BLUETOOTH MASS PRODUCTION (MP) TOOL Release Note V4927

2017/08/23

Table of Contents

Table of Contents

Description

<table>
<tr><th>Version</th><th>Description</th><th>Date</th></tr>
<tr><td>2.1.30.4927</td><td>
<u>Correction and Fine Tune</u>
1. User want to reduce write EEPROM test time of IS206XGM_002_nSPK05_V1.1.

Solution
We check the IS206XGM_002_nSPK05_V1.1 FW support HW I2C then the function is work. MP Tool added HW I2C function into IS206XGM_002_nSPK05_V1.1 solution.

The impact list
<table>
<tr><th>Device Name</th><th>Silicon Version</th><th>MPSE Device Name</th></tr>
<tr><td>IS206X</td><td>002</td><td>IS206XGM_002_nSPK05_V1.1</td></tr>
</table>
2. User want modified the RX Sensitivity packet number to do test with IQXEL.

Solution
We added new IQXEL waveform to do RX Sensitivity User can select the packet number 500 or 1000.

The impact list
<table>
<tr><th>Device Name</th><th>Silicon Version</th><th>MPSE Device Name</th></tr>
<tr><td>IS2008S</td><td>002</td><td>IS2008S_002_MHS_V2.1</td></tr>
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<tr><td>IS2020S</td><td>002</td><td>IS2020S_002_SHS_V2.1</td></tr>
<tr><td>IS2021S</td><td>002</td><td>IS2021S_002_SHS_V2.1</td></tr>
<tr><td>IS2023S</td><td>002</td><td>IS2023S_002_I2S_V2.1</td></tr>
<tr><td>IS2025S</td><td>002</td><td>IS2025S_002_2SPK_V2.1</td></tr>
<tr><td>IS2008S</td><td>203</td><td>IS2008S_203_MHS_V3.1</td></tr>
<tr><td>IS2010S</td><td>203</td><td>IS2010S_203_MHS_V3.1</td></tr>
<tr><td>IS2013S</td><td>203</td><td>IS2013S_203_1SPK_V3.1</td></tr>
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</table>
</td><td>2017/08/23</td></tr>
</table>

IS2021S	203	IS2021S_203_SHS_V3.1
IS2023S	203	IS2023S_203_I2S_V3.1
IS2025S	203	IS2025S_203_2SPK_V3.1
IS2062	012	IS2062GM_012_SPK01_V1.1
IS2063	002	IS2063GM_002_nSPK01_V1.1
IS2063	003	IS2063GM_003_nSPK02_V1.1
IS2064	002	IS2064GM_002_nSPK03_V1.1
IS206X	002	IS206XGM_002_nSPK05_V1.1
IS206X	012	IS206X_012_DUALMODESPK1.1_E1.0
IS206X	012	IS206X_012_DUALMODESPK2.0_E1.0

3. The some module will command fail when MP to do BUCK calibration.

Solution

We import the new BUCK calibration flow to solve command fail.

The impact list

Device Name	Silicon Version	MPSE Device Name
IS2008S	203	IS2008S_203_MHS_V3.1
IS2010S	203	IS2010S_203_MHS_V3.1
IS2013S	203	IS2013S_203_1SPK_V3.1
IS2015S	203	IS2015S_203_1SPK_V3.1
IS2020S	203	IS2020S_203_SHS_V3.1
IS2021S	203	IS2021S_203_SHS_V3.1
IS2023S	203	IS2023S_203_I2S_V3.1
IS2025S	203	IS2025S_203_2SPK_V3.1

Appendix A. Release Note History

<table>
<tr><th>Version</th><th>Description</th><th>Date</th></tr>
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<u>Correction and Fine Tune</u>
4. User want to reduce write EEPROM test time of IS206XGM_002_nSPK05_V1.1.

Solution
We check the IS206XGM_002_nSPK05_V1.1 FW support HW I2C then the function is work. MP Tool added HW I2C function into IS206XGM_002_nSPK05_V1.1 solution.

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We added new IQXEL waveform to do RX Sensitivity User can select the packet number 500 or 1000.

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<tr><td>IS2020S</td><td>002</td><td>IS2020S_002_SHS_V2.1</td></tr>
<tr><td>IS2021S</td><td>002</td><td>IS2021S_002_SHS_V2.1</td></tr>
<tr><td>IS2023S</td><td>002</td><td>IS2023S_002_I2S_V2.1</td></tr>
<tr><td>IS2025S</td><td>002</td><td>IS2025S_002_2SPK_V2.1</td></tr>
<tr><td>IS2008S</td><td>203</td><td>IS2008S_203_MHS_V3.1</td></tr>
<tr><td>IS2010S</td><td>203</td><td>IS2010S_203_MHS_V3.1</td></tr>
<tr><td>IS2013S</td><td>203</td><td>IS2013S_203_1SPK_V3.1</td></tr>
<tr><td>IS2015S</td><td>203</td><td>IS2015S_203_1SPK_V3.1</td></tr>
</table>
</td><td>2017/08/23</td></tr>
</table>

	IS2020S	203	IS2020S_203_SHS_V3.1
	IS2021S	203	IS2021S_203_SHS_V3.1
	IS2023S	203	IS2023S_203_I2S_V3.1
	IS2025S	203	IS2025S_203_2SPK_V3.1
	IS2062	012	IS2062GM_012_SPK01_V1.1
	IS2063	002	IS2063GM_002_nSPK01_V1.1
	IS2063	003	IS2063GM_003_nSPK02_V1.1
	IS2064	002	IS2064GM_002_nSPK03_V1.1
	IS206X	002	IS206XGM_002_nSPK05_V1.1
	IS206X	012	IS206X_012_DUALMODESPK1.1_E1.0
	IS206X	012	IS206X_012_DUALMODESPK2.0_E1.0

6. The some module will command fail when MP to do BUCK calibration.

Solution

We import the new BUCK calibration flow to solve command fail.

The impact list

Device Name	Silicon Version	MPSE Device Name
IS2008S	203	IS2008S_203_MHS_V3.1
IS2010S	203	IS2010S_203_MHS_V3.1
IS2013S	203	IS2013S_203_1SPK_V3.1
IS2015S	203	IS2015S_203_1SPK_V3.1
IS2020S	203	IS2020S_203_SHS_V3.1
IS2021S	203	IS2021S_203_SHS_V3.1
IS2023S	203	IS2023S_203_I2S_V3.1
IS2025S	203	IS2025S_203_2SPK_V3.1

2.1.30.4919

Correction and Fine Tune

1. The MPtool merge 8051 patch code of 5506-104 ROM fail.

Solution

MP Tool added new merge 8051 patch function for 5506-104.

The impact list

Device Name	Silicon Version	MPSE Device Name
IS2064B	114	IS2064B_114_SHS_V4.1
IS2064S	114	IS2064S_114_SPK_V4.1

2017/07/10

2.1.30.4914

[MPBT]

New device support (!NEW)

2017/06/23

1. MPBT to support new device, IS2064B_114_SHS_V4.1, IS2064S_114_SPK_V4.1 & IS2063GM_003_nSPK04_V1.1 test.

Device Name	Silicon Version	MPSE Device Name
IS2063GM	003	IS2063GM_003_nSPK04_V1.1
IS2064B	114	IS2064B_114_SHS_V4.1
IS2064S	114	IS2064S_114_SPK_V4.1

Correction and Fine Tune

1. The customer requested special barcode scanners for MPtool. They want MPtool support those barcode scanners to test.

   Solution

   MP Tool modified the test flow and added special barcode scanner control flow.

   The impact list

   Only customer's special barcode scanner is supported.

Device Name	Silicon Version	MPSE Device Name
All Devices	n/a	All Devices

2. New request from the customer. They would like to display BT Address with delimiter when MP write device name.

   Solution

   MP Tool added a keyword for item 595 (write device name). User can select the BT Address had delimiter or not when MP write device name.

   The impact list

Device Name	Silicon Version	MPSE Device Name
IS1677SM	101	IS1677SM_101_SPP_V1.3
IS1678SM	151	IS1678SM_151_SPP_V1.1
IS1678S	151	IS1678S_151_SPP_V1.1
IS1678S	152	IS1678S_152_SPP_V2.1

3. The customer had Buck calibration fail issue when Buck FW control mode.

   Solution

   MP Tool added a new test flow for buck FW control mode.

   The impact list

Device Name	Silicon Version	MPSE Device Name
IS2008S	203	IS2008S_203_MHS_V3.1

		IS2010S	203	IS2010S_203_MHS_V3.1
		IS2013S	203	IS2013S_203_1SPK_V3.1
		IS2015S	203	IS2015S_203_1SPK_V3.1
		IS2020S	203	IS2020S_203_SHS_V3.1
		IS2021S	203	IS2021S_203_SHS_V3.1
		IS2023S	203	IS2023S_203_I2S_V3.1
		IS2025S	203	IS2025S_203_2SPK_V3.1

2.1.30.4904

[MPBT]

New device support (!NEW)

1. MPBT to support new device, IS206XGM_002_nSPK05_V1.1 test. IS206XGM_002_nSPK05_V1.1 is support MSPK V1.X project.

Device Name	Silicon Version	MPSE Device Name
IS206X	002	IS206XGM_002_nSPK05_V1.1

Correction and Fine Tune

1. The customer had RX Sensitivity issue in the IQXEL.

Solution

The IQ API had bug. We update the IQMeasure DLL version.

The impact list

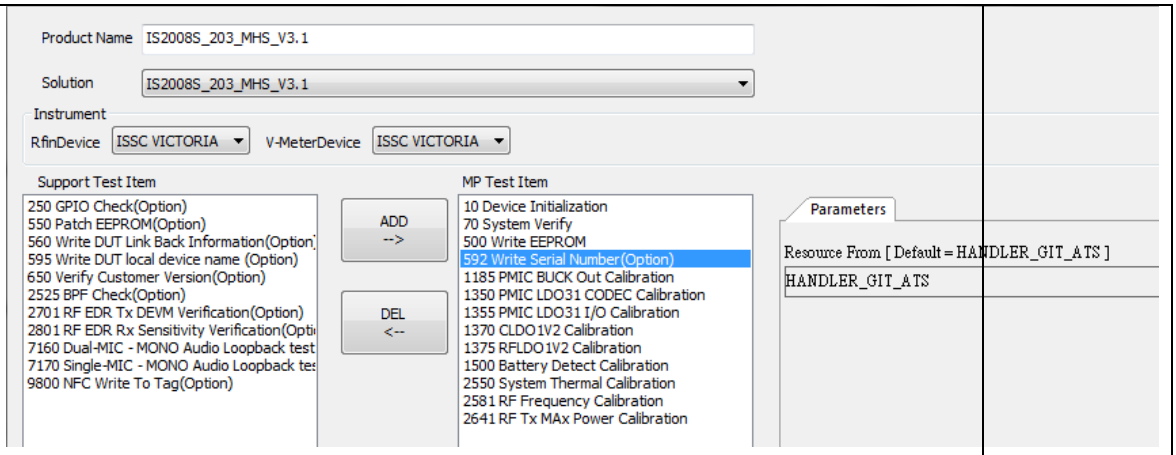
Device Name	Silicon Version	MPSE Device Name
IS1677	101	IS1677SM_101_SPP_V1.2
IS1677	101	IS1677SM_101_SPP_V1.3
IS1678	151	IS1678SM_151_SPP_V1.1
IS1678	151	IS1678S_151_SPP_V1.1
IS1678	152	IS1678S_152_SPP_V2.1
IS1690	253	IS1690SM_253_nSPK01_V1.1
IS1690	253	IS1690SM_253_nSPK02_V1.1
IS2008S	002	IS2008S_002_MHS_V2.1
IS2010S	002	IS2010S_002_MHS_V2.1
IS2013S	002	IS2013S_002_1SPK_V2.1
IS2015S	002	IS2015S_002_1SPK_V2.1
IS2020S	002	IS2020S_002_SHS_V2.1
IS2021S	002	IS2021S_002_SHS_V2.1
IS2023S	002	IS2023S_002_I2S_V2.1
IS2025S	002	IS2025S_002_2SPK_V2.1
IS2008S	203	IS2008S_203_MHS_V3.1
IS2010S	203	IS2010S_203_MHS_V3.1

2017/04/12

<table>
<tr><td></td><td>
<table>
<tr><td>IS2013S</td><td>203</td><td>IS2013S_203_1SPK_V3.1</td></tr>
<tr><td>IS2015S</td><td>203</td><td>IS2015S_203_1SPK_V3.1</td></tr>
<tr><td>IS2020S</td><td>203</td><td>IS2020S_203_SHS_V3.1</td></tr>
<tr><td>IS2021S</td><td>203</td><td>IS2021S_203_SHS_V3.1</td></tr>
<tr><td>IS2023S</td><td>203</td><td>IS2023S_203_I2S_V3.1</td></tr>
<tr><td>IS2025S</td><td>203</td><td>IS2025S_203_2SPK_V3.1</td></tr>
<tr><td>IS2062</td><td>012</td><td>IS2062GM_012_SPK01_V1.1</td></tr>
<tr><td>IS2063</td><td>002</td><td>IS2063GM_002_nSPK01_V1.1</td></tr>
<tr><td>IS2063</td><td>003</td><td>IS2063GM_003_nSPK02_V1.1</td></tr>
<tr><td>IS2064</td><td>002</td><td>IS2064GM_002_nSPK03_V1.1</td></tr>
<tr><td>IS206X</td><td>002</td><td>IS206XGM_002_nSPK05_V1.1</td></tr>
<tr><td>IS206X</td><td>012</td><td>IS206X_012_DUALMODESPK1.1_E1.0</td></tr>
<tr><td>IS206X</td><td>012</td><td>IS206X_012_DUALMODESPK2.0_E1.0</td></tr>
</table>
</td><td></td></tr>
<tr><td>2.1.29.4879</td><td>[MPBT]
<u>New device support</u> (!NEW)
1. MPBT to support new device, IS206X_012_DUALMODESPK2.0_E1.0 and IS2063GM_003_nSPK02_v1.1 test.

