Report NO: 16R010004

RTC-700M

Tablet PC Product

Compatibility Test Report

Summary	☒ Pass ☐ Fail ☐ Pass with Deviation (Comment: _____)			
Test Results Category				
	Critical	Major	Minor	Enhancement
Defect Found	0	0	0	0
Defect Unsolved	0	0	0	0

Issue date	QE Manager	Test Engineer
07-14-2016	KJ Wang	Anderson Lin

Summary Table of DTS:

Defect No.	Severity	Description

Version Released Records

Date	Version	Change History	Note

Note :

For all test items in this report, 3 results have been defined and described as following:

Pass: Functionality work perfectly
Fail: Functionality failed and must be resolved in the next version
N/A: Functionality Not Applicable or Not Available

This test report would be updated when re-test completed in product next change version.

Platform Information:

Item	Device Information	Test Item
System Model	RTC-700M	1,2,3,4,5
MB Ver.	RTC-700M Rev:A 0.3	1,2,3,4,5
CPU Type	TI OMAP4470	1,2,3,4,5
Storage	16GB Flash eMMC	1,2,3,4,5
Memory Type	LP-DDR2 / 1GB	1,2,3,4,5
LCD	Chimei N070ICG-LD1	1,2,3,4,5
Android Version	Android 4.2	1,2,3,4,5
OS Image Version	RTC-700M Standard image JellyBeans 4.2.2 Version:0.0.0.1 20160506	1,2,3,4,5
Adapter	LTE24E-S2-2 / OUTPUT:12V~2A / MAX:24W	1,2,3,4,5
Battery	RTC600H / 7.4V~1530mAh Rechargeable Li-polymer Battery	1,2,3,4,5

Summary:

1. Mechanical Check
　　1.1 Mechanism construction check
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　　1.4 Button and Function Key check

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　　4.1 Benchmark Test

5. Run in Test
　　5.1 StabilityTest
　　5.2 Playback video for overnight test

1. Mechanical Check

(1.1) Mechanism construction check

- Key test point:
  1. Inspect the mechanical appearance

Test Result	Judgment		
	Pass	Fail	Remark
No mechanical conflicts, gap, blend, deformed appearance, misalignment	☒	☐	

(1.2) I/O Connector and Cover check

- Key test point:
  1. Inspect the I/O connector and I/O cover

Test Result	Judgment		
	Pass	Fail	Remark
I/O Cover is firm	☒	☐	

(1.3) DC power outlet / inlet check

- Key test point:
  .1. Inspect DC Power outlet/inlet

Test Result	Judgment		
	Pass	Fail	Remark
No mechanical conflicts, gap, blend, deformed appearance, misalignment	☒	☐	

(1.4) Button and Function Key check

- Key test point:
  1. Inspect appearance of Power button

Test Result	Judgment		
	Pass	Fail	Remark
No mechanical conflicts, deformed appearance, misalignment	☒	☐	

2. Basic Function Test

(2.1) Display Function Test

(2.1.1) Display quality check

- Key test point:
  1. Perform "Display Tester" application->"Display quality"
  2. Check display quality with different patterns (full white / full black / color bar / black white brick) with variant back light

Test Result	Judgment		
No color deviation / No saw-tooth / No flicker / No light leak /No abnormal Uniformity	Pass	Fail	Remark
	☒	☐	

(2.1.2) Auto Brightness Function Test

- Key test point:
  Open a dialog for adjusting the brightness of the screen. You can check Automatic brightness to set the tablet to adjust the brightness automatically, using the tablet's built-in light sensor. Or uncheck that option to use the slider to set a brightness level you want at all times when using the tablet.

Test Result	Judgment		
Brightness is changeable according to different ambient environment.	Pass	Fail	Remark
	☒	☐	

(2.1.3) Play Video

- Key test point:
  Play video then check the display quality.

