Eink " 6F " Eink Test Start ..."
[SC] ChangeServiceConfig SUCCESS

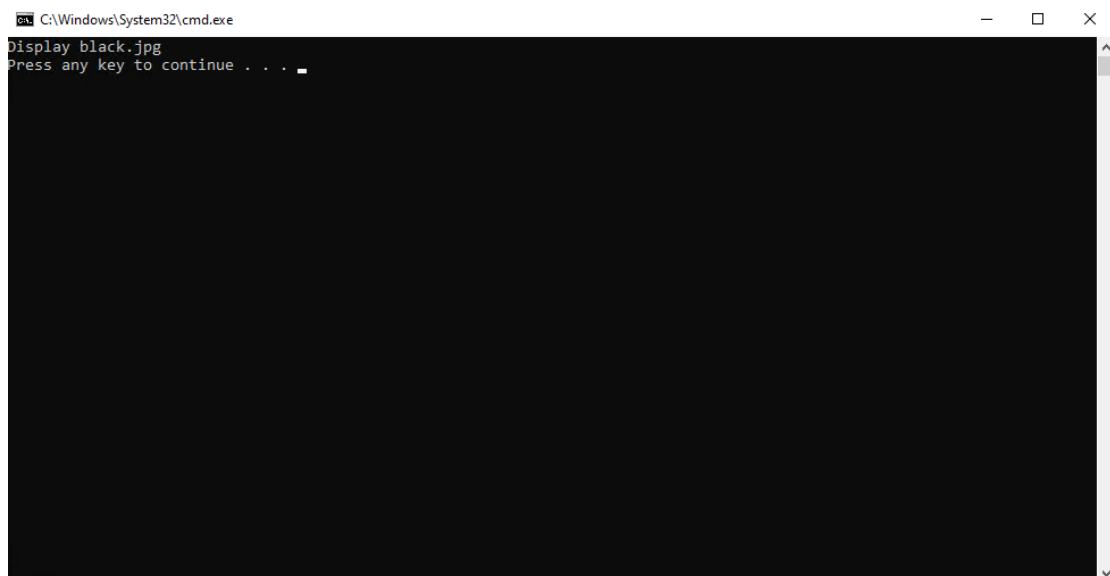
The EinkSvr service was stopped successfully.

FW Version : V03.05.01.57 R015808
[SC] ChangeServiceConfig SUCCESS
The EinkSvr service is starting....
The EinkSvr service was started successfully.