<table>
<tr><th>Device Name</th><th>Silicon Version</th><th>MPSE Device Name</th></tr>
<tr><td>IS206X</td><td>002</td><td>IS206X_012_DUALMODESPK2.0_E1.0</td></tr>
<tr><td>IS2063</td><td>003</td><td>IS2063GM_003_nSPK02_v1.1</td></tr>
</table>
<u>Correction and Fine Tune</u>
1. The customer need MP write the them’s product serial number information into EEPROM.

Solution
MPBT added new item 592 write serial number from HANDLER_GIT_ATS.
The customer will provide the product serial number to MPBT.
MPBT will write this serial number into EEPORM.</td><td>2017/01/06</td></tr>
</table>

<table>
<tr>
<td></td>
<td>


The impact list
<table>
<tr><th>Device Name</th><th>Silicon Version</th><th>MPSE Device Name</th></tr>
<tr><td>IS2008</td><td>203</td><td>IS2008S_203_MHS_V3.1</td></tr>
</table>
</td>
<td></td>
</tr>
<tr>
<td>2.1.29.4871</td>
<td>
[MPBT]
<u>New device support</u> (!NEW)
1. MPBT to support new device, IS1870SF_202A__V2.0, IS1871SF_202A__V2.0 and IS2064GM_002_nSPK03_v1.1 test.

<table>
<tr><th>Device Name</th><th>Silicon Version</th><th>MPSE Device Name</th></tr>
<tr><td>IS1870</td><td>202</td><td>IS1870SF_202A__V2.0</td></tr>
<tr><td>IS1871</td><td>202</td><td>IS1871SF_202A__V2.0</td></tr>
<tr><td>IS2064</td><td>002</td><td>IS2064GM_002_nSPK03_v1.1</td></tr>
</table>
<u>Correction and Fine Tune</u>
1. The customer had control mode pin short to GND issue during production of the module. The failed module can’t into APP mode.

Solution
We added the test item 255. MP will check the control mode pin have short to VCC or GND.
</td>
<td>2016/11/29</td>
</tr>
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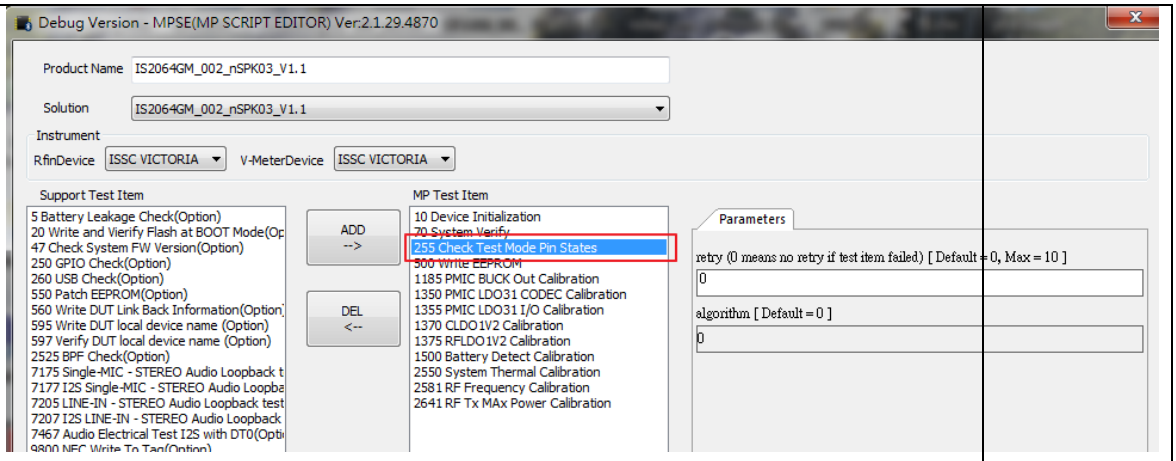


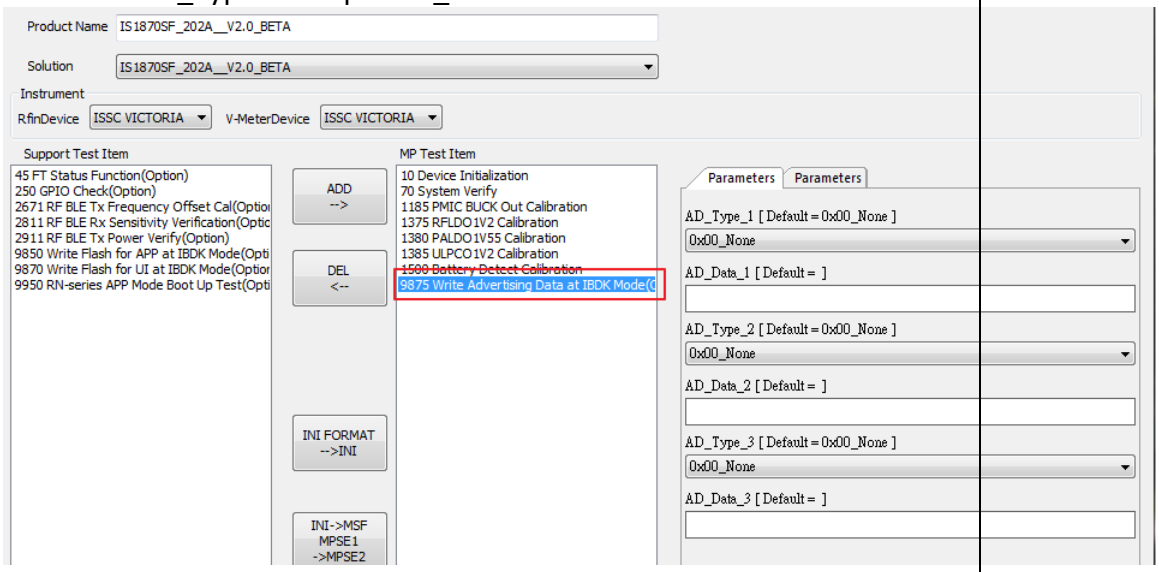
The impact list

Device Name	Silicon Version	MPSE Device Name
IS1677SM	101	IS1677SM_101_SPP_V1.2
IS1677SM	101	IS1677SM_101_SPP_V1.3
IS1678SM	151	IS1678SM_151_SPP_V1.1
IS1678S	151	IS1678S_151_SPP_V1.1
IS1678SM	152	IS1678S_152_SPP_V2.1
IS206X	012	IS206X_012_DUALMODESPK1.1_E1.0
IS2064	002	IS2064GM_002_nSPK03_v1.1

2. Customer need to modified the Advertising Data to match WeChat specification.

Solution

We added the test item 9875 to customer update Advertising Data. User can select AD_Type and input AD_data to match them format.



The impact list

Device Name	Silicon Version	MPSE Device Name
IS206X	012	IS206XGM_012_DUAL_SPK_V1.1
IS2062	012	IS2062GM_012_SPK01_V1.1
IS1677	101	IS1677SM_101_SPP_V1.2
IS1677	101	IS1677SM_101_SPP_V1.3
IS1678	151	IS1678S_151_SPP_V1.1
IS1678	152	IS1678S_152_SPP_V2.1
IS1678	101	IS1678SM_101_BLEDK_V1.1
IS1678	151	IS1678SM_151_SPP_V1.1
IS1870	102	IS1870SF_102A_V2.0
IS1871	102	IS1871SF_102A_V2.0
IS1870	202	IS1870SF_202A_V2.0
IS1871	202	IS1871SF_202A_V2.0

2.1.29.4851

2016/09/12

[MPBT]

New device support (!NEW)

1. MPBT to support new device, IS206X_013_ROM003.0_E1.0 test. IS206X is ROM code base on IS206X_012 flash code.

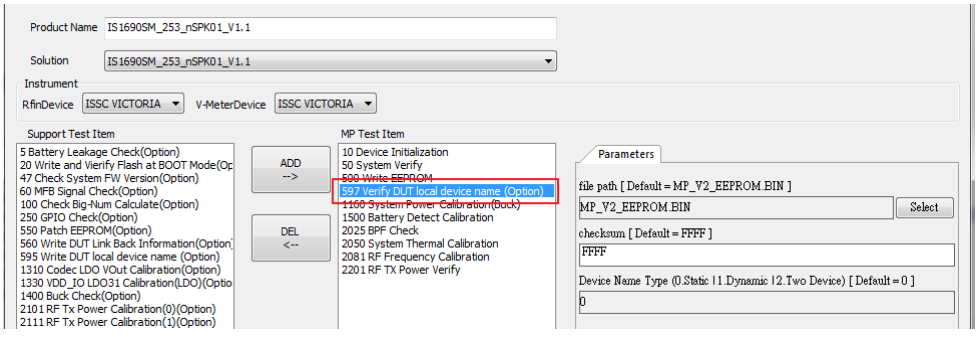
Device Name	Silicon Version	MPSE Device Name
IS206X	013	IS206X_013_ROM003.0_E1.0

Correction and Fine Tune

1. The customer always failed at item 597 on the device IS1690SM_253_nSPK01/nSPK02_V1.1. The item 597 was checked the EEPROM Device Name match with customer BIN file or not.

Solution

We check the DUT Device Name EEPROM address. We found that MP check the EEPROM address is different with UI. After confirmation MP modified to the same EEPROM address with UI.



The impact list

Device Name	Silicon Version	MPSE Device Name

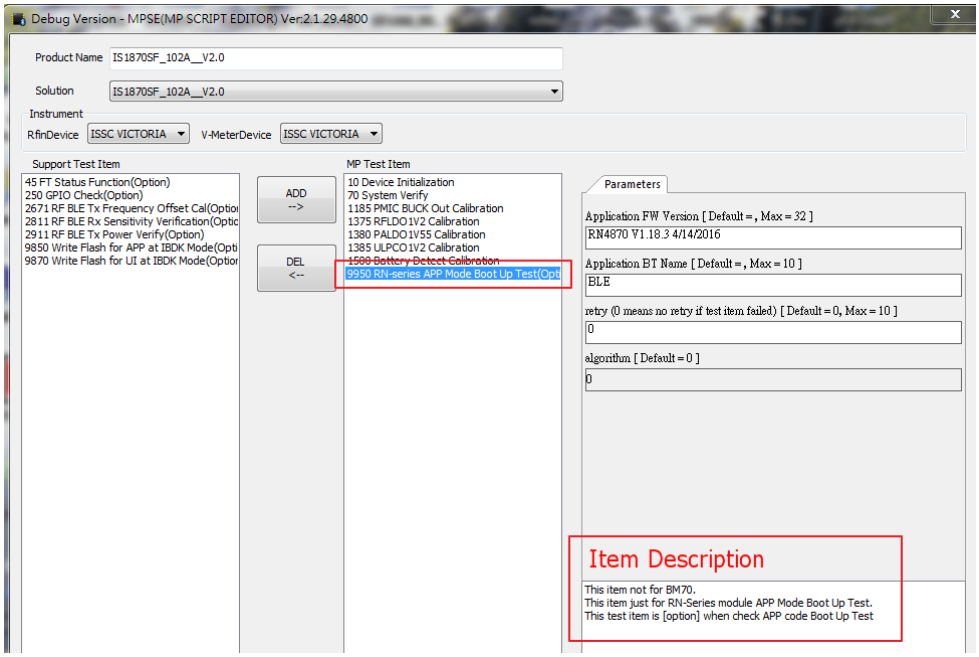
IS1690SM	253	IS1690SM_253_nSPK01_V1.1	
IS1690SM	253	IS1690SM_253_nSPK02_V1.1	

2.1.29.4804

[MPBT]

New support item (!NEW)

1. MPBT to support new item 9950 (RN-series APP Mode Boot Up Test) for RN Series test. This item will check FW boost string and boost commands are correct or not for RN series in the APP mode.