Test Result	Judgment		
No lag / No ghost / No flicker / No color deviation while playing video.	Pass	Fail	Remark
	☒	☐	

(2.1.4) LCD Leakage check

- Key test point:
  1. Put UUT under dark environment
  2. Adjust UUT brightness to max then check LCD leakage status

Test Result	Judgment		
	Pass	Fail	Remark
No obvious leakage appeared	☒	☐	

(2.1.5) HDMI Function test

- Key test point:
  1. Plug HDMI cable to connect to HDMI monitor
  2. Check HDMI screen

Test Result	Judgment		
	Pass	Fail	Remark
1.Tablet content can be shown on HDMI monitor 2.Sound can be played on HDMI monitor	☒	☐	

(2.2) Audio Function Test

(2.2.1) Internal speaker Function

- Key test point:
  1. Play music track (or ring tones)
  2. Hear the sound quality from internal speaker
  3. Adjust volume bar from minimum to maximum then check sound level is from minimum to maximum.
  4. Adjust volume bar from maximum to minimum then check sound level is from maximum to minimum

Test Result	Judgment		
	Pass	Fail	Remark
No noise, no distortion, no background noise .the sound is clean, volume can be changed as we set with internal speaker.	☒	☐	

(2.2.2) Line-out Function

- Key test point:

1. Plug earphone.
2. Play music track (or ring tones).
3. Hear the sound quality from earphone.
4. Adjust volume bar from minimum to maximum then check sound level is from minimum to maximum.
5. Adjust volume bar from maximum to minimum then check sound level is from maximum to minimum

Test Result	Judgment		
No noise, no distortion, the sound is clean, volume can be changed as we set with line-out. Internal speaker will be turned off automatically when we plug in earphone. Sound can be played from left channel or right channel as we set	Pass	Fail	Remark
	☒	☐	

(2.2.3) Microphone Function

● Key test point:
1. Execute "Sound Recorder" program
2. Choose "record" button then say something close to internal MIC
3. Choose "stop" button
4. Choose "play" button to play recording file
5. Check recording file
6. Repeated step 1->5 on earphone MIC

Test Result	Judgment		
No noise and distortion while recording voice.	Pass	Fail	Remark
	☒	☐	

(2.3) Wi-Fi Function Test

(2.3.1) Turn on /off Wi-Fi Function

● Key test point:
Turn on Wi-Fi function then check the signal strength of Wi-Fi is displayed on system bar.
Turn off Wi-Fi function then check the signal strength of Wi-Fi is off on system bar.
Switch Wi-Fi on /off for 5 times then check Wi-Fi function still can work normally.

Test Result	Judgment		
Wi-Fi function can work normally after switch Wi-Fi on /off. The signal strength of Wi-Fi is displayed on system bar.	Pass	Fail	Remark
	☒	☐	

(2.3.2) Connect to internet

● Key test point:

Turn on Wi-Fi function then execute web browser. Type in website link (ex: www.google.com)

Test Result	Judgment		
We can connect to internet by web browser via Wi-Fi connection. Website shows correctly without any error or crash.	Pass	Fail	Remark
	☒	☐	

(2.3.3) Download files

- Key test point:
  Turn on Wi-Fi function then connect to website to download files

Test Result	Judgment		
We can download files from internet via Wi-Fi connection. The file is complete and not broken.	Pass	Fail	Remark
	☒	☐	

(2.3.4) Check the strength indicator of W-Fi signal

- Key test point:
  Turn on Wi-Fi function then look at the system bar. Check the strength indicator of Wi-Fi signal.

Test Result	Judgment		
Wi-Fi icon is present at the system bar all the time for at least 5 minutes. The indicator of Wi-Fi signal is variable.	Pass	Fail	Remark
	☒	☐	

(2.3.5) Wi-Fi performance test

- Key test point:
  Turn on Wi-Fi function then connect to http://speedof.me/m/ Execute download and upload performance test. Record the test result.

Test Result			Judgment		
Run	download	upload	Pass	Fail	Remark
1	10.02 Mbps	9.72 Mbps			
2	5.81 Mbps	9.79 Mbps	☒	☐	
3	18.76 Mbps	13.82 Mbps			
4	9.37 Mbps	10.5 Mbps			

5	5.78 Mbps	11.45 Mbps			
Average	**9.95 Mbps**	**11.06 Mbps**			

(2.3.6) Switch on /off between 3G , Wi-Fi , and Airplane mode

- Key test point:
  Switch on /off between 3G, Wi-Fi, and Airplane mode at least 5 times.