Display white.jpg
Press any key to continue . . .
```

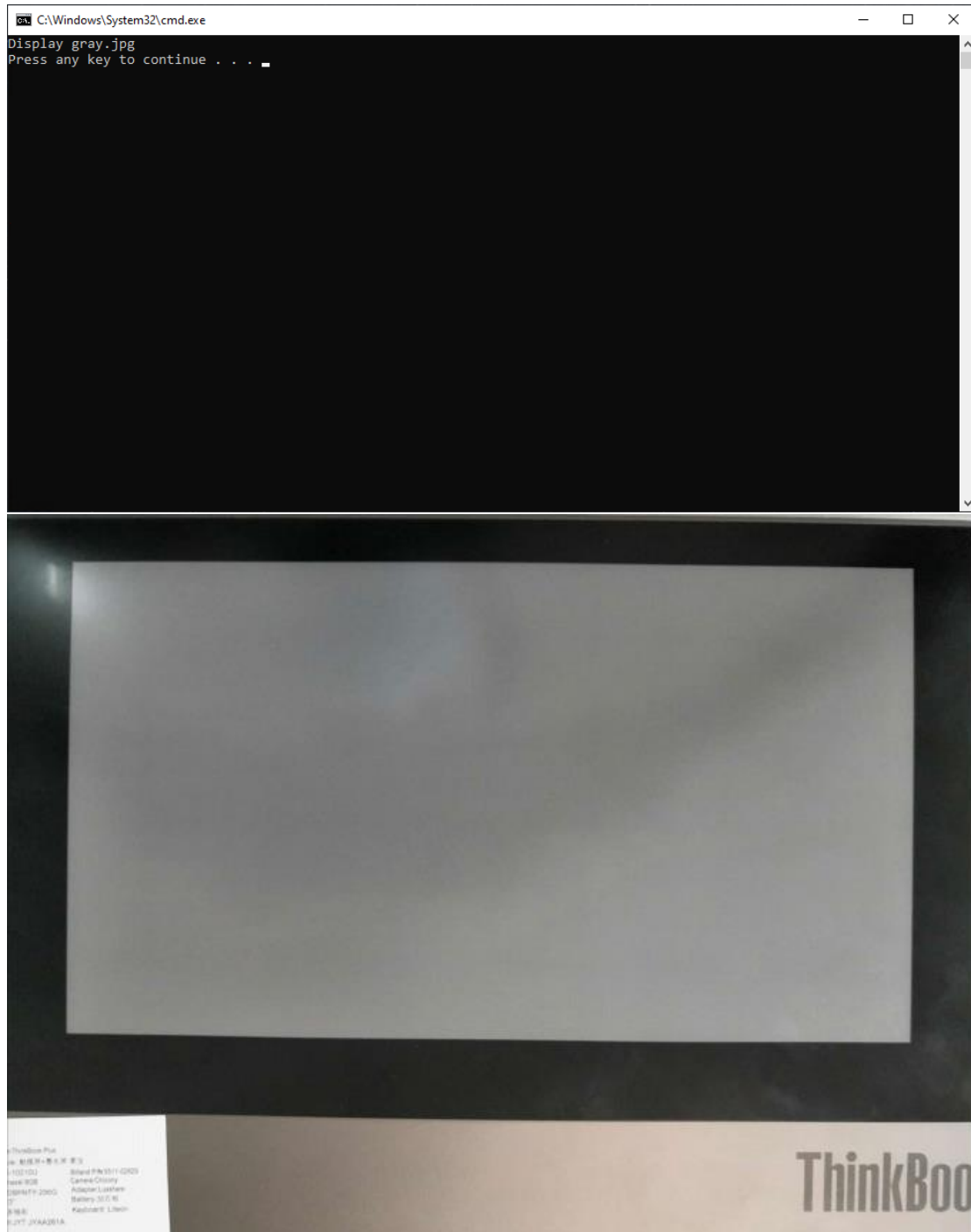


3. Press any key to brush in the black picture for screen display test





4. Press any key to brush in the gray picture for screen display test

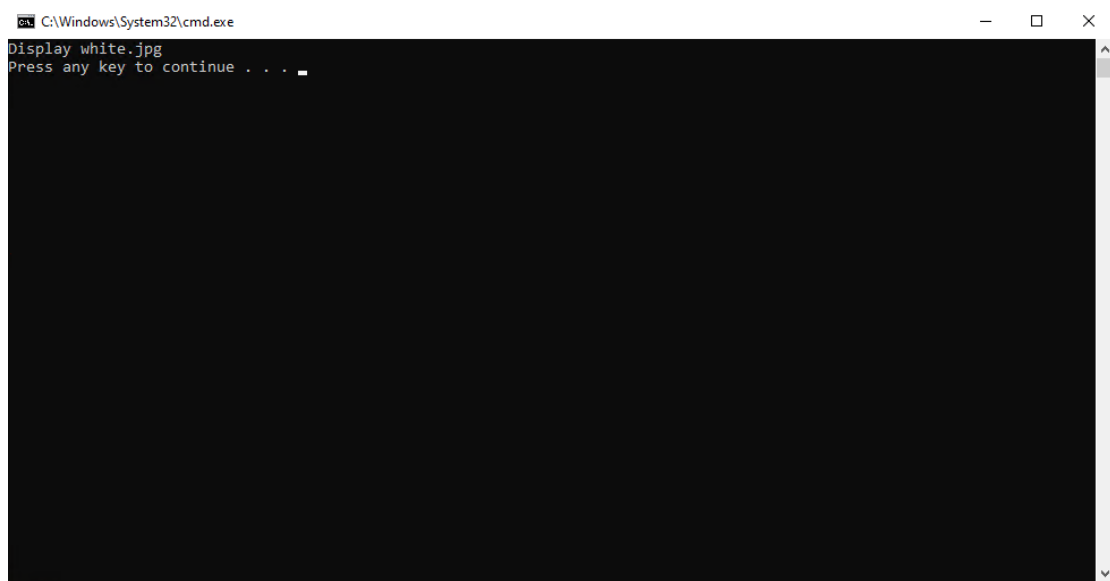