The impact list

Device Name	Silicon Version	MPSE Device Name
RN4870U	102	IS1870SF__102_V2.0
RN4871U	102	IS1871SF__102_V2.0
RN4678U	151	IS1678SM_151_SPP_V1.1

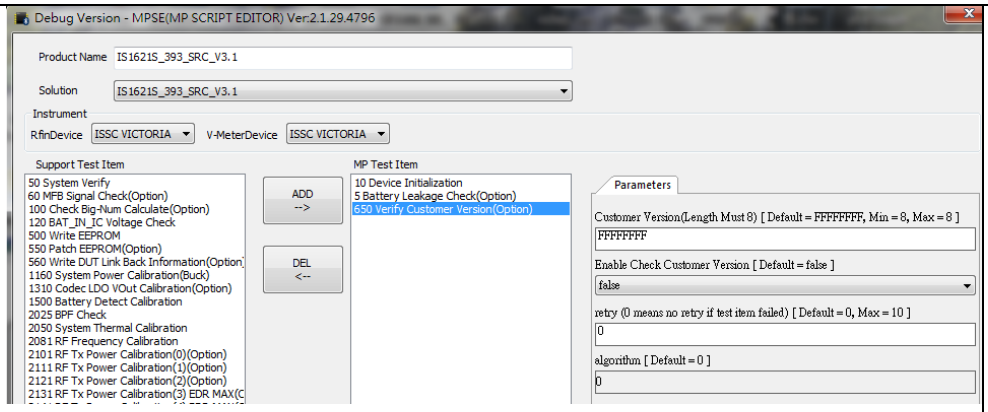
2. MPBT to support new device, IS206X_012_DualModeSPK1.1_E1.0 test. IS206X_012 is a new silicon to support BT4.2 Dual Mode SPK.

The impact list

Device Name	Silicon Version	MPSE Device Name
IS206X	012	IS206x_012_DualModeSPK1.1_E1

3. The customer request to check UI version and device current leakage. MP added those items at IS1621 solution
   MPSE added item5 (Battery Leakage Check) and item 650 (Verify Customer Version)

2016/06/06



The impact list

Device Name	Silicon Version	MPSE Device Name
IS1621S	393	IS1621S_393_SRC_V3.1

Correction and Fine Tune

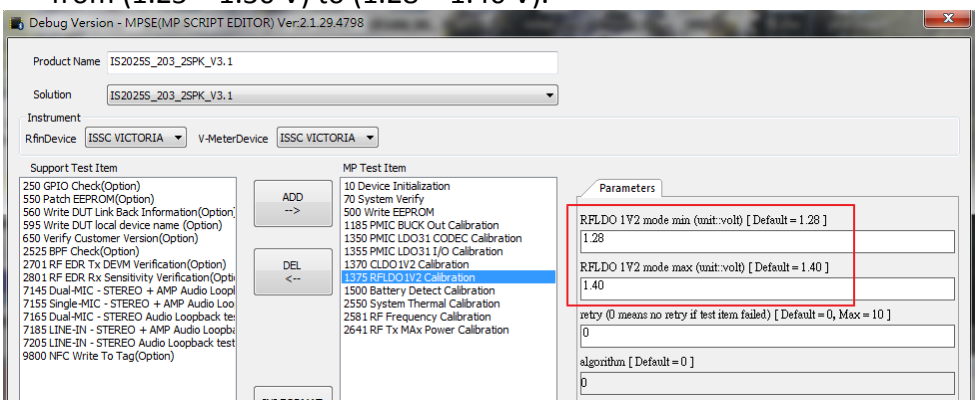
1. The RFLDO calibration is with RF RX on current as the loading, which about half of RF TX on current. Need to fine tune default parameter and calibration threshold.

Solution

1.1 Modified the EEPROM value of RFLDO setting (address: 0x02AC) from 0xC0 to 0xF0.

Parameter Name	Address	Length	Old	New	Remarks
RFLDO setting	0x02AC	0x01	C0	F0	Change RFLDO to 0xF0.

1.2 Modified the MPSE item 1375 (RFLDO1V2 Calibration) default limit from (1.25 ~ 1.30 V) to (1.28 ~ 1.40 V).



The impact list

Device Name	Silicon Version	MPSE Device Name
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IS2010S	002	IS2010S_002_MHS_V2.1
IS2013S	002	IS2013S_002_1SPK_V2.1
IS2015S	002	IS2015S_002_1SPK_V2.1

IS2020S	002	IS2020S_002_SHS_V2.1	
IS2021S	002	IS2021S_002_SHS_V2.1	
IS2023S	002	IS2023S_002_I2S_V2.1	
IS2025S	002	IS2025S_002_2SPK_V2.1	
IS2008S	203	IS2008S_203_MHS_V3.1	
IS2010S	203	IS2010S_203_MHS_V3.1	
IS2013S	203	IS2013S_203_1SPK_V3.1	
IS2015S	203	IS2015S_203_1SPK_V3.1	
IS2020S	203	IS2020S_203_SHS_V3.1	
IS2021S	203	IS2021S_203_SHS_V3.1	
IS2023S	203	IS2023S_203_I2S_V3.1	
IS2025S	203	IS2025S_203_2SPK_V3.1	

2. The customer high current issue of IS2021-203 device.

Solution

Modified the EEPROM value of SBC_payload_queue_percentage (address: 0x01CA) from 0x32 to 0x3E.

Parameter Name	Address	Length	Old	New	Remarks
SBC payload queue percentage	0x01CA	0x01	32	3E	Increase SBC payload queue percentage to avoid polling request sent to cell phone.

The impact list

Device Name	Silicon Version	MPSE Device Name
IS2008S	203	IS2008S_203_MHS_V3.1
IS2010S	203	IS2010S_203_MHS_V3.1
IS2013S	203	IS2013S_203_1SPK_V3.1
IS2015S	203	IS2015S_203_1SPK_V3.1
IS2020S	203	IS2020S_203_SHS_V3.1
IS2021S	203	IS2021S_203_SHS_V3.1
IS2023S	203	IS2023S_203_I2S_V3.1
IS2025S	203	IS2025S_203_2SPK_V3.1

2.1.29.4781

[MPBT]

New device support (!NEW)

2. MPBT to support new device, IS1678S_152_SPP_V2.1 test.
   IS1678S-152 is a new silicon to support BT4.2 dual mode and iAP2

Device Name	Silicon Version	MPSE Device Name
IS1678S	152	IS1678S_152_SPP_V2.1

2016/04/19

Known issue and solution

1. **Issue**
   MP Item1500 (SAR calibration), reading SAR ADC is not very stable in

previous MP tool of IS1870SF__102_V2.0 and IS1871SF__102_V2.0, this issue is happened in a few percentage of silicon, the SAR value will be over the MP preset threshold and judged as fail.

Solution

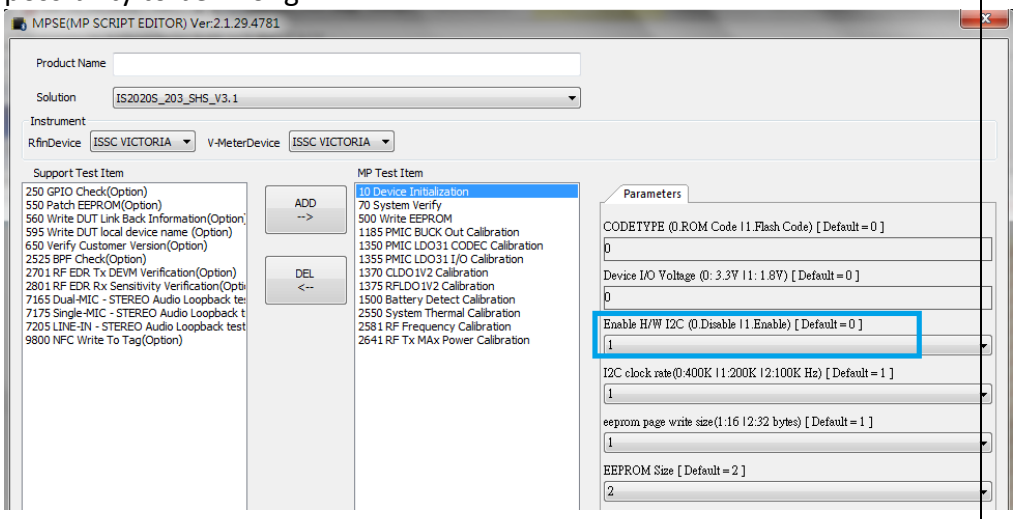
Improve the test flow in MP tool to stabilize the power to solve this issue.

The impact list

Device Name	Silicon Version	MPSE Device Name
IS1870SF	102	IS1870SF__102_V2.0
IS1871SF	102	IS1871SF__102_V2.0

2. **Issue**

The user who enables the hardware I^{2}C function to speed up the EEPROM programming would suffer an issue when writing special parameter (e.g. device name, calibration parameter …etc.), the stored parameter is with possibility to be wrong.



Solution

MP tool will automatically disable hardware I^{2}C after item500 (write EEPROM) is completed.

The impact list

Device Name	Silicon Version	MPSE Device Name
IS2008S	203	IS2008S_203_MHS_V3.1
IS2010S	203	IS2010S_203_MHS_V3.1
IS2011S	203	IS2011S_203_MHS_V3.1
IS2013S	203	IS2013S_203_1SPK_V3.1
IS2015S	203	IS2015S_203_1SPK_V3.1
IS2020S	203	IS2020S_203_I2S_V3.1
IS2025S	203	IS2025S_203_2SPK_V2.1

2.1.29.4777	[MPBT/MPSE] Fixed: 1. Fixed Item 47 “check FW version” can’t reload by MPSE and MPBT.	2016/04/08

2.1.29.4773	[MPBT] Added: 1. Support IS206XGM_012_DUAL_SPK_V1.1.	2016/03/25
2.1.29.4772	[MPBT] Added: 1. Added new test item to check FW Version for QC. 2. Added new test item to check Device Name for QC.	2016/03/24
2.1.29.4759	[MPBT] Added: 1. Support IQFELX and IQXEL test RF Power, Frequency and Sensitivity for devices IS1690 /IS1677 /IS1678 2. Support N4010A test BDR/EDR for devices IS2008S / IS2010S /IS2013S /IS2015S /IS2020S /IS2021S /IS2023S /IS2025S /IS1690 /IS1677 /IS1678	2016/02/03
2.1.29.4754	[MPBT] Added: 1. Support IQFELX and IQXEL test RF Power, Frequency and Sensitivity for devices IS2008S / IS2010S /IS2013S /IS2015S /IS2020S /IS2021S /IS2023S /IS2025S	2016/01/27
2.1.29.4752	[MPBT] Default bin Update: 1. IS2008S_203_MHS_V3.1. E1.0.1.3 2. IS2010S_203_MHS_V3.1. E1.0.1.3 3. IS2013S_203_1SPK_V3.1. E1.0.1.4 4. IS2015S_203_1SPK_V3.1. E1.0.1.4 5. IS2020S_203_SHS_V3.1. E1.0.1.3 6. IS2021S_203_SHS_V3.1. E1.0.1.3 7. IS2023S_203_I2S_V3.1. E1.0.1.4 8. IS2025S_203_2SPK_V3.1. E1.0.1.3	2016/01/19
2.1.28.4702	[MPBT] Added: 1. Modified the IS1678S_151_SPP_V1.1 item 2180 default limit and user can't modified it. 2. Modified the IS1678SM_151_SPP_V1.1 item 2180 default limit and user can't modified it. 3. Modified the IS1870SF_102A_V2.0 item 1375 and item 2680 default limit. 4. Modified the IS1871SF_102A_V2.0 item 1375 and item 2680 default limit. 5. MPBT BT ADDR Page support check Bar code auto range function. 6. IS2063GM_001_SPK02_V1.1 added item 7467 (I2S test)..	2015/12/11
2.1.28.4681	[MPBT] Added: 1. Support IS2063GM_002_nSPK01_V1.1.	2015/11/24
2.1.28.4669	[MPBT] Modified: 1. Modified the IS1678SM_151_SPP_V1.1 device name can support length from 16 to 30.	2015/11/13

	2. Modified the IS1678S_151_SPP_V1.1 device name can support length from 16 to 30.	
2.1.28.4657	[MPBT] Support: 1. IS2062GM_012_SPK01_V1.1 Fixed: 1. Dual site test item issue.	2015/11/6
2.1.28.4638	[MPBT] Fixed: 1. Fixed the BT5502 I2S DR0 run time error.	2015/10/23
2.1.27.4616	[MPBT] Added: 1. Support IS1870SF_102A__V2.0. 2. Support IS1871SF_102A__V2.0. Fixed: 1. PMU cal. function error for BT5502. (V4572 & V4579 had this issue.)	2015/10/01
2.1.27.4579	[MPSE] Modified: 1. Item 2525 change to optional item from must item. 2. BT5502/BT5506 change CLDO limit range to 1.20 ~ 1.24V.	2015/09/04
2.1.27.4572	[MPBT] Added: 1. Support IS1678SM_151_SPP_V1.1. 2. BT5506 I2S remove check Harmonic	2015/09/01
2.1.27.4565	[MPBT] Fixed: 1. Fixed BT5502 search wrong RF address in update RF eeprom. 2. Fixed to get wrong eeprom size when old device(IS1621S) haven't eeprom size parameter.	2015/08/27
2.1.27.4529	[MPBT] Added: 1. Support IS2008S_203_MHS_V3.1. 2. Support IS2010S_203_MHS_V3.1. 3. Support IS2013S_203_1SPK_V3.1. 4. Support IS2020S_203_SHS_V3.1. 5. Support IS2021S_203_SHS_V3.1. 6. Support IS2023S_203_I2S_V3.1. 7. Support IS2025S_203_2SPK_V3.1.	2015/07/28
2.1.27.4492	[MPBT] Added: 1. Support IS1691S_253_SPK_V3.1.	2015/06/25
2.1.27.4486	[MPMF] Added: 1. Fixed MPMF can't apply old device issue.	2015/06/18