Test Result	Judgment		
Network function is workable while switching between 3G, Wi-Fi, and Airplane mode.	Pass	Fail	Remark
	☒	☐	

(2.3.7) Switch on /off between 3G and Wi-Fi

- Key test point:
  Turn on Wi-Fi and 3G connection. Check system should use Wi-Fi connection.
  Turn off Wi-Fi connection. Check network connection will change from Wi-Fi to 3G automatically.

Test Result	Judgment		
Network connection will change from Wi-Fi to 3G automatically while turning off Wi-Fi.	Pass	Fail	Remark
	☒	☐	

(2.3.8) Wake up from sleep mode, check Wi-Fi function

- Key test point:
  Wake up system from sleep mode then check Wi-Fi function is workable.

Test Result	Judgment		
Wi-Fi function still can work correctly after waking up from sleep mode.	Pass	Fail	Remark
	☒	☐	

(2.3.9) Reboot system, check Wi-Fi function

- Key test point:
  Reboot system then check W-Fi function.

Test Result	Judgment		
W-Fi function still can work correctly after reboot.	Pass	Fail	Remark
	☒	☐	

(2.4) 3G Function Test

(2.4.1) Turn on /off 3G Function

- Key test point:
  Turn on 3G function then check the signal strength of 3G is displayed on system bar.
  Turn off 3G function then check the signal strength of 3G is off on system bar.
  Switch 3G on /off for 5 times then check 3G function still can work normally.

Test Result	Judgment		
3G function can work normally after switch 3G on /off. The signal strength of 3G is displayed on system bar.	Pass	Fail	Remark
	☒	☐	

(2.4.2) Connect to internet

- Key test point:
  Turn on 3G function then execute web browser. Type in website link (ex: www.google.com)

Test Result	Judgment		
We can connect to internet by web browser via 3G connection	Pass	Fail	Remark
	☒	☐	

(2.4.3) Download files

- Key test point:
  Turn on 3G function then connect to website to download files

Test Result	Judgment		
We can download files from internet via 3G connection. The file is complete and not broken.	Pass	Fail	Remark
	☒	☐	

(2.4.4) Check the strength indicator of 3G signal

- Key test point:
  Turn on 3G function then look at the system bar. Check the strength indicator of 3G signal.

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Test Result	Judgment		
3G icon is present at the system bar all the time for at least 5 minutes. The indicator of 3G signal is variable.	Pass	Fail	Remark
	☒	☐	

(2.4.5) 3G performance test

- Key test point:
  Turn on 3G function then connect to http://speedof.me/m/ Execute download and upload performance test. Record the test result.

Test Result			Judgment		
Run	download	upload	Pass	Fail	Remark
1	2.36 Mbps	1.62 Mbps			
2	2.71 Mbps	1.56 Mbps			
3	2.21 Mbps	1.59 Mbps	☒	☐	
4	1.8 Mbps	1.15 Mbps			
5	1.15 Mbps	1.35 Mbps			
Average	**2.05 Mbps**	**1.45 Mbps**			

(2.4.6) Switch on /off between 3G ,Wi-Fi , and Airplane mode

- Key test point:
  Switch on /off between 3G, Wi-Fi, and Airplane mode at least 5 times..

Test Result	Judgment		
Network function is workable while switching between 3G, Wi-Fi, and Airplane mode.	Pass	Fail	Remark
	☒	☐	

(2.4.7) Switch on /off between 3G and Wi-Fi

- Key test point:
  Turn on Wi-Fi and 3G connection. Check system should use Wi-Fi connection.
  Turn off Wi-Fi connection. Check network connection will change from Wi-Fi to 3G automatically.

  .

Test Result	Judgment		
Network connection will change from Wi-Fi to 3G automatically while turning off Wi-Fi.	Pass	Fail	Remark
	☒	☐	

(2.4.8) Wake up from sleep mode, check 3G function

- Key test point:
  Wake up system from sleep mode then check 3G function is workable.

Test Result	Judgment		
3G function still can work correctly after waking up from sleep mode.	Pass	Fail	Remark
	☒	☐	

(2.4.9) Reboot system, check 3G function

- Key test point:
  Reboot system then check 3G function.