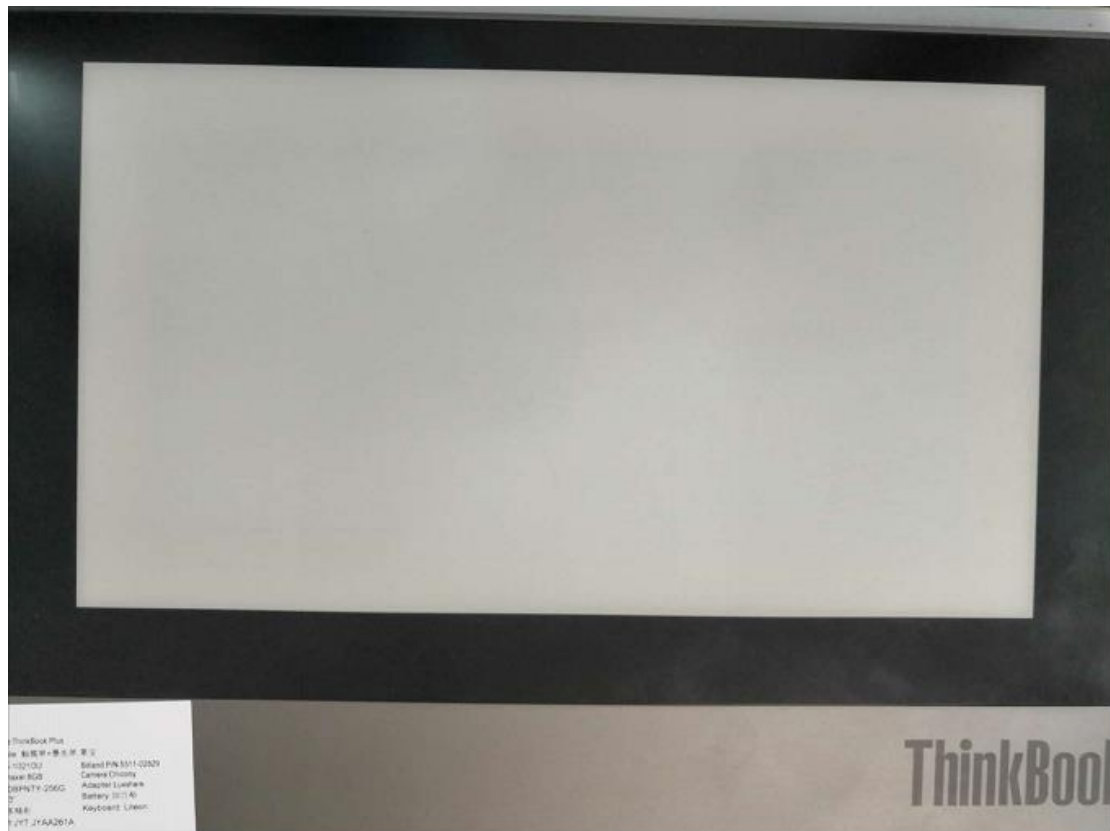
A. Test illumination: 1000-1300lux

B. Sight distance: 30 ± 5 cm, detection angle: $\pm 45^\circ$

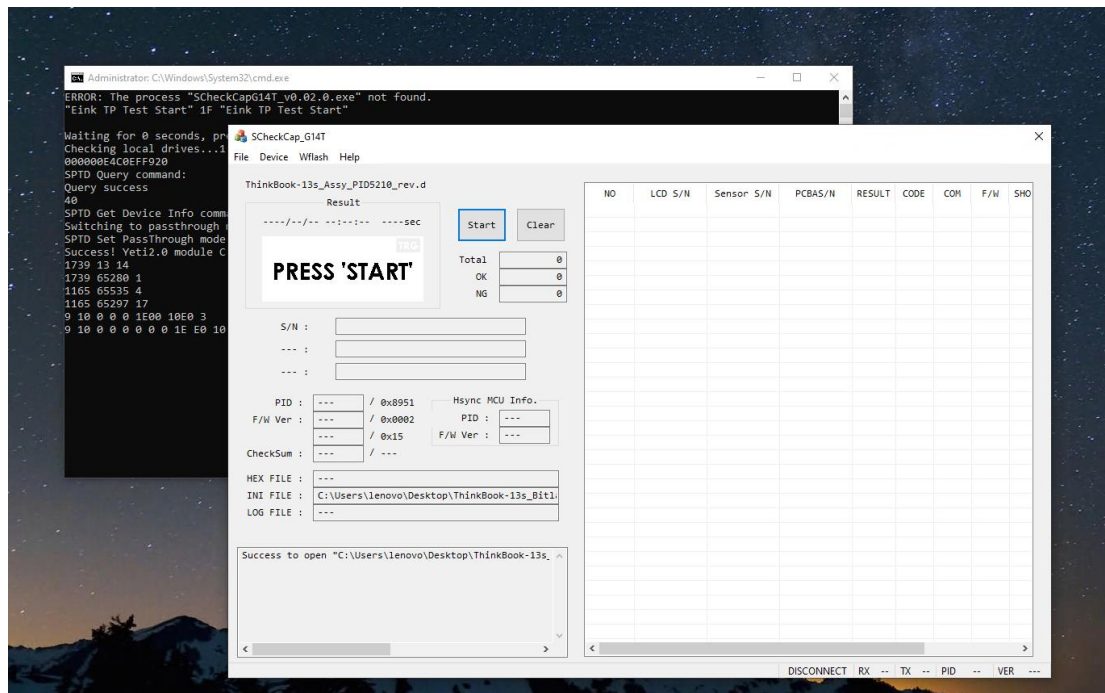
C. Check whether there is any abnormal display, bright dark point, bright dark line, bubble and other visible abnormalities