2.1.27.4474	[MPBT] Added: 1. Support IS2023S_203_I2S_V3.1.	2015/06/04
2.1.27.4447	[MPMF] Fixed: 1. Fixed MPMF can't load old device msf file issue.	2015/05/22
2.1.27.4427	[MPBT] Added: 1. Support New Version USB Sound Card (Surface Blue color) .	2015/05/13
2.1.26.4414	[MPBT] Added: 1. Support IS1678S_151_SPP_V1.1 . Fixed : 1. Fixed BT5502/BT5506 item 2641 algorithm default value.	2015/05/04
2.1.26.4412	[MPBT] Removed: 1. Delete item 2640 TX Power cal. with MT8852 algorithm0 (close loop cal.) for IS2008/2010/2011/2013/2015/2016/2020/2021/2023/2025/2062/2063/2064 . 2. Delete item 2641 TX Power cal. with GU algorithm0 (close loop cal.) for IS2008/2010/2011/2013/2015/2016/2020/2021/2023/2025/2062/2063/2064 . [MPSE] Added: 1. Added check rule that check item 2640 / 2641 algorithm value that need algorithm 1.	2015/04/30
2.1.26.4405	[MPBT] Modified: 1. IS2008/2010/2011/2013/2015/2016/2020/2021/2023/2025/2062/2063/2064 item 2640 TX Power cal. with MT8852 use open loop cal. . 2. IS2008/2010/2011/2013/2015/2016/2020/2021/2023/2025/2062/2063/2064 item 2641 TX Power cal. with GU use open loop cal. 3. IS2008/2010/2011/2013/2015/2016/2020/2021/2023/2025 item 8xxx default hopping off 4. IS2008/2010/2011/2013/2015/2016/2020/2021/2023/2025 item 8250 default packet value is 1000 , TX Power is -85 , Dirty is on 5. IS2008/2010/2011/2013/2015/2016/2020/2021/2023/2025 item 8300 default packet value is 300 , TX Power is -85 , Dirty is on [MPSE] Removed: 1. Remove the device IS1677SM_101_SPP_V1.4 . 2. Remove the device IS1677S_151_SPP_V1.1 . 3. Remove the device IS1678SM_101_BLEDK_V1.1 . 4. Remove the device IS1678SM_101_BLEDK_V2.2 .	2015/04/21

2.1.26.4351	[MPBT] Fixed: 1. Fixed BT5502/BT5506 item 2681 Frequency cal. didn't update eeprom issue.	2015/03/05
2.1.26.4332	[MPBT] Fixed: 1. Fixed BT5502 item 2525 error time out. Added: 1. Support IS1690SM_253_nSPK02_V1.1. 2. Support IS2063GM_001_SPK02_V1.1.	2015/02/02
2.1.26.4323	[MPBT] Fixed: 1. Fixed BT5502 item 2525 BPF test time.	2015/01/22
2.1.26.4322	[MPBT] Added: 1. Support IS1690SM_255_SPKs_V1.1. 2. Support Victoria2.5 test board.	2015/01/21
2.1.25.4235	[MPMF] Fixed: 1. Fixed IS1679SM_101_BLETR_V1.2 merge to IPF file fail issue.	2014/10/31
2.1.25.4231	[MPBT] Added: 1. Support IS1679SM_101_BLETR_V1.2. Modified: 1. IS1677SM_101_SPP_V1.2 calibration close to the upper limit. 2. IS1677SM_101_SPP_V1.3 calibration close to the upper limit. 3. IS1679SM_101_BLEDR_V1.1 calibration close to the upper limit. 4. IS1679SM_101_BLEDR_V1.2 calibration close to the upper limit. 5. IS1679SM_101_BLEDK_V1.1 calibration close to the upper limit. 6. IS1679SM_101_BLEDK_V2.2 calibration close to the upper limit.	2014/10/27
2.1.25.4216	[MPBT] Added: 1. Support IS1675SM_101_MFIGP_LiBAT_V3.3. 2. Support IS1675SM_101_MFIGP_3NiMH_V3.3. 3. Support IS1675SM_101_MFIGP_2NiMH_V3.3.	2014/10/09
2.1.25.4213	[MPBT] Fixed: 1. Fixed BT5502 Item 2525 can't load old msf file.	2014/10/03
2.1.25.4207	[MPET] Fixed: 1. Fixed IS1690S_255_SPKs_V5.1 merge issue. [MPBT] Added: 1. Added BT5502 Item 2525 Synthesizer detector function.	2014/10/01

2.1.25.4193	[MPBT] Added: 1. Support BM57SPP03M_SPP03/05_V1.5 Modified: 1. IS1688S_154_SPK02_V4.1 Item 8 loop max time & measure voltage time.	2014/09/15
2.1.25.4182	[MPBT] Added: 1. Support IS1690S_255_SPKs_V5.1 Modified: 1. IS1688SM_151_SPK02_V0.1 Item 8 loop max time.	2014/09/10
2.1.25.4176	[MPBT] Added: 1. Support IS2013S_002_1SPK_V2.1 Fixed: 1. Fixed IS1675SM_101_MFIGP_2NiMH_V2.2 SAR BAT channel [MPDE] Default bin Update: 1. IS1675SM_101_MFIGP_3BAT_V2.2 E2.0.0.3	2014/09/05
2.1.25.4135	[MPBT] Added: 1. Support IS2008S_002_MHS_V2.1 2. Support IS2023S_002_I2S_V2.1	2014/08/11
2.1.25.4111	[MPDE] Default bin Update: 1. IS2010S_002_MHS_V2.1 E1.0.2.1 2. IS2020S_002_SHS_V2.1 E1.0.2.1 3. IS2025S_002_2SPK_V2.1 E1.0.2.1 4. IS2011S_002_MHS_V2.1 E1.0.2.1 5. IS2021S_002_SHS_V2.1 E1.0.2.1	2014/07/28
2.1.25.4108	[MPSE] Fixed: 1. Fixed Except BT5502 no RF Auto Calibration flag naming.	2014/07/24
2.1.25.4107	[MPBT] Fixed: 1. Fixed IS1675SM_101_MFIGP_V2.2_2BAT PMU cal. no need power switch to 2.2V Added: 1. Support handler H/B save and load file. 2. Support BT5502 Audio control switch path test. [MPSE] Modified: 1. Modified BT5502 RF Auto Calibration flag naming. (All BT5502 MSF file need re-build)	2014/07/24
2.1.24.4065	[MPET]	2014/06/12

	Added: 1. Support IS1690SM_253_Nspk01_V1.1 2. Support IS1675SM_101_MFIGP_LiBAT_V2.2 3. Support IS1675SM_101_MFIGP_3NiMH_V2.2 4. Support IS1675SM_101_MFIGP_2NiMH_V2.2	
2.1.24.4049	[MPET] Fixed: 1. Old device merge error that can't open com port.	2014/06/06
2.1.24.4042	[MPBT] Fixed: 1. Load old device msf file than apply error	2014/06/04
2.1.24.4039	[MPSE] Fixed: 1. IS2025S_002_2SPK_V2.1 ini check sum	2014/06/03
2.1.24.4037	[MPBT] Modified: 1. IS2025S_002_2SPK_V2.1 GPIO setting change 2. IS1675SM_101_MFIGP_V1.1 change EEPROM battery address 3. ITEM 7400 pure test need change EEPROM to 0x00 4. IS1677SM_101_SPP PMU didn't Cal. when default into limit. [MPDE] Default bin Update: 6. IS2010S_002_MHS_V2.1 E1.0.1.1 7. IS2015S_002_1SPK_V2.1 E1.0.1.1 8. IS2020S_002_SHS_V2.1 E1.0.1.1 9. IS2025S_002_2SPK_V2.1 E1.0.1.1 10. IS2011S_002_MHS_V2.1 E1.0.1.1 11. IS2021S_002_SHS_V2.1 E1.0.1.1	2014/05/30
2.1.23.3998	[MPBT] Added: 1. Support IS2010S_002_MHS_V2.1 2. Support IS2011S_002_MHS_V2.1 3. Support IS2015S_002_1SPK_V2.1 4. Support IS2020S_002_SHS_V2.1 5. Support IS2021S_002_SHS_V2.1 6. Support IS2025S_002_2SPK_V2.1 Modified: 1. IS1621S_393_SRC_V3.1 wait time the same BM21AVDC1NB1 at power on	2014/05/14
2.1.23.3972	[MPBT] Added: 1. Support IS1675SM_101_MFIGP_V1.1_3BAT Item 590 Dynamic_sn	2014/04/30
2.1.23.3949	[MPBT] Added: 1. Support IS1688S_154_SPK02_V4.1	2014/04/23

	2. Support Audio test on Win7	
2.1.22.3943	[MPBT] Added: 1. Support BM21AVDC1NB1	2014/04/21
2.1.22.3900	[MPBT] Added: 1. Support IS1688SM_151_SPK02_V0.1 Item 8 PSM mode test [MPET] Fixed: 1. Check project name function at merger	2014/03/26
2.1.21.3842	[MPBT] Added: 1. Support IS1675SM_101_MFIGP_V1.1 Fixed: 1. Item 550 load IPF file error	2014/03/06
2.1.21.3838	[MPBT] Added: 1. Support IS1677SM_101_SPP_V1.3	2014/03/05
2.1.21.3837	[MPBT] Added: 1. Support IS1688SM_151_SPK02_V0.1	2014/03/04
2.1.21.3825	[MPBT] Added: 1. Support IS1681SM_202_CSD_V0.1 2. Support IS1657SM_508_HIDH_V1.1 3. IS1677 N4010 EDR 2M/3M can select OFF mode [MPSE] Modified: 1. IS1684S_202/305 GPIO test table	2014/02/24
2.1.11.3761	[MPBT] Fixed: 1. Item 15 setting MSF file error Added: 1. IS1677SM-101 support N4010 BDR/EDR 2. Support IS1689S_253_SPK_V3.1	2014/01/20
2.1.11.3704	[MPSE] Fixed: 1. BM77 EEPROM Verify only fail of test item 500 Modified: 1. Item 15 and 40 support full mode , Normal mode and quick mode	2013/12/24
2.1.11.3692	[MPSE] Fixed: 1. Flash File not match current solution of test item 20	2013/12/18
2.1.11.3689	[MPBT]	2013/12/13

	Added: 1. Support IS1813S_112_HIDBr_V2.1_LIBAT 2. Support IS1813S_112_HIDBr_V2.1_2BAT [MPDE] Default bin Update: 1. IS1813S_112_HIDBr_V2.1_2BAT E1.0.0.1 2. IS1813S_112_HIDBr_V2.1_ LIBAT E1.0.1.0	
2.1.11.3679	[MPBT] modified: 1. Item 15 and 40 support Write/Read (full mode) and Read(quick mode) [MPDE] Default bin Update: 1. IS1689S_253_SPK_V3.1 E1.0.0.1	2013/12/11
2.1.11.3659	[MPBT] Added: 1. Supported IS1688SM_151_SPPAU_V1.2 [MPDE] Default bin Update: 1. IS1687SM_151_SPPAU_V1.2 E2.0.2.0 2. IS1687SM_151_SPPAU_V1.1 E1.0.2.0 3. IS1687SM_161_SPPAU_V1.2 E2.0.2.0 4. IS1687SM_161_SPPAU_V1.1 E1.0.2.0 5. IS1688SM_151_SPPAU_V1.1 E1.0.2.0 6. IS1688SM_151_SPPAU_V1.2 E2.0.2.0 7. IS1688SM_151_SPK02_V0.1 E1.0.2.0 8. IS1681S_305_SPK_V5.1 E1.0.5.0 9. IS1685S_305_SPK_V5.1 E1.0.5.0 10. IS1684S_305_SPK_V5.1 E1.0.6.0 11. IS1621S_305_SPK_V5.1 E1.0.2.2 12. IS1689S_151_SPK_V1.1 E1.0.4.0 13. IS1685S_151_SPK_V1.1 E1.0.2.0 14. IS1684S_151_SPK_V1.1 E1.0.2.0 15. IS1683S_151_SPK_V1.1 E1.0.4.0 16. IS1681S_151_SPK_V1.1 E1.0.3.0	2013/12/03
2.1.11.3651	[MPBT] Added: 1. Supported IS1687SM_151_SPPAU_V1.2 2. Supported IS1687SM_161_SPPAU_V1.2 Modified: 1. Item590 support serial number function (SN , ACC_SN) [MPDS] Modified: 1. Item590 accessory serial number and serial number : 1. BM77/78/79 Added:	2013/11/22