Test Result	Judgment		
3G function still can work correctly after reboot.	Pass	Fail	Remark
	☒	☐	

(2.5) GPS Function Test

(2.5.1) GPS cold-start TTFF

- Key test point:
  After first boot, executing "GPSTest.apk" to test GPS cold-start TTFF.

Test Result	Judgment		
1.GPS can detect satellite and positioning 2.TTFF less than 3 minutes	Pass	Fail	Remark
	☒	☐	

(2.5.2) GPS performance

- Key test point:

Execute "GPSTest".apk to check GPS performance

Test Result	Judgment		
	Pass	Fail	Remark
The numbers of receiving satellites:12	☒	☐	

(2.6) Bluetooth Function Test

(2.6.1) Bluetooth on /off Function

- Key test point:
  Turn on Bluetooth function then check the Bluetooth icon is displayed on system bar.
  Turn off Bluetooth function then check the Bluetooth icon is not displayed on system bar.
  Switch Bluetooth on /off for 5 times then check Bluetooth function still can work normally.

Test Result	Judgment		
	Pass	Fail	Remark
Bluetooth function can work normally after switch Bluetooth on /off. The Bluetooth icon is displayed on system bar.	☒	☐	

(2.6.2) Search BT Devices

- Key test point:
  Click Apps->Settings->Wireless &networks->Bluetooth settings->Find nearby devices->Scan for devices"

Test Result	Judgment		
	Pass	Fail	Remark
We can see other surrounding Bluetooth enabled device in the screen of BT setting.	☒	☐	

(2.6.3) Data transmission via Bluetooth

- Key test point:
  1. Click "Apps->Settings->Wireless &networks->Bluetooth settings->Discoverable"
  2. Click"Apps->Settings->Wireless &networks->Bluetooth settings-> Find nearby devices"
  3. Pair with other Bluetooth device
  4. Send files (100MB file) to other Bluetooth device.
  5 .Receive files (100MB file) from other Bluetooth device.

Test Result	Judgment		
	Pass	Fail	Remark
We can perform data transmission via bluetooth.	☒	☐	

(2.6.4) Connect to Bluetooth Devices

- ● Key test point:
    1. Click "Apps->Settings->Wireless &networks->Bluetooth settings->Discoverable"
    2. Click "Apps->Settings->Wireless &networks->Bluetooth settings->Find nearby devices"
    3. Pair with Bluetooth device (Bluetooth mouse / Keyboard / Earphone)
    4.make sure Bluetooth device can work.

Test Result	Judgment		
1.We can use BT Mouse(Logitech M557) to select APP or execute APP	Pass	Fail	Remark
2.We can use BT Keyboard to(Microsoft Mobile Keyboard 5000) type words as we expected 3. We can hear music by BT Earphone (SONY MW600).	☒	☐	

(2.6.5) Wake up from sleep mode, check Bluetooth function

- ● Key test point:
    Wake up system from sleep mode then check Bluetooth function is workable

Test Result	Judgment		
Bluetooth function still can work correctly after waking up from sleep mode.	Pass	Fail	Remark
	☒	☐	

(2.6.6) Reboot system, check Bluetooth function

- ● Key test point:
    Reboot system then check Bluetooth function.

Test Result	Judgment		
Bluetooth function still can work correctly after reboot.	Pass	Fail	Remark
	☒	☐	

(2.7) NFC Function Test

(2.7.1) NFC Card and NFC Tag detection test

- Key test point:
  1. Turn on NFC function then check NFC Card or Tag can be detected via NFCTag APP.
  2. Turn on NFC function then check NFC Card or Tag can be detected NFCTag APP.

Test Result	Judgment		
	Pass	Fail	Remark
NFC Card(Easy Card / FIME NFC Card) and NFC Tag(SONY tag type 2) can be detected	☒	☐	

(2.7.2) Detect distance

- Key test point:
  1. Put/Move a NFC Card on the area of NFC sensor
  2. Check the distance of NFC Card detection.