5. Press any key to brush in the white picture for recovery, to avoid the residual shadow caused by TFT leakage and affect judgment

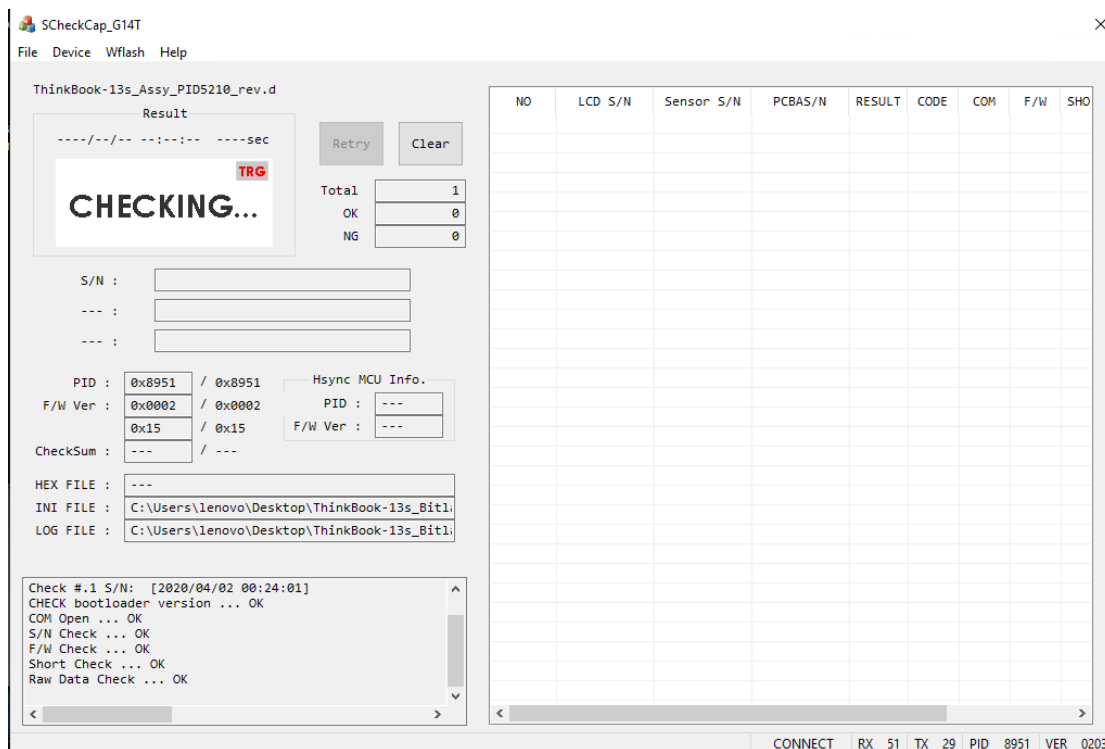




6. Start TP automatic detection, and wait for 2-3 minutes;