	1. Item595 serial number : 1. BM77/78/79 2. IS1687SM_151/161_SPPAU_V1.2 [MPDE] Default bin Update: 1. IS1689S_151_SPK_V1.1 E1.0.3.0 2. IS1687SM_151_SPPAU_V1.2 E2.0.1.0 3. IS1687SM_161_SPPAU_V1.2 E2.0.1.0	
2.1.11.3587	[MPBT] Added: 1. Supported new test ITEM 40 Check RAM status at IBDK mode [MPDS] Modified: 1. ITEM 40 replaced ITEM 15 : 1.1 IS1681S_151_SPK_V1.1 1.2 IS1683S_151_SPK_V1.1 1.3 IS1684S_151_SPK_V1.1 1.4 IS1685S_151_SPK_V1.1 1.5 IS1688S_151_SPK_V1.1 1.6 IS1689S_151_SPK_V1.1 [MPDE] Default bin Update: 1. IS1681S_151_SPK_V1.1 E1.0.2.0 2. IS1683S_151_SPK_V1.1 E1.0.3.0 3. IS1684S_151_SPK_V1.1 E1.0.1.0 4. IS1685S_151_SPK_V1.1 E1.0.1.0 5. IS1689S_151_SPK_V1.1 E1.0.2.0 6. IS1681SM_151_SPK03_V0.0 E0.92.1.0 7. IS1687SM_151_SPPAU_V1.1 E1.0.1.0 8. IS1687SM_161_SPPAU_V1.1 E1.0.1.0 9. IS1688SM_151_SPK02_V0.1 E1.0.1.0	2013/10/23
2.1.10.3550	[MPBT] Added: 1. New search type of BT Address INDEX at BT ADDRESS page. Barcode setting please refer MP2.1_user_manual Page.11. [MPDS] Added: 1. Supported N4010 EDR(ITEM 7805 ~ 7835) test below: BM57SPP serial IS1657S_508_SPP_V8.3, IS1657S_518_SPP_V8.3 IS1657SM_508_SPP_V1.4 2. Supported IQ Flex RF test below: IS1684S_305_SPK_V1.1 IS1681S_151_SPK_V1.1	2013/10/02

2.1.10.3530	[MPBT] Added: 1. Supported IS1687SM_151_SPPAU_V1.1 [MPDS] Added: 1. IS1681S_151_SPK_V1.1 adds ITEM 560 Write DUT Link Back information 2. IS1689S_151_SPK_V1.1 adds ITEM 15 Check RAM Status	2013/09/24
2.1.10.3510	[MPBT] Added: 1. Supported IS1681SM_051_SPK03_0.0. 2. Supported IS1681SM_151_SPK03_0.0. Fixed: 1. ITEM 15 Check RAM Status fail after patch EEPROM.	2013/09/10
2.1.10.3499	[MPBT] Added: 1. Supported IS1689S_151_SPK_V1.1. [MPDS] Added: 1. IS1681S_151_SPK adds ITEM 595. [MPDE] Update 1. IS1683S_051_SPK_V1.1 E1.0.1.0 -> E1.0.2.0 2. IS1683S_151_SPK_V1.1 E1.0.1.0 -> E1.0.2.0	2013/09/03
2.1.10.3474	[MPBT] Fixed: 1. IS1632S_283_MHS_V3.0 , IS1632S_283B_MHS_V4.0 has test fail but show PASS. Added: 1. IS1681S_151_SPK_V1.1, IS1683S_151_SPK_V1.1, IS1684S_151_SPK_V1.1 and IS1685S_151_SPK_V1.1 are supported ITEM 15 Check RAM Status.	2013/08/22
2.1.10.3471	[MPBT] Added: 1. IS1681/87/88 are supported ITEM 15 Check RAM Status.	2013/08/21
2.1.10.3459	[MPBT] Fixed: 1. IS1632S_283B_MHS_V4.0 Simple Pairing will be disabled.	2013/08/12
2.1.10.3457	[MPBT] Added: 1. Supported IS1632S_283B_MHS_V4.0. [MPDE] Update: 1. IS1681S_304_SHS_V4.1 to E1.0.3.0	2013/08/09

	2. IS1682S_304_SHS_V4.1 to E1.0.6.0 3. IS1685S_304_SHS_V4.1 to E1.0.3.0 4. IS1686S_304_SHS_V4.1 to E1.0.4.0 5. IS1681S_151_SPK_V1.1 to E1.0.1.0	
2.1.10.3452	[MPBT] Added: 1. Add item 150 to IS1687SM_161_SPPAU_V1.1 2. Add item 7450 to IS1681S_206_SPK_V6.0 3. Add item 7450 to IS1681SM_202_SPK04_V0.0 [MPDS] 1. Update Files	2013/08/01
2.1.10.3444	[MPBT] Added: 1. Add item 590 to IS1687SM_161_SPPAU_V1.1 2. Support IS1632S_283B_MHS_V4.0 [MPDS] 1. Update Files [MPDE] 1. Update Files	2013/7/25
2.1.10.3439	[MPBT] Added: 1. Support IS1688SM_151_SPPAU_V1.1 Modify: 1. Change IS1677SM_101_SPP_V1.2 project name from IS1677SM_101 to IS1677SM_101_SPP [MPDS] 1. Update Files	2013/7/19
2.1.10.3433	[MPBT] Added: 1. Support IS1687SM_161_SPPAU_V1.1 2. Support VICTORIA V215 [MPDS] 1. Update Files	2013/7/16
2.1.9.3425	[MPDS] Added: 1. Add NFC Write To Tag Item (9800) To IS1681S_151_SPK_V1.1	2013/07/10
2.1.9.3420	[MPBT] Fixed: 1. IS1677SM_101_SPP_V1.2 check IC error.	2013/07/09
2.1.9.3414	[MPBT] Added: 3. Support IS1679SM_101_BLETR_V1.1 4. Support IS1679SM_101_BLEDK_V2.2 5. Support IS1677SM_101_SPP_V1.2 Fixed:	2013/07/05

	2. N4010A EDR Test Item Log Title Not Correct Error [MPDS] 1. Update Files	
2.1.9.3403	[MPBT] 1. Supported IS1681S_151_SPK_1.1. 2. Supported IS1683S_151_SPK_1.1. 3. Supported IS1684S_151_SPK_1.1. 4. Supported IS1685S_151_SPK_1.1. 5. Support N4010A EDR Test Item. 6. Update User Manual. [MPDS] 1. Add N4010A EDR Test Item To IS1681S_206_SPK_V6.0	2013/07/02
2.1.9.3288	[MPBT] Fixed: 1. ITEM 7400 log title.	2013/05/21
2.1.9.3283	[MPDS] 1. Add Item 1330 to IS1681S_206_SPK_V6.0. 2. Change IS1681S_206_SPK_V6.0 default RfinDevice from ISSC VICTORIA to MT8852B	2013/05/14
2.1.9.3282	[MPBT] Fixed: 1. Load Only MT8852A or MT8852B or N4010A Test ITEM MSF file error. [MPSE] Fixed: 1. Only Select MT8852A or MT8852B or N4010A Test ITEM, save file error.	2013/05/10
2.1.9.3281	[MPBT] Added: 1. Supported IS1681S_051_SPK_1.1. 2. Must have RF test item when RF tester is MT8852 or N4010. Fixed: 2. ITEM 7400 CVSD loopback write wrong EEPROM [MPDS] Added: 1. ITEM 7400 adds PURE CVSD test option.	2013/05/10
2.1.8.3264	[MPBT] Added: 1. Supported IS1696S_204_HS_V2.4. 2. Supported IS1683S_051_SPK_V1.1. 3. Supported IS1688SM_051_SPK02_V0.1. [MPDS] Added: 1. BM57SPP0x serials are supported N4010 test. 2. IS1657Sx serials are supported N4010 test. 3. IS1688SM_051 adds EEPROM size in ITEM 10. [MPSE]	2013/04/03

	Fixed: 1. BM57SPP05_SPP05_V1.3 version checks error in ITEM 20 Write Flash.	
2.1.8.3259	[MPBT] Added: 1. ITEM 100 BigNum enhancement with script 3. 2. ITEM 7400 has option of EQ, FIR, TX_NR and RX_NR 3. Supported IS1685S_051_SPK_V1.1 4. Supported IS1681S_207_SPK_V7.1 [MPDE] Added: 1. IS1621S_393_SRC_V3.1_E1.0.4.0 -> E1.0.5.0	2013/3/22
2.1.8.3248	[MPBT] Added : 1. Supported IS1812S_102_HIDM_V2.1_2BAT. 2. BM57, BM77 serials are supported ITEM 9705 verify EEPROM. [MPDS] Added: 1. IS1681S_206_SPK_V6.0 2. BT5029 serials are added ITEM 7400 CVSD loopback test.	2013/2/27
2.1.8.3235	[MPBT] Added: 1. Supported EDR test with MT8852B. [MPSE] Added: 1. Change editor area format as Pages for more parameters and descriptions. [MPDS] Added: 1. EDR test item (8605, 8610, 8615, 8620, 8625, 8630) for all of Solution. 2. BDR ITEM 8200 Limits.	2013/2/8
2.1.7.3196	**[MPBT]** Added: 1. ITEM 7270, 7300 verify a peak tone delta of L/R channel. 2. ITEM 7400 CVSD test with EQ, FIR, TX_NR and RX_NR. 3. Supported IS1681S_206_SPK_V6.0, IS1679SM_101_BLEDK_V1.1 4. Remove IS1677SM_101_BLEDK_V1.1 5. Default BT_ADDR from 001167000000 -> 001167111111. 6. Save a last BT_ADDR number when abnormal condition such as AC power or PC is down. Fixed: 1. ITEM 1400 log order HV_HL, HV_LL. 2. ITEM 1330 VDD_IO calibration voltage out of range but PASS. **[MPET]** Modified 1. Ignore Device_Name in calibration address check lists.	2013/02/01

	[MPDS] Added 1. ITEM 7270, 7300 upper limitation of L/R peak tone delta. Modified 1. ITEM 8825 BLE PRI test Cycle range 0~10 -> 1~3. 2. ITEM 2180 power level default value (EDR:1, BDR:2).	
2.1.7.3119	[MPBT] Added: 1. IS1677SM_101_BLEDK_V1.1, IS1678SM_101_BLEDK_1.1 Modified: 1. Agilent N4010 FW version check (Legal: Version > 5.03.00) 2. ITEM #7720 Get result timeout when packet type is DH1, DH3 or DH5. 3. ITEM #7270 removes the DUT reboot procedure. [MPMF] Fixed: 1. Write EEPROM fail when MSF has EEPROM size option(ITEM #10). [MPDS] Modified: 1. IS1695S_204 ITEM #10 turn on 3.3/1.8 option	2013/01/11
2.1.7.3052	[MPBT] Fixed: 1. ErrorCode 0020-01: Always set VDD_IO 1V8 [MPDS] Modified: 1. BM57SPP05M_V1.3 adds RF test item with N4010	2012/12/24
2.1.7.3047	[MPBT] Added: 1. Support RF tester - Agilent N4010A 2. Handler Page and supported Auto-Handler HT3000 3. Support Change DUT's Local Device Name 4. Manufacture Information Page 5. ITEM #1510 SAR Battery offset Modified: 1. ITEM #2025 BPF test [MPDS] Modified: 1. IS1621S_393_SRC ITEM 2201 2. IS1696S_203, IS1696S_204 ITEM #10 VDD_IO 1V8/3V3 option 3. BM57SPP05M_V1.3 supported N4010 [MPDE] 1. Default bin changed : IS1681S_201, IS1685S_201 IS1681S_202, IS1684S_202, , IS1685S_202, IS1686S_304_SHS_V4.1, IS1685S_304_SHS_V4.1, IS1681S_304_SHS_V4.1, IS1682S_304_SHS_V4.1	2012/12/21

	IS1621S_393_SRC IS1685S_305_SPK_V5.1, IS1684S_305_SPK_V5.1, IS1621S_305_SPK_V5.1, IS1681S_305_SPK_V5.1	
2.1.6.3008	[MPSE] Fixed: 1. RfinDevice selection is incorrect when load msf type of VICTORIA. [MPDS] Add: IS1685S_202 adds ITEM 2201 RF Tx Power Verify.	2012/12/05
2.1.6.2999	[MPBT] Add: 1. Supported IS1682S_304_SHS_V4.1, IS1696S_204_HS_V2.4. 2. ITEM 7260 Dual-MIC with stereo, ITEM 7262 Dual-MIC with mono. Modified: 1. BM57SPPxx serials - ITEM 590 Write Accessory SN no need input first BT Address in Prefix when mode is BTADDR. [MPDS] Add: 1. IS1681S_305_SPK_V5.1, IS1684S_305_SPK_V5.1, IS1685S_305_SPK_V5.1 and IS1621S_305_SPK_V5.1 are add ITEM 595 write Device Name Modified: 1. BM57SPP serial change description of AccSN Prefix length 6 -> 4. 2. IS1686S_304 change ITEM 7270 -> 7260. [MPDE] Updated: 1. IS1681S_305_SPK_V5.1. EEPROM table from E1.0.2.0 to E1.0.3.0 2. IS1684S_305_SPK_V5.1 EEPROM table from E1.0.3.0 to E1.0.4.0 3. IS1685S_305_SPK_V5.1 EEPROM table from E1.0.2.0 to E1.0.3.0 4. IS1621S_305_SPK_V5.1 EEPROM table from E1.0.0.1 to E1.0.0.2	2012/11/30
2.1.6.2989	[MPBT] Add: 1. ITEM 7700 ~ 7740 for N4010 BT test 2. Supported IS1621S_305_SPK_V5.1. Modified 1. ITEM 7400 more EEPROM and Xmemory changed. [MPDS] Modified 1. IS1681S_305_SPK_V5.1 GPIO default pin defined 2. IS1681SM_202_SPK02_V1.1 ITEM 7400 Limitation.	2012/11/16
2.1.6.2980	[MPBT] Fixed: 1. ITEM 7255 and 7270 test fail (ErrorCode7255-01, 7270-01) no change codec_parameter. [MPET] Fixed:	2012/11/08