Test Result	Judgment		
	Pass	Fail	Remark
NFC Card can be detected under 1 cm	☒	☐	

(2.7.3) NFC on /off Function

- Key test point:
  1. Turn on NFC function then check NFC Card or Tag can be detected.
  2. Turn off NFC function then check NFC Card or Tag can 't be detected.
  2. Switch NFC on /off for 5 times then check NFC function still can work normally.

Test Result	Judgment		
	Pass	Fail	Remark
NFC function works normally while switching NFC on /off for 5 times	☒	☐	

(2.7.4) Wake up from sleep mode then check NFC Function

- Key test point:
  1. Wake up system from sleep mode then check NFC function is workable

Test Result	Judgment		
NFC function still can work correctly after waking up from sleep mode.	Pass	Fail	Remark
	☒	☐	

(2.7.5) Reboot system then check NFC Function

- Key test point:
  1. Reboot system then check NFC function.

Test Result	Judgment		
NFC function still can work correctly after reboot.	Pass	Fail	Remark
	☒	☐	

2.8 Sensor Test

(2.8.1) Light sensor Function test

- Key test point:
  1. Under sun light environment, display should be read clearly.
  2. Under dark light environment, display should be read clearly.
  3. Put DUT under different ambient then check the change of light sensor.

Test Result	Judgment		
1. The brightness of screen is changeable according to ambient. 2. Display can be read clearly under all conditions.	Pass	Fail	Remark
	☒	☐	

(2.8.2) G- sensor (Accelerometer) Function test

- Key test point:
  1. rotate DUT to 90° angle then confirm the screen is upright.
  2. rotate DUT to 180° angle then confirm the screen is upright.
  3. rotate DUT to 270° angle then confirm the screen is upright.

Test Result	Judgment		
1. Rotate DUT then confirm screen will follow correct direction we rotate. 2. Display screen will rotate within 3 seconds when tablet is rotated.	Pass	Fail	Remark
	☒	☐	

(2.8.3) P- sensor Function test

- Key test point:
  1. Perform TI sensor test APP.
  2. Use hand to approach Proximity sensor.
  3. When we approach to the P-sensor by hand, the "Proximity State" will show "NEAR".
  4. When we leave far away from the P-sensor by hand, the "Proximity State" will show "FAR".

Test Result	Judgment		
	Pass	Fail	Remark
Proximity sensor can detect the approach of the hand (P-sensor register value will change) when hand is near the sensor less than 7cm	☐	☐	Not support

(2.8.4) E-Compass Function test

- Key test point:
  1. Perform "AndroSensor v1.9.4.4a" test APP.
  2. Check the value of E-Compass.

Test Result	Judgment		
	Pass	Fail	Remark
The value of E-Compass is changeable	☒	☐	

(2.8.5) Magnetometer Function test

- Key test point:
  1. Perform "AndroSensor v1.9.4.4a" test APP.
  2. Check the value of Magnetometer.

Test Result	Judgment		
	Pass	Fail	Remark
The value of magnetometer is changeable	☒	☐	

(2.8.6) Gyro-sensor Function test

- Key test point:
  1. Perform "AndroSensor v1.9.4.4a" test APP.
  2. Check the value of Gyro-sensor

Test Result	Judgment		
	Pass	Fail	Remark
Rotate DUT then the values of Gyro-sensor is changeable	☒	☐	

(2.8.7) MEMS pressure sensor Function test

- Key test point:
  1. Perform "AndroSensor (V 1.9.4.4a)" test APP.

Test Result	Judgment		
	Pass	Fail	Remark
The value of atmospheric pressure is changeable	☒	☐	

