![SiliconMotion logo]

SM2256 Flash F/W & ISP Release Information

Introduction
This purpose of this document is to provide release information on the SM2256 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

■ **Tester FW**	■ **Controller ISP**
□ **Yield Issue**	■ **Yield Issue**
■ **Flash Issue**	■ **Flash Issue**
□ SLC Flash	□ SLC Flash
□ Samsung Flash	□ Samsung Flash
□ Toshiba/Sandisk Flash	□ Toshiba/Sandisk Flash
□ Intel/Micron Flash	□ Intel/Micron Flash
□ Hynix Flash	□ Hynix Flash
□ Others	□ Others
□ MLC Flash	□ MLC Flash
□ Samsung Flash	□ Samsung Flash
□ Toshiba/Sandisk Flash	□ Toshiba/Sandisk Flash
□ Intel/Micron Flash	□ Intel/Micron Flash
□ Hynix Flash	□ Hynix Flash
■ TLC Flash	■ TLC Flash
■ Samsung Flash	■ Samsung Flash
■ Toshiba/Sandisk Flash	■ Toshiba/Sandisk Flash
□ Intel/Micron Flash	□ Intel/Micron Flash
■ Hynix Flash	■ Hynix Flash
□ Others	□ Others
□ **Compatibility issue**	□ **Compatibility issue**
□ **Tester Bug Fix**	■ **ISP Bug Fix**
■ **AP Bug Fix & New Function**	□ **Feature Enhance**
■ **Feature Enhance**	

8/12/2015

Version	MP Tool Version	ISP Version	Note
O0803A	**O0811A**	**O0803A**	1. **Fix the issue of error map handling when doing unsafe power cycle.** 2. **Fix the issue of changing die command before accessing flash.** 3. **Fix the issue that SLC spare block is risky to run out.** 4. **Add the mechanism to avoid read ECC fail of next time.** 5. **Fix the issue of FW hang up when doing SPOR test.**
O0626A	O0624A	O0626A	1. Fix of the issue that Slumber current is higher than Partial. 2. Fix of the issue of download ISP for Hynix 16nm 128Gb TLC. 3. Enable support of manufacturing burn-in test (RDT) for production. 4. Fixes of SMART issues for erase count and temperature. 5. Fix of EOB fail handling in rebuild link flow.
O0521A	O0506A	O0521A	1. Fixes of CDM and ATTO test FW hang up issues. 2. Fixes of S4 and SPOR issues. 3. Disable SSC function. 4. Enable Flash support of Samsung 16nm 128Gb TLC.
O0414C	O0212C	O0414C	1. Enable SSC (at SATA interface). 2. Disable write UNC command. 3. Introduce program fail handling. 4. Bug fix of read retry flow on Samsung 19nm 128Gb TLC. 5. Enable UART interrupt to dump error/event log when FW hang up.
O0306	O0127C	O0226B	1. Bug fixes of SPOR. 2. Improvement of timeout issue of WHCK test. 3. Enhancement on RAID function. 4. Support of Samsung 19nm TLC, Toshiba A19nm TLC, and Hynix 16nm TLC. 5. Note that when used with SM2256AB chip, it's not required to initialize SPI EEPROM (via MP tool setting).
N1230A SLC Cache	N1128B	N1230A	FW 1. Add "initial RAID engine" function. 2. Fixed a mistake in the function of checking ECC fail

			3. Modify "restore RAID parity flow" to fix power cycle issue when Map ECC fails.
			4. LDPC mode is modified to be initialized by MPTool.
			SW
			1. For Hynix 16nm TLC, ignore checking the second byte of Flash ID.
N1128C	N1117D	N1128C	1. Support Samsung 19nm K9ADG TLC
			2. Support Toshiba A19 TLC
			3. Support Hynix H27QFG 16nm TLC
			4. Package of NAND flash which is supported – # of CEs is equal to # of dies

Note:

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

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