	1. Create ipf error : IS1695S_203_HS_V3.3, IS1696S_203_HS_V3.3, IS1621S_393_SRC [MPDS] Modified: 1. IS1634NM_204_AG_V1.2 deletes ITEM: 2101, 2121, 2131 and 2141.	
2.1.6.2966	[MPBT] Add: 1. New option (SYSTEM page) of dump EEPROM when test is successful, and save it in Log folder. Fixed: 1. ITEM 7270 test fail (ErrorCode7270-00) when other site is testing ITEM 8000 in Multi-Site. [MPDS] Modified: 1. IS1681S_305_SPK_V5.1 ITEM 1500,2140,2180,7270 default value. 2. IS1684S_305_SPK_V5.1 ITEM 1500,2140,2180 default value 3. IS1685S_305_SPK_V5.1 ITEM 1500,2140,2180 default value [MPDE] Updated: 1. IS1681S_305_SPK_V5.1. EEPROM table from E1.0.1.0 to E1.0.2.0 2. IS1684S_305_SPK_V5.1 EEPROM table from E1.0.2.0 to E1.0.3.0 3. IS1685S_305_SPK_V5.1 EEPROM table from E1.0.1.0 to E1.0.2.0	2012/10/31
2.1.6.2960	[MPBT] Add: 1. Shows remain BD_ADDR count in “Range” mode. Modified: 1. BM77SPP_SPP_V1.1 ITEM 1500 SAR value(4.2 / 3.0) Fixed: 1. No check NFC reader when BD_ADDR type is “FROM TAG” 2. ITEM 2150 Tx power Cal BLE – No test log. 3. Update BD_ADDR when reload msf. 4. ITEM 500 write EEPROM - No reload EEPROM	2012/10/25
2.1.6.2954	[MPBT] Fixed: 1. BM77SPP_SPP_V1.1 verifies EEPROM always Fail at ITEM 500 Write EEPROM 2. ITEM 9800 NFC Write To Tag - Testing is PASS but the item in list is Fail	2012/10/22
2.1.6.2953	[MPBT] Added: 1. Supported IS1684S_305_SPK_V5.1 2. New ITEM 9600 Suspend Verify Modified: 1. Max EEPROM size 32k -> 64k : IS1685S_305, IS1681S_305, IS1684S_305 2. ITEM 7270, ITEM7300 improvement [MPDS]	2012/10/19

	Modified: 1. IS1681SM_SPK04 adds ITEM 1330 VDD IO Calibration 2. BM77SPP_V1.1 adds ITEM 9600 Suspend Verify and GPIO SI pin	
2.1.6.2939	[MPBT] Added: 1. Supported NFC Tag test. And MPSE item number is ITEM 9800 NFC Write To Tag. 2. Supported IS1681SM_202_SPK03. 3. ITEM 100 Big-Num improvement with more scripts [MPDS] Modified: 1. IS1681S_304, IS1682S_304, IS1685S_304 are adding ITEM 9800. 2. IS1681S_305, IS1684S_305, IS1685_305 are adding ITEM 9800.	2012/10/15
2.1.5.2915	[MPBT] Modified: 1. Log:bd_addr always show "00:00:00:00:00:00" when test failed (RT1371) [MPSE] Fixed: 1. Exception when load a old msf then save a msf file.	2012/09/28
2.1.5.2907	[MPBT] Modified: 1. BM77SPP_SPP_V1.1 check IC version rule. [MPET] Modified: 1. IS1685S_305_SPK_V5.1, IS1681S_305_SPK_V5.1 add in merge rule [MPDS] Modified: 1. IS1685S_202_SHS_v21 adds ITEM 2081	2012/09/27
2.1.5.2897	[MPBT] Feature: 1. Supported IS1681S_305_SPK_V5.1, IS1685S_305_SPK_V5.1, 2. Supported BM77SPP_SPP_V1.1 3. Supported IS1657SM_508_SPP_V1.4	2012/09/19
2.1.5.2889	[MPBT] Modified: 1. Change solution name IS1681SM_202_SPK04_V0.1 -> IS1681SM_202_SPK04_ V0.0.	2012/09/13
2.1.5.2888	[MPBT] Feature: 1. Supported IS1681SM_202_SPK04_V0.1. Fixed: 2. Cannot Apply when no MT8850 test item (ITEM8xxx).	2012/09/12
2.1.5.2887	[MPBT] Feature: 1. Supported IS1681SM_202_CARKIT01_V0.1.	2012/09/11

	Fixed: 1. No change operator ID functions at Single-site. 2. Message bug of Cal Frequency at RF_Page UI config. [MPDS] 1. IS1621S_393_SRC default bin update.	
2.1.5.2871	[MPBT] Modification: 1. ITEM 595 write DUT local device name - keep last SN. Fixed: 1. Log disappears after ITEM 595. 2. Duplicate SN when last time test fail in ITEM 595. [MPDS] 1. Modified ITEM1500 limitation maxHV: 600 -> 620, maxLV: 220 ->240, listed below: IS1812SM_001_HIDM_V0.1_2BAT, IS1811S_001_HIDBr_V1.1_2BAT, IS1811SM_001_HIDBr_V1.1_2BAT.	2012/08/28
2.1.5.2870	[MPBT] Feature: 1. Supported IS1811S_101_HIDBr_V1.1_LIBAT.	2012/08/27
2.1.5.2868	[MPBT] Fixed: BM57SPP0x serial verify EEPROM error	2012/08/24
2.1.5.2866	[MPBT] Fixed: BM57SPP0x serial verify EEPROM error [MPET] Fixed: IS1685S_304_SHS_V4.1 merge error	2012/08/22
2.1.5.2862	[MPBT] Feature: 1. Supported IS1657S_508_SPP_V8.3, IS1657S_518_SPP_V8.3 2. ITEM 100 Big-Num test improvements with script_misc.	2012/08/17
2.1.5.2861	[MPBT] Feature: 1. Supported IS1681S_304_SHS_V4.1 Fixed: 1. ITEM 595 write device name with SN – A bug of duplicate SN under Dual-site mode 2. ITEM 57 system power verify (SPP) – A bug of test pass but the system power is smaller than limitation.	2012/08/16
2.1.5.2859	[MPBT] Feature: 1. Create ITEM 595 write Device Name with SN and auto increase [MPDS]	2012/08/14

	1. IS1681S_202_SHS_V2.1 added ITEM 595	
2.1.5.2856	[MPBT] Fixed: 1. IS1812SM_001_HIDM write EEPROM fail when test ITEM250(GPIO) [MPET] Fixed: 1. IS1686S_304, IS1685S_305 merge default bin error. [MPDS] 2. IS1812SM_001_HIDM ITEM 1030 v2.8~v2.95	2012/08/09
2.1.5.2854	[MPBT] Feature: BM77SPP_SPP_v1.1 supported Dual-Mode(BDR,BLE) test with MT8852. Support IS1812SM_001_2BAT. Support IS1681SM_202_SPK02_V1.1. Support IS1685S_304_SHS_V4.1.	2012/08/08
2.1.5.2846	[MPBT] Feature: Supported IS1695S_203_MHS_V3.3, IS1696S_203_MHS_V3.3, IS1686S_304_SHS_V4.1 Fixed: 1. Check miss 0x0F in ITEM 2025 BPF. 2. RF test with GU sometimes no Tx packet. [MPDS] 1. IS1632S_283_MHS_V3.0, IS1621S_393_SRC_V3.1 are added ITEM 100 Big-Num	2012/07/30
2.1.5.2834	[MPBT] Fixed: 1. ITEM 7255 (Audio Electrical Test) test bug of fake Pass in Dual-site mode. Root cause: no wait other site in Audio test. [MPET] Fixed 1. IS1696S_102 merge bin exception. Root cause: no define address of calibration. [MPDS] 1. BM57SPPx serial EEPROM saving in ITEM 2050. 2. IS1686S_304 from FlashCode to ROMCode in ITEM 10.	2012/07/09
2.1.5.2828	[MPBT] Fixed: 1. Cannot close the MP Tool in Dual-Site mode.	2012/06/21
2.1.5.2825	[Feature] Added: 1. Chip support IS1686S_304 Formula Release (RT#1269) [MPBT] Fixed: 1. Test-Item 2080 (RF Frequency Calibration): Output log error of TXPWR.	2012/06/21

	2. Test-Item 2180 (Tx Power Calibration_ALL): Update XMomery with EEPROM upper layer after calibration. [MPET] Fixed: 1. Check .txt header bug of ROM Information. [MPDS] Modified: 1. IS1811S, IS1811SM change default setting of Test-Item 10.	
2.1.5.2824	[Feature] Added： 1. Chip support IS1686S_304 Beta Release (RT#1269) 2. New Test-Item 1330 (trim PMU_VDD_IO) for trim VDD IO 2.7v and 1.8v. 3. Test-Item 250(GPIO test) Supported L(SI0)/R(SI1) key. [MPBT] Modified： 1. Test-Item 560 (DUT Linkback) clear all table before testing. 2. Single-page mode can use space or enter key to start testing. 3. Test-Item 1400 (buckcheck) added Victoria SetVoltageMode(SARDET_BUCK). Fixed： 1. BM57 SPP serial EEPROM Checksum error at only Test-Item 550 (EEPROM patch) situation. [MPDS] 1. IS1812SM_001, IS1681SM_202 modified the GPIO default script. 2. IS1681S-201, IS1681S-202, IS1685S-202 added Test-Item 560(LinkBack). 3. IS1811S-001, IS1812S_001 added Test-Item 100(BigNum).	2012/06/15
2.1.5.2817	[Feature] Added：1. Chip support IS1681SM_202 Formula Release (RT#1248) 2. BinNum test (Item:100) enhancement of 2 scripts [MPBT] Fixed： 1. Bug of errorcode:250-50 IC list define. [MPET] Fixed： 1. .ipf data block size from 16 bytes to 128 bytes. [MPMF] Fixed： 1. Wrong type for ipf elements size, too small.	2012/06/07
2.1.5.2806	[Feature] Added：Chip support IS1696S-102 (RT#1114) [MPBT] Fixed： 1. bug of Test-item:7270 2. Item:2201 (RF Tx Power Verify) display error when open the Item:2141 at the same time. 3. Xmemory reload EEPROM After Item:500/550 (Write/Patch	2012/05/29

	EEPROM).	
2.1.5.2798	[MPDS] Added：IS1621S_254 modified a limitation of Test Item 1500 (Battery Detect Calibration) (RT#1120) Added：IS1682S_201, IS1681S_201 supported Test Item 100 (Check Big-Num Calculate). (RT#896, RF#870)	2012/4/27
2.1.5.2797	[Feature] Added：Chip support IS1812SM_001_HIDBr_V1.1_2BAT. (RT#972) [MPDS] Added：IS1685S_202, IS1681S_202, IS1621S_254 support Test Item 100 (Check Big-Num Calculate). (RT#871, RF#861, RT#1120)	2012/4/26
2.1.5.2794	[Feature] Added：Chip support IS1811SM_001_HIDBr_V1.1_2BAT and IS1811S_001_HIDBr_V1.1_2BAT. (RT#980) Added：Support Test Item 2180(RF Tx Power Calibration_All) for all chip. [MPDS] Added：IS1621S_393_SRC_V3.1 support Test Item 120. (RT#1130) [MPBT] Modified：Test Item 560 for IS1621S_393_SRC_V3.1 change Write Data. (RT#1130)	2012/04/13
2.1.5.2788	[Feature] Added：Chip support BM57SPP02M/03M/05M/06M/07M for V1.3 (RT#1166)	2012/04/10
2.1.5.2787	[Feature] Added：Chip support IS1621S-393_SRC_V3.1 (RT#1130)	2012/04/09
2.1.5.2769	[Feature] Added：Chip support IS1621S-254.(RT#1120) Fixed：IS1681S_202_SHS_V2.1 EEPROM table for BT address issue.(RT#1147)	2012/03/27
2.1.5.2749	[Feature] Added：Chip support BM57SPP01M. Updated : IS1681S_202_SHS_V2.1 EEPROM table from 0.0.3.0 to 0.0.4.0 (RT#871) Updated : IS1685S_202_SHS_V2.1 EEPROM table from 0.0.2.0 to 0.0.3.0 (RT#861) [MPBT] Fixed：fixbug for Write Flash issue of SLT.	2012/02/08
2.1.5.2740	[Feature] Added：Chip support IS1685N_254	2012/02/20
2.1.5.2738	[Feature] Updated : IS1681S_202_SHS_V2.1 EEPROM table from 0.0.2.0 to 0.0.3.0 (RT#871) Updated : IS1685S_202_SHS_V2.1 EEPROM table from 0.0.1.0 to 0.0.2.0	2012/02/16