2.9 Touchscreen Function Test

Test case	Key Test Point	Test Criteria	Judgment
(2.9.1) 2-fingers pinch	1. Open picture 2. Pinch out to zoom in 3. Pinch in to zoom out	Picture can be zoomed in and zoomed out by 2-fingers pinch.	Pass
(2.9.2) Swipe Test	swipe page from left to right side / right side to left side / from top to down side / from down to top side	Page move while swiped	Pass
(2.9.3) Press and hold	Press and hold an icon.	Icon can be choosed and hold.	Pass
(2.9.4) Drag and move ICON test	Icon selected and moved with finger	Icon can be Dragged and moved.	Pass
(2.9.5) Wake up from sleep mode	Wake up from sleep mode then check Touch can work.	Touch can work after waking up from sleep mode	Pass
(2.9.6) Multi touch test	Run touch screen APP, use fingers touch screen Follow Product/Touch Screen Spec.	10 Touch points can be recognized	Pass
(2.9.7) Draw 1 Line test	Run touch screen APP at painting status to check Draw 1 line at vertical/ horizontal and X directions	No dash lines found (*note, draw line slowly) No jump during drawing	Pass
(2.9.8) 2-fingers touch and draw line test	Draw 2 lines at vertical/ horizontal and X directions	2 lines can be recognized with min. 1.5cm distance (follow touch screen spec.; center to center)	Pass

(2.9.10) 3-fingers touch and draw line test	Draw 3 lines at vertical/ horizontal and X directions	3 lines can be recognized with min. 1.5cm distance (follow touch screen spec.; center to center)	Pass
(2.9.11) Rotate screen	Rotate screen then check Touch works well	1. No delay 2. Touch location is correct.	Pass
(2.9.12) Full loading mode	Running "StabilityTest" App then check Touch works well under full loading mode	1. No delay 2. Touch location is correct.	Pass
(2.9.13) Touch response time	Use calculate APP to input "123456789" +"987654321"=	1. No missing of digit. 2.No late response of input and display 3.The result should be "1111111110"	Pass
(2.9.14) Touch area test	Touch screen thru the edge of touch area to ensure all area can be detected (paint test)	No unreachable area	Pass
(2.9.15)LED noise testing	Near to LED noise then check no ghost touch	1.No ghost touch 2.Touch position is correct	Pass
No Ghost touches	Perform any touch gesture	No Ghost touches appeared while performing any touch gesture	Pass

2.10 Camera Function Test

(2.10.1) Take pictures test

- Key test point:
  1. Use camera APP to take picture.

Test Result	Judgment		
Check the picture is clear, no distortion, no inverse, no critical color deviation. Camera can take pictures despite of bright or dark environment	Pass	Fail	Remark
	☒	☐	

(2.10.2) Auto Focus test

- Key test point:
  Use camera APP to take picture for near (10cm / according to Spec.) and far (infinite) object.

Test Result	Judgment		
Check the AF distance (according to Spec.)	Pass	Fail	Remark

Camera can focus fully automatic or on a manually selected point or area.	⊠	☐	

(2.10.3) Flash light test

- Key test point:
  Choose Flash mode "Auto" ,"On", "Off" to test

Test Result	Judgment		
Auto mode: Flash mode will be turned on automatically according to ambient environment. Flash mode "On" : Flash will turn on Flash mode "Off" : Flash will turn off	Pass	Fail	Remark
	⊠	☐	

(2.10.4) Barcode scan test

- Key test point:
  Perform barcode APP and scan different barcode type.

Test Result	Judgment		
barcode format(QR Code / Data Matrix / EAN8/13,UPCA,UPCE / Code39 / Code 128 / Interleaved 2-of-5)can be detected. The distance of barcode detection needed to meet with Spec.	Pass	Fail	Remark
	⊠	☐	

2.11 USB Function Test

(2.11.1.1) USB Compatibility Test

- Key test point:
  1. Connect with USB mouse, USB keyboard, USB Flash, USB Hub.

Test Result		Judgment		
USB mouse: icon can be selected by USB mouse	Mini USB	Pass	Fail	Remark
		⊠	☐	
USB keyboard: type words USB Flash: can be detected. Size is correct USB Hub: plug usb mouse, USB keyboard, USB Flash,all devices can be detected	USB 2.0 Type A	⊠	☐	

(2.11.2) USB Data transmission

- Key test point:
  1. Perform data transmission with USB Flash.

