



SM2258XT B17 NAND Flash F/W & ISP Release Information – R0817B0

Introduction

This purpose of this document is to provide release information on the SM22X family F/W and ISP release information

Fix Coverage

- stands for the “new fix” or “new support” in the category
- stands for the “no-update” in the category

<input checked="" type="checkbox"/> MP Tool	<input checked="" type="checkbox"/> Controller ISP
<input type="checkbox"/> Yield Issue <input type="checkbox"/> Flash Issue <input checked="" type="checkbox"/> 3D NAND Flash <ul style="list-style-type: none"> <input type="checkbox"/> Samsung Flash <input type="checkbox"/> Toshiba/Sandisk Flash <input checked="" type="checkbox"/> Intel/Micron Flash <input type="checkbox"/> Hynix Flash <input type="checkbox"/> Others <input type="checkbox"/> MP Tool Bug Fix <input checked="" type="checkbox"/> MP Tool New Function <input checked="" type="checkbox"/> Feature Enhance	<input type="checkbox"/> Yield Issue <input type="checkbox"/> Flash Issue <input checked="" type="checkbox"/> 3D NAND Flash <ul style="list-style-type: none"> <input type="checkbox"/> Samsung Flash <input type="checkbox"/> Toshiba/Sandisk Flash <input checked="" type="checkbox"/> Intel/Micron Flash <input type="checkbox"/> Hynix Flash <input type="checkbox"/> Others <input checked="" type="checkbox"/> ISP Bug Fix <input checked="" type="checkbox"/> Feature Enhance



ISP Revision History

Package	ISP version	MP Tool Version	RDT version	Note
R0828A	R0817B0	R0825A	R0821A0	<p>ISP:</p> <ol style="list-style-type: none"> 1. Modify cache read enable option. 2. Reduce flash clock when thermal throttling. 3. Improve GC performance during flush H2f to avoid GC over time limit under large card mode. 4. Fix Ulink script 6.0 failed at PwrMgt and Sanitize item. 5. Modified thermal throttling issue when fixed temperature is set. 6. For the specific customer's AES requirement add the B16 and B17 batch file. <p>RDT:</p> <ol style="list-style-type: none"> 1. Sync DLL auto lock issue with ISP 2. Modify rebuSysBlk(). 3. Set EDO mode before reset cpu for IM Flash. 4. Modify B16/B17 Max active die to 16. 5. Fix a bug which issue 0xFD CMD to invalid CE lead to hanging <p>MPTool:</p> <ol style="list-style-type: none"> 1. Modify Vendor Specific string to fill one 0x20 for one word. 2. Add WWN/Model Name update at SNChanger Tool. 3. Add "MPTool showing Diff Levels & Colors' request" 4. Add special Badblock counts display rule. 5. Modify checksum mismatch issue at enable or disable pretest procedure.
R0605A	R0522A0	R0601A	R0518A0	<p>ISP:</p> <ol style="list-style-type: none"> 1. Modify setClock for DLL value register meta-stable issue. 2. Adjust first read issue work-around flow. 3. Fine tune retry flow for B17 at high temperature 4. Fix B17 1TB UGSD Issue. 5. Fix B16 and B17 Issue which random data is program to GCDes Block when move data stage. <p>MPTool:</p> <ol style="list-style-type: none"> 1. Add "Pre-check good block quantity" option at [RDT Test Setting] dialog. 2. Add "RDT Fail: Capacity is not enough" error parsing. 3. Auto-enumerate port in MPTool upon drive insertion. ([OPTION] : AutoScan) 4. Assign default GcStep1-3 when user didn't enable GcStep checkbox. 5. Show warning message when bypass distinguish grade enable. 6. Add IDEMA 1000GB and 1024GB support.
R0402A	R0327B0	R0330A	R0206A0	ISP:



				<ol style="list-style-type: none"> 1. Fix dummy write <ol style="list-style-type: none"> A. Fix NCQ command fail. B. Empty FBlock when H2f table ecc fail. C. Return trim status when dummy write. 2. Write 768K to enter GC. 3. Fix TranAddress bug with PhyCE are not continuous. 4. Modified SMART customized ID length for transcend requirement. 5. Add CID table at offset 0x35 for SMART model name 6. Fix FFU reset cpu failed. 7. Check shallow erase value before set. 8. Support B17 UB221 \ 111. 9. Add default read before table retry. 10. Add table retry+soft decode. 11. Fix DLL lock to 0x01 issue. 12. Fix read count bug. <p>MPtool:</p> <ol style="list-style-type: none"> 1. Modify new MPISP Tag. 2. Modify that select "Check & Keep RDT" option and do pretest then also need to pre-check capacity enough or not? 3. Add new errorcode 0x09/0x0A for _SMIPtestGenDiffAddrTable(). 4. Always disable Internal/External interleave way setting.
R0223A	R0123A0	R0124A	R0130A0	<p>ISP</p> <ol style="list-style-type: none"> 1. Enlarge command queue depth for glntlvWay>4 2. Erase wait status if glntlvWay==8 3. Power on ExtraGC will finish gc state when spare only have 2 block. 4. Distinguish read count threshold between SLC and non-SLC. 5. Fix read scrub issue which data stop count is not restored. 6. Fix bug of DDR200 return from power mode with wrong flash mode. <p>MPTool:</p> <ol style="list-style-type: none"> 1. Display TranADJ timeout case, then show failed CE location. 2. Change "START" button UI to be the same as "Q0918A" : "Start\r\n(Space Key)". 3. Show "Idle time for background GC" option. 4. Show "Max Data Size for GC (GB)" option. 5. Microcode.flu added file size need to append "one plane page size" and IDTable Word234 and 235 also need to assign this value. 6. Add "Delay 30 minutes to read check" option at [RDT Test Setting] dialog. 7. Just display flash part name that package can support. 8. Create virtual FlashID.bin when click "Gen Linux Bin with All Parameter" or "Gen FFU File"
Q1124A	Q1115A0	Q1121A	Q1116A0	ISP



				1 First formal release to support Intel/Micron B17.
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Note:

1. F/W and ISP update is recommended.
2. History # is denoted by "Version-Date" .

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