	(RT#861) Added：Chip support IS1685S_201 [MPDS] Modified：IS1681S_202 support test item 2081,2101,2111,2121,2131,2141,2201 [MPET] Added：supported IS1681S_202/IS1685S_202 merge customer footprint issue	
2.1.5.2720	[Feature] Added：Support bin file version3. Modified：IS1681S_201_SHS_V1.0、IS1681S_202_SHS_V2.1、IS1685S_201_SHS_V1.0、IS1685S_202_SHS_V2.1 update EEPROM table. [MPDS] Modified：IS1652NM_406_HIDBr_V1.1_2BAT、IS1652NM_406_HIDM_V6.0_2BAT、IS1652N_105_HIDM_V5.0_1BAT、IS1652N_105_HIDM_V5.0_2BAT、IS1652N_406_HIDM_V6.0_1BAT、IS1652N_406_HIDM_V6.0_2BAT、IS1652N_406_HIDM_V6.0_LIBAT、IS1652N_507_HIDBr_V7.1_2BAT support test item 250 of GPIO test. [MP2.1] Added：add single site page. [MPMF] Fixed：fixbug for get parameter failed.	2012/02/02
2.1.4.2700	[MP2.1] Fixed :Test Item 50 test failed issue of HID. [MPMF] Added : Support IBDK mode.	2012/01/19
2.1.4.2665	[MP2.1] Modified : Remove MT8852 test environment setting Removed : Removed BM57SPP02_V1.1 in release package	2012/01/03
2.1.4.2662	[Feature] Added : Supported BM57SPP02/03/05/06/07 Added : Supported IS1652NM_406 [MP2.1] Fixed : Test item 2080 output log data loss issue Updated : IS1681S_202 EEPROM table to 0.0.1.0 Improve the performance of MT8852A CW Measurement Mode	2012/01/02
2.1.4.2642	[MP2.1] Fixed：Load script issue.	2011/12/20
2.1.4.2640	[Feature] Added：Support IS1685S_201 and IS1621NM_AVD_V0.1 Added：Support Test Item 560.	2011/12/16
2.1.4.2629	[Feature] Added：Support SLT Function.	2011/12/13

2.1.4.2626	[Feature] Added：chip support IS1685S_202, IS1681S_202 [MP2.1] Fixed：Test Item 1100 of heavy load issue. Fixed：Test Item 100 issue. Updated：IS1681S_201 EEPROM table to 0.0.2.0	2011/12/12
2.1.4.2575	[MP2.1] Fixed : TEST ITEM 2810 can't work issue.	2011/11/11
2.1.4.2570	[Feature] Added：chip support IS1681S_201. Added：Write Fix BT address function.	2011/11/09
2.1.4.2545	[Feature] Added：chip support IS1632S_283. Modified：add support test item 100 for IS1652N_406, IS1652N_406LIBAT, IS1652N_406_OB, IS1652N_507_HIDBr_V7.1_2BAT, IS1652NM_406_HIDBr_V1.1_2BAT Modified：change IS1652N_406_HIDM_V6.0_1BAT bin file from E0.0.1.0 to E0.0.3.0 [MPBT2.1] Fixed：Show error code issue. Added：add check OS of initial sound card.	2011/10/24
2.1.4.2528	[Feature] Added：chip support BM57SPP02M_V1.2.	2011/10/17
2.1.4.2516	[Feature] Added：chip support IS1652N_406_LiBAT. [MPBT2.1] Added：support SLT output log function.	2011/10/11
2.1.4.2509	[Feature] Added：Support Item 590 accessory serial number. [MPBT2.1] Fixed：IS1652N_406_LiBAT test item 1500 LV use 3.0V Fixed：VDD_IO trim function of not update last voltage. Fixed：Test item 2140 BDR MAX eeprom value write to RF_TXPOWER2 address. Fixed：RT#859 issue. Modified：Item 250 change test procedure and log format.	2011/09/30
2.1.4.2489	[Feature] Added：chip support IS1621N_152, IS1632N_162, IS1632N_173, IS1632N_182, IS1632N_213, IS1632S_182, IS1636N_162, IS1636N_213, IS1652N_105, IS1652N_105_OB, IS1652N_406, IS1652N_406_OB, IS1652N_507_HIDBr_V7.1_2BAT, IS1652NM_406NM_HIDBr_V1.1_2BAT Added：Test Item 250 GPIO Check.	2011/09/22
2.1.4.2444	[Feature]	2011/09/08

	Added：chip support BM57SPP02M、BM57SPP03M	

Appendix B. Test Item List

Item No.	Item Name	Item Description
10	Device Initialization	
15	Ram check at BOOT	
20	Write flash & verify flash	
40	Ram check at IBDK	
50	System Verify	
55	System Verify (One Battery)	
57	System Verify	For SPP
60	MFB check	
70	System Verify	For BT5502
100	Check Big-Num Calculate	
120	BAT_IN_IC Voltage Check	
150	CP self test	For BM57SPP06/07 only
250	GPIO Check	
500	Write EEPROM & verify EEPROM	
560	Write DUT Link Back Information	
550	Patch EEPROM	
580	EEPROM checksum verify	
590	Write Serial Number.	
595	Write DUT local device name.	
650	Verify Customer Version.	
710	Data Encryption.	
1025	PMU PMU LDO Trim	For BT5035
1030	PMU Boost Trim	For BT5035
1050	System Power Calibration(LDO)	
1100	System Power Calibration(Buck)	
1150	System Power Calibration(Buck)	For BT5039. 分成 Heavy load & Light Load
1160	BUCK2 Test	For BT5029
1180	MLDO OUT Calibration	For BT5502
1185	BUCK OUT Calibration	For BT5502
1200	System Power Calibration(LDO)	For BT5035
1250	System Power Calibration(Buck)	For BT5035
1300	PMU HV LDO Trim	For BT5035
1310	PMU LDO31 Codec Trim	For BT5029
1320	PMU VDD IO calibration	
1330	PMU LDO31 VDD IO Trim	
1350	PMU LDO31 CODEC Calibration	For BT5502
1355	PMU LDO31 I/O Calibration	For BT5502
1370	PMU CLDO1V2 Calibration	For BT5502
1375	PMU RFLDO1V2 Calibration	For BT5502
1400	Buck Check	

1410	Buck Line Regulation Check	For BT5035 (Not support)
1450	Buck 1V8 Verify	
1500	Battery Detect Calibration	
1550	Adaptor Detect Calibration	
1555	Adaptor Detect Calibration	For BT5039
1600	Charging Current Calibration	Not support
1650	Charging Current Verify	Not support
1800	Ambient Thermal Calibration	For BT5039. Upper
2025	BPF Check	
2050	System Thermal Calibration	
2080	RF Frequency Calibration	
2081	RF Frequency Calibration	
2100	RF Tx Power Calibration(0)	
2101	RF Tx Power Calibration(0)	For Golden Unit Test
2110	RF Tx Power Calibration(1)	
2111	RF Tx Power Calibration(1)	For Golden Unit Test
2120	RF Tx Power Calibration(2)	
2121	RF Tx Power Calibration(2)	For Golden Unit Test
2130	RF Tx Power Calibration(3) EDR MAX	
2131	RF Tx Power Calibration(3) EDR MAX	For Golden Unit Test
2140	RF Tx Power Calibration(4) BDR MAX	
2141	RF Tx Power Calibration(4) BDR MAX	For Golden Unit Test
2200	RF Tx Power Verify	
2180	RF Tx Power Calibration(ALL)	
2201	RF Tx Power Verify	For Golden Unit Test
2301	RF Sensitivity Verify	For Golden Unit Test
2550	System Thermal Verify	For BT5502
2580	RF Frequency Calibration	For BT5502
2581	RF Frequency Calibration (GU)	For BT5502
2640	RF TX Power Calibration	For BT5502
2641	RF TX Power Calibration (GU)	For BT5502
6050	GPIO Test	Not support
6250	Sensor Laser Power Calibration	Not support
7140	Audio Test for Dual-Mic – MONO + amp	For BT5502
7145	Audio Test for Dual-Mic – STEREO + amp	For BT5502
7150	Audio Test for Single-Mic - MONO + amp	For BT5502
7155	Audio Test for Single -Mic – STEREO + amp	For BT5502
7160	Audio Test for Dual-Mic – MONO	For BT5502
7165	Audio Test for Dual-Mic – STEREO	For BT5502
7170	Audio Test for Single-Mic – MONO	For BT5502
7175	Audio Test for Single -Mic – STEREO	For BT5502
7180	Audio Test for LINE-IN – MONO + amp	For BT5502
7185	Audio Test for LINE-IN – STEREO + amp	For BT5502
7200	Audio Test for LINE-IN – MONO	For BT5502
7205	Audio Test for LINE-IN – STEREO	For BT5502
7250	Audio Electrical Test	
7260	Audio Electrical Test for DMIC	Not support
7270	Audio Electrical Test for 2CH	
7300	Audio Line-in loopback test	
7400	Audio CVSD loopback test	
7700	N4010A Environment Setting	
7705	N4010A BDR Output Power	

7710	N4010A BDR Power Control	
7715	N4010A BDR Initial Carrier Frequency Tolerance	
7720	N4010A BDR Carrier Frequency Drift	
7725	N4010A BDR Single-slot Sensitivity	
7730	N4010A BDR Multi-slot Sensitivity	
7735	N4010A BDR Modulation Characteristics	
7740	N4010A BDR Maximum Input Level	
7800	Ext Acoustic Quality Test	Not support
7805	N4010A EDR Relative Transmit Power	
7810	N4010A EDR Frequency Stability and Modulation Accuracy	
7815	N4010A EDR Differential Phase Encoding test	
7820	N4010A EDR Sensitivity	
7825	N4010A EDR BER Floor Performance	
7830	N4010A EDR Maximum Input Level	
7835	N4010A EDR Guard Time	
7850	Button Function Test	Not support
8000	MT8852 Environment Setting	
8050	MT8852 BDR Output Power Test	The output power test performs power measurements on the EUT transmitted packets in one of three ways. The link is frequency hopping in each case.
8100	MT8852 BDR Power Control Test	The power control test performs power measurement cycles on the EUT output, if the EUT supports power control, at each of the defined frequencies (LOW, MEDIUM and HIGH).
8150	MT8852 BDR Initial Carrier Test	The initial carrier test performs a frequency accuracy test on a DH1 pseudo random data packet.
8200	MT8852 BDR Carrier Drift Test	The carrier drift test performs a frequency drift measurement over the length of the packet received.
8250	MT8852 BDR Single Slot Sensitivity Test	For a single slot sensitivity measurement the MT8850A/52A/52B transmits DH1 packetswith a pseudo random payload (PRBS 9) to the EUT at a minimum power level.
8300	MT8852 BDR Multi Slot Sensitivity Test	For a multi slot sensitivity measurement the MT8850A/52A/52B transmits the longest supported packet type as reported by the EUT during link set up with a pseudo random payload (PRBS 9) to the EUT at a minimum power level.
8350	MT8852 BDR Modulation Index Test	This test measures the modulation characteristics on the EUT output for each of the frequency ranges selected (LOW, MEDIUM and HIGH).
8400	MT8852 BDR Max Input Power Test	For the EUT maximum input power test the MT8850A/52A/52B transmits a pseudo random payload (PRBS 9) DH1 data packet to the EUT so that the EUT receives the signal at a power level of -20 dBm.
8605	MT8852 EDR Relative Transmit Power Test	
8610	MT8852 EDR Carrier Frequency Stability and Modulation Test	
8615	MT8852 EDR Differential Phase Encoding Test	
8620	MT8852 EDR Sensitivity Test	
8625	MT8852 EDR BER Floor Sensitivity Test	
8630	MT8852 EDR Maximum Input Power Test	
8805	MT8852 BLE Output Power Test	

8810	MT8852 BLE Initial Carrier and Drift Test	
8815	MT8852 BLE Modulation Index Test	
8820	MT8852 BLE Sensitivity Test	
8825	MT8852 BLE PER Integrity	
8830	MT8852 BLE Input Power Sensitivity Test	
9600	Suspend verify	
9800	NFC Write to Tag	
9850	Write App Mode Code	
9870	Write App Mode UI	
9875	Write Advertising Data	
9950	APP Mode Boot Up Test	

Appendix C. MPBT Error Code

Item	Err	Description	Remarks
0000	01	Connect DUT failed.	
	02	For write BT address related errors.	
	03	Write/Read MP calibration flag failed.	
	04	Failure to set the control board.	
	05	Send command Enter Device Under Test Mode failed.	
	06	Pre-write EEPROM function failed.	
	07	Send reset command failed after write / patch EEPROM.	
	08	MSF inconsistent with DUT version.	
	09	Set power mode failed.	
	10	Write BT Address Failed	
	13	Write EEPROM Failed	
	17	E2PROM_I2C_Setting failed.	
	20	DUT's BT Address is Inconsistent with input BT Address	
	21	DUT's BT Address is Inconsistent with BT Address range	
	23	Read XMem failed	
	30	Set EEPROM checksum failed.	
	33	Read RF register failed	
	40	Init GPIO P31 state failed.	
	50	MP2.1 does not support older MSF	
	51	Initial parameter error	
	70	Create new log file error	
	71	Open existed log file error	
	79	Initial USB sound card error	
	89	Control MT8852 failed.	
	90	Re-connect DUT	
	96	Stop test	
	97	The program can't be expected error.	
	99	Control Victoria error.	
0005	00	RAM read/write 0x00 compare failed	
	20	DUT's BT Address is Inconsistent with input BT Address	
0008	00	Buck out compare failed	
	01	Send command failed.	
	97	Programming error	
	98	Input MSF test items and parameters error	
	99	Control VICTORIA error	