Test Result		Judgment		
Copy 1 GB files to USB 3.0 Flash(Write speed)	Mini USB: 1 min.31sec.	Pass	Fail	Remark
		☒	☐	
	USB 2.0 Type A: 11 min. 11 sec	☒	☐	

(2.11.3) USB ADB Function

- Key test point:
    1. Connect to PC via ADB (mini usb)
    2. Check PC can connect with DUT via ADB (mini usb)

Test Result	Judgment		
Perform "adb devices" command, then we can see DUT id on the terminal screen	Pass	Fail	Remark
	☒	☐	
check adb icon is shown on the top of screen	☒	☐	

2.12 Micro SD Function Test

(2.12.1) Micro SD Compatibility test

- Key test point:
    1. Insert Micro SD.
    2. Check Micro SD size.

Test Result	Judgment		
Micro SD Card can be detected. Size is correct	Pass	Fail	Remark
ADATA SDHC 8GB	☒	☐	
SP SDHC 16GB	☒	☐	
Sandisk SDHC 32GB	☒	☐	
Transcend SDHC 32GB	☒	☐	
Transcend SDXC 64GB	☒	☐	

(2.12.2) Micro SD Read / Write Test

- Key test point:
    1. Perform data transmission with SD Card.

Test Result		Judgment		
1 GB file can be transmitted completely within 5 mins		Pass	Fail	Remark
ADATA SDHC 8GB	3 mins 11 secs	☒	☐	
SP SDHC 16GB	1 mins 34 secs	☒	☐	
Sandisk SDHC 32GB	1 mins 49 secs	☒	☐	
Transcend SDHC 32GB	1 mins 4 secs	☒	☐	
Transcend SDXC 64GB	1 mins 21 secs	☒	☐	

2.13 Battery Basic Function Test

(2.13.1) Battery Charge LED Test

- Key test point:
  1. Plug and Unplug Adapter then check battery charge LED status.

Test Result	Judgment		
1. Plug Adapter: battery charge LED will turn on 2. Unplug Adapter: battery charge LED will turn off 3. Battery charged to 100%:LED status meet with Spec.	Pass	Fail	Remark
	☐	☐	Not support

(2.13.2) Battery charge status under Android system

- Key test point:
  Check battery status (charge / discharge / full battery (100%) / low battery (14%) / battery capacity :xxxx m Ah) under system.

Test Result	Judgment		
1.Battery charge: system shows battery charge 2.Battery discharge: system shows battery discharge 3.Battery full: system shows battery power level:100% 4.Battery low: system shows battery power level:14% and issue alarm event 5. battery capacity:1530 m Ah	Pass	Fail	Remark
	☒	☐	

(2.13.3) Battery charge and discharge time test

- Key test point:

test battery charge and discharge time under normal usage and full loading

Test Result	Judgment		
	Pass	Fail	Remark
Battery Charge time: 2 hrs 6 min. (Wi-Fi on / BT on / NFC on / Brightness: 50% / Sound: 50%) (Idle mode)	☒	☐	Charging to 97%
Battery Charge time: 2 hrs 51 min. (Wi-Fi on / BT on / Brightness: 50% / Sound: 50%)(Idle mode)	☒	☐	Charging to 100%
Battery Discharge time: 4 hrs 47 min. (Wi-Fi on / BT on / Brightness: 50% / Sound: 50%)(Idle mode)	☒	☐	
Battery can be charged under power-off mode	☒	☐	
Battery can be charged under sleep mode	☒	☐	
Battery can be charged under full loading mode(execute StabilityTest App)	☒	☐	

(2.13.4) Swappable Battery test

- Key test point:
  2 battery can be detected

Test Result	Judgment		
	Pass	Fail	Remark
2 battery can be detected under android system	☒	☐	
2 battery can be charged at the same time	☒	☐	
The priority of battery discharging is :2nd battery(hard pack / swappable) then 1st battery	☒	☐	
2nd battery(hard pack / swappable) can be hot-plug	☒	☐	

2.14. Ethernet Function Test

(2.14.1)DHCP Function Test

- Key test point:
  1. Plug RJ-45 Cable then connect to internet via DHCP.

Test Result	Judgment		
	Pass	Fail	Remark
1. We can connect to internet to browse website via DHCP	☒	☐	

(2.14.2) LAN LED status Test

- Key test point:
  1. Check LAN led color under different LAN speed.