7. Complete the test and check whether the test information is consistent with the standard

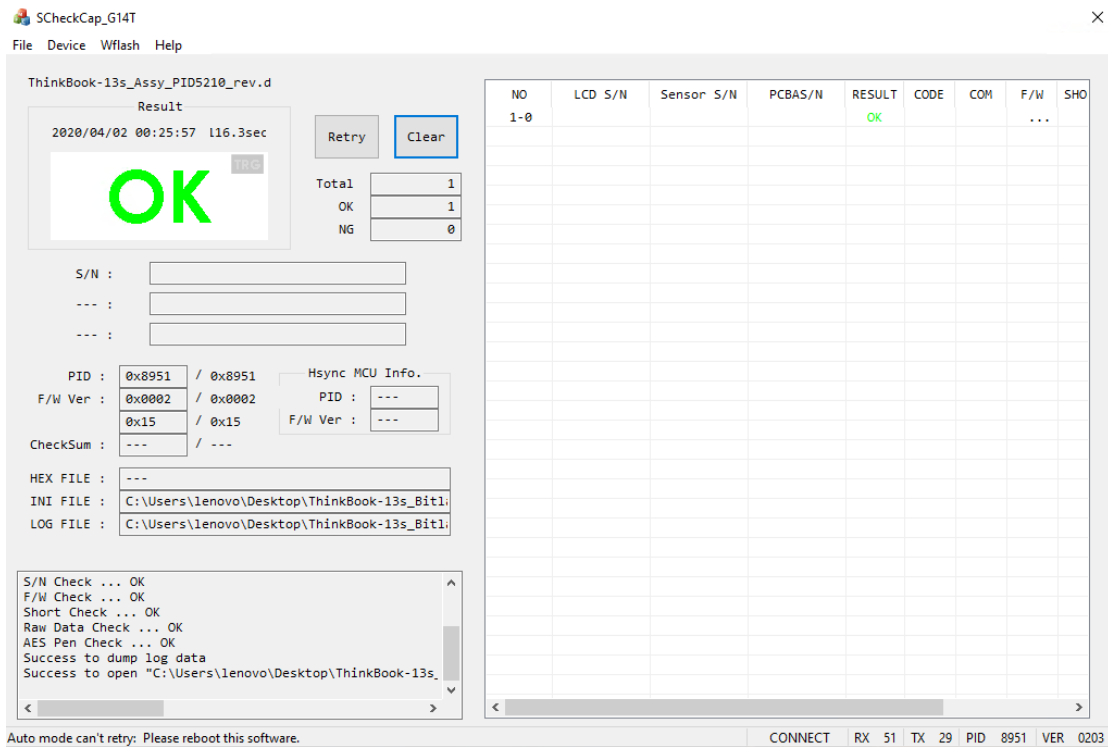


WAIT for getting Noise Level

WAIT for getting Noise Level

[touch] or [Esc] : finish test

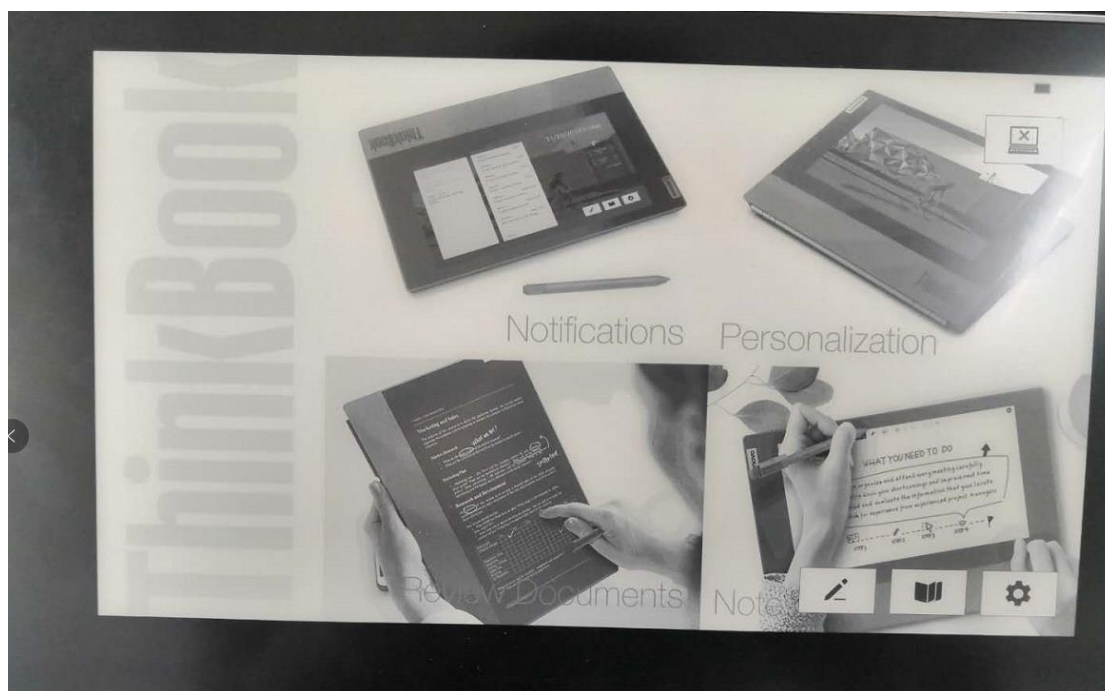
Downloaded from <http://ajph.org/> on November 10, 2015