0009	00	Buck out compare failed	
	01	Send command failed.	
	97	Programming error	
	98	Input MSF test items and parameters error	
	99	Control VICTORIA error	
0015	00	RAM read/write 0x00 compare failed	
	01	Read RAM command timeout	
	97	Programming error	
	98	Input MSF test items and parameters error	
	99	Control VICTORIA error	
0020	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	09	Boot mode change To IBDK mode failed.	
	20	Write flash command failed.	
	21	Verify flash I/O failed.	
	24	Verify flash data compare failed.	
	25	Flash ID incorrect.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
0040	00	RAM read/write 0x00 compare failed	
	01	Send command failed.	
	70	Switch BOOT mode failed	
	80	Switch IBDK mode failed	
	85	Confirm IBDK mode failed	
	97	Programming error	
	98	Input MSF test items and parameters error	
	99	Control VICTORIA error	
0050	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	20	System power too lower.	
	21	Battery SAR value too lower.	
	22	Adapter in detect failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
	Extended	:20 – System power test fail :21 – Battery test fail :22 – Adapter in detect failed	
0055	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	20	System power too lower.	
	21	Battery SAR value too lower.	
	23	Boost voltage too lower.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
	Extended	:20 – System power test fail :21 – Battery test fail :23 – Boost test fail	

0057	00	Limitation error	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
0060	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	98	Input MSF test items and parameters error	
0070	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write eFlash/eeprom command failed.	
	05	eFlash format failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
0100	00	Big Number result error	
	01	Send command failed.	
	98	Input MSF test items and parameters error	
0250	00	Control Mode GPIO Test Failed.	
	01	Send command failed.	
	98	Input MSF test items and parameters error	
0255	00	Verify EEPROM failed	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
0500	00	Verify EEPROM failed	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
0550	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
560	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
0580	00	EEPROM checksum verify failed.	
	03	Send Read/Write EEPROM command failed.	
	60	Mask EEPROM (address+length) > buffer size.	
	98	Input MSF test items and parameters error	
0590	01	Send command failed.	
	02	Send command timeout.	
	10	Get serial number failed.	
	97	Programming error	
	98	Input MSF test items and parameters error	
0592	01	Send command failed.	
	02	Send command timeout.	

	03	Send Read/Write EEPROM command failed.	
	97	Programming error	
	98	Input MSF test items and parameters error	
0595	03	Send Read/Write EEPROM command failed.	
	10	(*.msf) support 2nd device name setting different with EEPROM Multi Speaker Option	
	98	Input MSF test items and parameters error	
0650	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	10	The Customer Version size is over range.	
	15	The EEPROM extend file format failed.	
	97	Programming error	
	98	Input MSF test items and parameters error	
710	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	10	Get SHA1 data failed.	
	20	Verify SHA1 data different with EEPROM value.	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1025	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	07	PMU SPI data Write and Verify failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1030	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	07	PMU SPI data Write and Verify failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1050	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1100	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1150	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	

	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1160	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1180	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	60	Search out of limit range.	
	96	Cal trim to max counter	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1185	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	60	Search out of limit range.	
	96	Cal trim to max counter	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1200	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	07	PMU SPI data Write and Verify failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1250	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	50	Low Voltage greater then High voltage	
	52	High voltage is lower than Reference voltage or Low voltage is higher than Reference voltage.	
	53	No #1200 test item in MSF	
	55	High or Low voltage is lower than 1.7v	
	07	PMU SPI data Write and Verify failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1300	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	07	PMU SPI data Write and Verify failed.	
	98	Input MSF test items and parameters error	

	99	Control Victoria error.	
1310	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1320	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	60	Search out of limit range.	
	96	Cal trim to max counter	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1350	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	60	Search out of limit range.	
	96	Cal trim to max counter	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1355	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	60	Search out of limit range.	
	96	Cal trim to max counter	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1370	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	60	Search out of limit range.	
	96	Cal trim to max counter	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1375	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	60	Search out of limit range.	
	96	Cal trim to max counter	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	

1400	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1410	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1450	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1500	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	30	GPIO control failed	
	50	Upper SAR value is less than or equal to lower SAR value.	
	51	Battery SAR slope over range.	
	52	SAR value maximum – SAR value minimum >10.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1550	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	50	Upper SAR value is less than or equal to lower SAR value.	
	52	SAR value maximum – SAR value minimum >10.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1600	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1650	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
1800	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	

	99	Control Victoria error.	
2025	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	98	Input MSF test items and parameters error	
2050	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
2080	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	07	Control RF instrument failed.	
	20	Tx power to lower.	
	88	Init value over range (0x1F)	
	98	Input MSF test items and parameters error	
2081	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	20	GU receive total packet count is zero.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
2100	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	07	Control RF instrument failed.	
	88	Adjust the initial value of range.	
	89	EEPROM value and Init trim value is not match.	
	98	Input MSF test items and parameters error	
2101	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	88	Adjust the initial value of range.	
	89	EEPROM value and Init trim value is not match.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
2110		Please refer to test item 2100.	
2111		Please refer to test item 2101.	
2120		Please refer to test item 2100.	
2121		Please refer to test item 2101.	
2130		Please refer to test item 2100.	
2131		Please refer to test item 2101.	
2140		Please refer to test item 2100.	
2141		Please refer to test item 2101.	
2180	00	Limitation error.	
	01	Send command failed.	
	03	end Read/Write EEPROM command failed.	

	50	Init power smaller than threshold	
	52	Invalid Tx VGA curve	
	97	Program Error	
	98	Input MSF test items and parameters error	
2200	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
2201	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
2301	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
2525	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
2550	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
2580	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	09	INSTR Get TX Freq offset failed.	
	60	Search out of limit range.	
	96	Cal trim to max counter	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
2581	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	60	Search out of limit range.	
	80	GU measure Frequency offset failed.	
	96	Cal trim to max counter	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
2640	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	

	03	Send Read/Write EEPROM command failed.	
	09	INSTR Get TX Power failed.	
	60	Search out of limit range.	
	96	Cal trim to max counter	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
2641	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	60	Search out of limit range.	
	80	GU measure RF RSSI failed.	
	96	Cal trim to max counter	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
6050	01	Send command failed.	
	02	Send command timeout.	
	98	Input MSF test items and parameters error	
6250	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	20	Laser power and adjust the values obtained different direction.	
	21	Slope value is zero.	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control PM100 error.	
7140	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	30	Tone Test failed	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7145	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	30	Tone Test failed	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7150	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	04	Failure to set the control board.	
	30	Set dut L/R channel failed.	
	35	Tone Test failed	

	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7155	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	04	Failure to set the control board.	
	30	Tone Test failed	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7160		Please refer to test item 7155.	
7165		Please refer to test item 7155.	
7170		Please refer to test item 7155.	
7172		Please refer to test item 7155.	
7175		Please refer to test item 7155.	
7177		Please refer to test item 7155.	
7180		Please refer to test item 7155.	
7185		Please refer to test item 7155.	
7200		Please refer to test item 7155.	
7202		Please refer to test item 7155.	
7205		Please refer to test item 7155.	
7207		Please refer to test item 7155.	
7250	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7255	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7260	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	04	Victoria control failed	
	30	Tone Test failed	
	90	Re connect DUT failed	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7262	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	04	Victoria control failed	

	30	Tone Test failed	
	90	Re connect DUT failed	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7270	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	04	Victoria control failed	
	90	Re connect DUT failed	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7300	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7400	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7450	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	04	Victoria control failed	
	40	Init GPIO P31 state failed.	
	90	Reconnect DUT failed	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7455	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	04	Victoria control failed	
	40	Init GPIO P31 state failed.	
	90	Reconnect DUT failed	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7460	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	

	40	Init GPIO P31 state failed.	
	90	Reconnect DUT failed	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7462	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	40	Init GPIO P31 state failed.	
	90	Reconnect DUT failed	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7464	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	40	Init GPIO P31 state failed.	
	90	Reconnect DUT failed	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7466	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	40	Init GPIO P31 state failed.	
	90	Reconnect DUT failed	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7467	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	40	Init GPIO P31 state failed.	
	90	Reconnect DUT failed	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7468	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	03	Send Read/Write EEPROM command failed.	
	40	Init GPIO P31 state failed.	
	90	Reconnect DUT failed	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control sound card failed.	
7800	01	Send command failed.	
	02	Send command timeout.	

	98	Input MSF test items and parameters error	
7850	00	Limitation error.	
	01	Send command failed.	
	02	Send command timeout.	
	98	Input MSF test items and parameters error	
7700	00	N4010A testing.	
	01	Send command to MT885x failed or has lost control of N4010A.	
	03	Read BT ADDRESS at EEPROM error	
	05	N4010A test result data invalid.	
	07	Device can't be test mode	
	89	Device can't be connected and test with N4010A.	
	98	Input MSF test items and parameters error	
7705		N4010A BDR Output Power Test Fail	
7710		N4010A BDR Power Control Test Fail	
7715		N4010A BDR Initial Carrier Test Fail	
7720		N4010A BDR Carrier Drift Test Fail	
7725		N4010A BDR Single Slot Sensitivity Test Fail	
7730		N4010A BDR Multi Slot Sensitivity Test Fail	
7735		N4010A BDR Modulation Index Test Fail	
7740		N4010A BDR Max Input Power Test Fail	
7805		N4010A EDR Relative Transmit Power Test Fail	
7810		N4010A EDR Carrier Frequency Stability and Modulation Test Fail	
7815		N4010A EDR Differential Phase Encoding Test Fail	
7820		N4010A EDR Sensitivity Test Fail	
7825		N4010A EDR BER Floor Sensitivity Test Fail	
7830		N4010A EDR Maximum Input Power Test Fail	
7835		N4010A BLE Output Power Test Fail	
8000	00	MT885x testing.	
	01	Send command to MT885x failed or has lost control of MT885x.	
	03	Read BT ADDRESS at EEPROM error	
	05	MT885x test result data invalid.	
	07	Device can't be test mode	
	89	Device can't be connected and test with MT8852.	
	98	Input MSF test items and parameters error	
8050		MT8852 BDR Output Power Test Fail	
8100		MT8852 BDR Power Control Test Fail	
8150		MT8852 BDR Initial Carrier Test Fail	
8200		MT8852 BDR Carrier Drift Test Fail	
8250		MT8852 BDR Single Slot Sensitivity Test Fail	
8300		MT8852 BDR Multi Slot Sensitivity Test Fail	
8350		MT8852 BDR Modulation Index Test Fail	
8400		MT8852 BDR Max Input Power Test Fail	
8605		MT8852 EDR Relative Transmit Power Test Fail	
8610		MT8852 EDR Carrier Frequency Stability and Modulation Test Fail	
8615		MT8852 EDR Differential Phase Encoding Test Fail	
8620		MT8852 EDR Sensitivity Test Fail	
8625		MT8852 EDR BER Floor Sensitivity Test Fail	
8630		MT8852 EDR Maximum Input Power Test Fail	
8805		MT8852 BLE Output Power Test Fail	
8810		MT8852 BLE Initial Carrier and Drift Test Fail	
8815		MT8852 BLE Modulation Index Test Fail	
8820		MT8852 BLE Sensitivity Test Fail	

8825		MT8852 BLE PER Integrity Fail	
8830		MT8852 BLE Input Power Sensitivity Test Fail	
9600	00	Limitation Error.	
	01	DUT send command Error	
	04	Victoria control Fail (SAR_DET / MFB / GetVoltage)	
	10	Re-open DUT COM port error	
	20	Re-connect DUT error	
	97	Program Error	
	98	Get config data from .msf error	
9800	00	NFC write Tag fail	
	05	NFC update Tag CC block fail	
	08	NFC dump Tag Data Area Size (DAS) fail	
	10	NFC detect Tag timeout	
	20	NFC check CC block fail	
	21	NFC BT Address verify fail	
	25	NFC Device Name verify fail	
	30	NFC generate content fail	
	50	NFC get UID fail	
	98	Msf parameters error	
9850	00	Write APP flash code fail	
	01	DUT send command Error	
	20	Write flash command failed.	
	24	Verify flash data compare failed.	
	26	Set memory type failed.	
	27	Lock and Erase flash failed.	
	98	Input MSF test items and parameters error	
9870	00	Write APP flash code fail	
	01	DUT send command Error	
	20	Write flash command failed.	
	24	Verify flash data compare failed.	
	26	Set memory type failed.	
	27	Lock and Erase flash failed.	
	28	UI code didn't match Flash code version.	
	98	Input MSF test items and parameters error	
9875	00	Write Advertising Data failed	
	01	DUT send command Error	
	03	Send Read/Write EEPROM command failed.	
	10	Read Device Name from device failed	
	15	Write Advertising Data to EERPOM failed.	
	25	MSF file input Advertising Data fromat error.	
	97	Program Error	
	98	Input MSF test items and parameters error	
9950	00	Boot up test fail	
	01	DUT send command Error	
	03	Send Read/Write EEPROM command failed.	
	05	Key word conversion failed from MSF file.	
	97	Program Error	
	98	Input MSF test items and parameters error	
	99	Control Victoria error.	
9999	03	Read BT ADDRESS at EEPROM error	
	07	Device can't be test mode	
	97	Program Error	

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