Test Result	Judgment		
	Pass	Fail	Remark
Not support	☐	☐	

(2.14.3)WOL Function Test

- Key test point:
  1. Execute "Magicpacket" App to test WOL function

Test Result	Judgment		
	Pass	Fail	Remark
Not support	☐	☐	

(2.14.4) LAN Bandwidth Test

- Key test point:
  1. Connect DUT and PC via different speed LAN HUB(10MB / 100MB) by using "iPerf" App
  2. Run iPerf APP then execute command:
     iperf –c 192.168.x.x –w 100M –t 1800 –i 60

Test Result		Judgment		
		Pass	Fail	Remark
Bandwidth :94.9 Mbits /sec (30 minutes.)	100MB LAN HUB	☒	☐	
Bandwidth :9.19 Mbits /sec (30 minutes.)	10MB LAN HUB	☒	☐	

2.15. COM Port Function Test

(2.15.1) COM Port Loopback Test

- Key test point:
  1. Plug COM Port loopback then executing App to test.

Test Result	Judgment		
	Pass	Fail	Remark
COM Port loopback data lost	☒	☐	

2.16. Vibrator Function Test

(2.15.1) Vibrator function Test

● Key test point:
    1. Executing "AutoTest 700mApp" to test vibrator function.

Test Result	Judgment		
	Pass	Fail	Remark
We can feel vibrator is vibrating	☒	☐	

2.17. Buttons and LED Function Test

(2.17.1) Buttons function Test

● Key test point:
    1. Press Power button to check behavior is correct.

Test Result		Judgment		
		Pass	Fail	Remark
Press Power button for 1 second	Go to sleep mode	☒	☐	
Press Power button for 2 second	Pop up shutdown message	☒	☐	
Press Power button for 7 second	Force shutdown	☒	☐	

(2.17.2) LED function Test

● Key test point:
    1. Check Power status LED.
    2. Check battery charging LED.

Test Result	Judgment		
	Pass	Fail	Remark
Check Power status LED and battery charging LED	☐	☐	Not support

2.18. Function Key Test

(2.18) Function Key Test

- Key test point:
  1. Function key for mute / increase sound / decrease sound

Test Result	Judgment		
	Pass	Fail	Remark
	☐	☐	Not support

2.19 Accessory Function Test

(2.17.1) Docking Function Test

- Key test point:
  Check Docking function is workable.

Test Result	Judgment		
1. Docking function isn't workable(LAN / USB /COM)	Pass	Fail	Remark
	☒	☐	

3. Time Accuracy Test

(3.1) System Clock & RTC Clock Test

- Key test point:
  Check RTC Clock in Power On Mode.
  Check RTC Clock in Power Off Mode.

Test Result	Judgment		
1. Power On Mode: time interval 24 hrs. Criteria: +/-1 min. 2. Power Off Mode: time interval 24 hrs. Criteria: +/-1 min.	Pass	Fail	Remark
	☒	☐	

4. Benchmark Test

(4.1) Benchmark Test

- Key test point:
  Each benchmarking test was run 5 times in order to get an average value.

Test Result of Benchmark		
An3DBench		
Run	Score	Note
1	7745	A 3d benchmark based on the Android version of the jPCT 3d engine. Runs 7 tests from fill rate to complex scenes.
2	7719	
3	7767	
4	7716	
5	7727	
Average	**7732**	
Quadrant Standard V 2.1.1		
Run	Score	Note
1	2126	Quadrant is a CPU, I/O and 3D graphics benchmark.
2	2147	
3	2167	
4	2070	
5	2115	
Average	**2125**	
AnTuTu Benchmark V 5.7		
Run	Score	Note
1	13802	Benchmark App for Android device
2	13738	
3	13782	
4	14177	
5	13840	
Average	**13868**	

5. Run in Test

(5.1) StabilityTest

- Key test point:
  Execute "Stability Test" App to do run in test.

Test Result	Judgment		
DUT can work normally .No crash or pop up error message after running overnight test.	Pass	Fail	Remark
	☒	☐	V2.7

(5.2) Playback video for overnight test

- Key test point:
  Perform "MXPlayer" to playback video for overnight test

Test Result	Judgment		
DUT can work normally .No crash or pop up error message after running playback video for 12 hours.	Pass	Fail	Remark
	☒	☐	