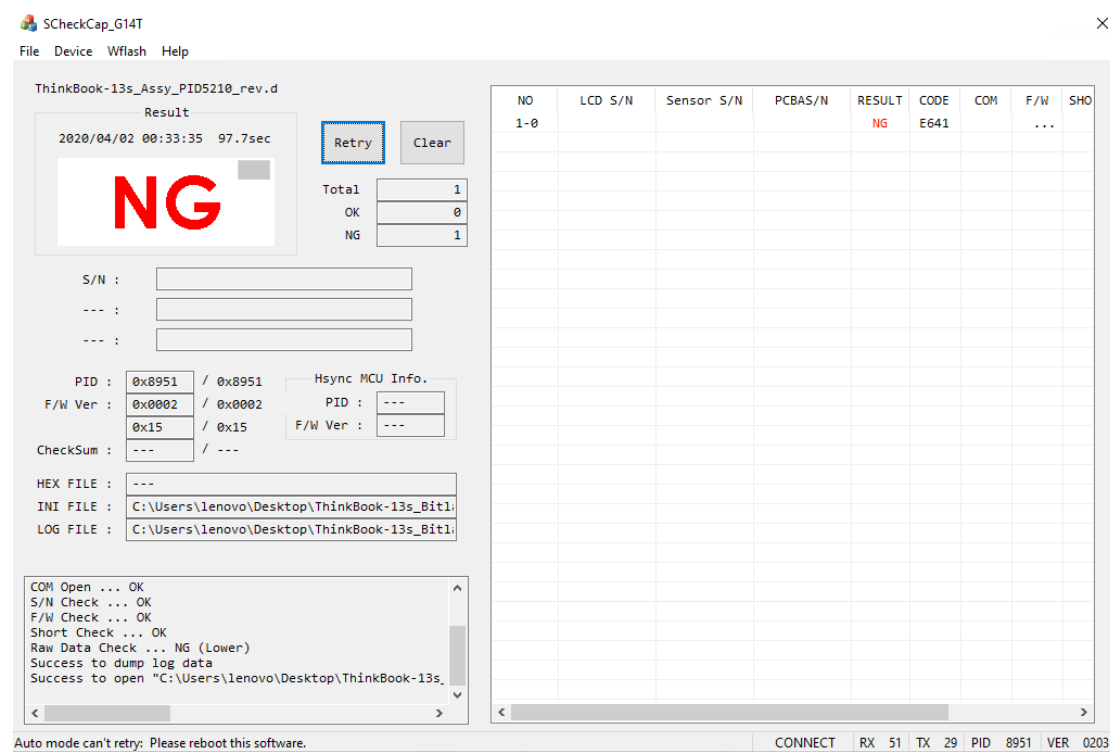
8. Exit the program to check whether the log passes and open the eink app service. At this time, do not close any windows, wait for the script to automatically run and exit, and wait for the eink test pass prompt to be displayed;

```
Administrator: C:\Windows\System32\cmd.exe
" E Ink " 6F " E Ink Test Start ..."
ERROR: The process "SCheckCap614T_v0.02.0.exe" not found.
=====
Test Pass!!!
Test Pass!!!
Test Pass!!!
=====
Press any key to continue . . .
```

9. After the service is turned on, the e-ink screen is as follows:



10. Test simulation abnormality is caused by finger pressing. Refer to the table of abnormality codes and ThinkBook-13s_Bitland_0002_15_rev.d\Log\ThinkBook-13s_Assy_PID5210_rev.d_20200402_003157\20200402_003157____NG_0001_00.csv for specific abnormality points



11. When testing fail, please close the UI test interface. At this time, you will be prompted that the test fails. Press any key to restart the system

```

Administrator: C:\Windows\System32\cmd.exe
=====
Link TP Test Fail
The test fails, shut down the test software and
restart the system to test again
=====
Press any key to continue . . .

```

Error Code

Error Code	Condition	Error Code	Condition
E600	FW writing error	E650	Drawing check error
E601	FW version error	E651	First input error
E602	VID error	E652	Multi touch error
E603	PID error	E653	Touch square draw error
E604	Checksum error	E654	Touch diagonal draw error
E610	Touch device communication error	E655	Pen square draw error
E611	Pen device communication error	E656	Pen diagonal draw error
E620	Tx - Tx short	E657	Pen accuracy check error
E621	Rx - Rx short	E660	Noise level high
E622	Tx - Rx short		
E623	Tx - GND short		
E624	Tx - VDD short		
E625	Rx- GND short		
E626	Rx - VDD short		
E630	Tx open		
E631	Rx open		
E640	Raw data high		
E641	Raw data low		
E642	Calibration threshold error		
E645	Gap Check Horizontal error (Rx open)		
E646	Gap Check Vertical error (Tx open)		

12. Whether to update TP FW automatically when modifying the configuration file, change '0' to '1' and save

```
*ThinkBook-13s_Assy_PID5210.ini - 记事本
文件(F)  编辑(E)  格式(O)  查看(V)  帮助(H)

:
:   ThinkBook-13s_Assy_PID5210.ini
:   Date: 2020.2.20
:   Created by IniMaker   (C) 2014- Wacom Co.,Ltd.
:
:

[CORE]
CPU="G14S"

[DEVICE]
VID=0x048D
PID=0x8951
USAGEPAGE=0xFF11
USAGE=0x0011

[SETTING]
TITLE="ThinkBook-13s_Assy_PID5210_rev.d"
LOG_DIR="Log"
LOG_FILE="ThinkBook-13s_Assy_PID5210_rev.d"
START_TRG=4
ENTER_SN=0
WRITE_FW=1

COMPARE_FWVER=1
SHORT_CHECK=1
RAW_CHECK=1
DRAWING_CHECK=0
YETI_CUNIT=1
GET_RAWDATA_INTERVAL=100
FEATURE_INTERVAL=100
PEN_SETAREA_ENABLE=1
AES_CHECK=1

DRAW_DISABLE_MTOUCH=1

WFLASH_PATH="exe\\wflash_g11t_3_26(32).exe"
HEX_FILE="FW\\UPDATE_G14TS_thinkbook13s_5210_v0002_rev15.hex"
CHECKSUM=0xA10F
WRITE_COMPARE_FWVER=1
FWVER_MAJOR=0x0002
FWVER_MINOR=0x15

WAIT_TIME=650
SHORT_THRESHOLD=650
```