

SM2260 L06B F/W Release Note

FW Package	MP Tool Version	ISP Version	Note
C2.3.15	V3.2.25	C2.3.15	<ul style="list-style-type: none"> ● FW Changes <ul style="list-style-type: none"> - Enable support of FUA and add option for "Bypass FUA". Enabled by default. - Fix DRAM bit flip issue in low temperature (-10'C). - Fix for L1 resume - Support Enable/Disable Pure MLC feature (MLC program for whole drive) in LightSwitch (disabled by default) - Modify VDT23 level from 2.89V to 2.3V. ● MP Tool Changes <ul style="list-style-type: none"> - Enable DRAM Low temperature setting. - Add option "BOKBCh=1 of SYSTEM" to update RDT parsing rule.(TestLoop+3) - Add "Device NAND Info" button to display NAND CE/CH info - Update RDT parsing rule.(StartLoop from 1 to 0) - Add PowerOff/PowerOn buttons for tester to poweron/off devices. - Add "Check RDT Result" button to check that running mode is RDT.("RDT=3" of "SYSTEM"). - Add to re-do port mapping flow when clicking "Power On" button. - Add "MultiDevice=2" of [SYSTEM] to power off the devices after executing MP. - Update LightSwitch to V1.2.2
C2.3.13	V3.2.15	C2.3.13	<ul style="list-style-type: none"> ● FW Changes <ul style="list-style-type: none"> - Fix for reboot timeout – reduce erase time of empty blocks when reboot - Fix of some corner cases of spare block becoming 0 in GC - Fix for some ULink test failures (v6.0) - Disable OPROM (OPROM v208) by default in Lightswitch. ● MP Tool Changes <ul style="list-style-type: none"> - Fix of programming ISP - Add options of TrainADJ, PretestLS, Flash Management item - Update SMI NVMe drive for MP tool to v1.4.24
C2.3.7	V3.2.13	C2.3.7	<ul style="list-style-type: none"> ● FW Changes <ul style="list-style-type: none"> - Adjust TrainAdj max error bit in MPISP. - Enhance PCIe error handling flow. - Enable ATA security to support password and authentication. - Enable Flash I/O 1.2V and 1.8V support (configured by MP Tool) ● MP Tool Changes <ul style="list-style-type: none"> - Add TrainAdj configuration, for user to input ECC threshold and bypass mode (don't care TrainAdj result) - Enable option of DRAM trained window check - Add display of error count info, RDT setting info, and bad block table in "RDT Result" page.
C2.2.3	V3.2.5	C2.2.3	<ul style="list-style-type: none"> ● Enable Samsung DRAM settings for 128/256/512/1024GB SSD

			<p>configurations.</p> <ul style="list-style-type: none"> ● Limit the number of active program/erase dies. ● Fine tune thermal throttling settings to limit PS1 performance degradation within 20% (compared to PS0). ● Use 4B Read in Get Feature to avoid NAND compatibility issue (some previous version not allowing 1B Read). ● Separate the PFail Switch from VDT120. ● Enhance RDT features in MP Tool.
C2.1.9	V3.2.3	C2.1.9	<ul style="list-style-type: none"> ● Support 2LUNs/CE for 1TB drive configuration ● Enable MIRA DRAM setting. ● Support to erase previous INFO blocks. ● MP V3.2.3 enable the following features <ul style="list-style-type: none"> - Add RDT Kick Off Command after load RDT FW - Update SMI driver to "WinDrv2260_142000_20161117.zip" - Support 8P Tester (8P HW Tester is not released yet, available in Jan.'17) - Add Date (YY/MM/DD) Mask of serial number - Add "Erase Previous Info Blocks" option in Pretest setting (("EraseInfoBlk" of "OPTION" in System.ini)) - Add DRAM vendor MIRA - Add to save BarCode list to \\LogFile\BarCode.txt
C2.1.6	V3.2.0	C2.1.6	<ul style="list-style-type: none"> ● Rollback to use Set Feature to switch between SLC and TLC modes since some NAND parts may not be capable of 0xDA/0xDF commands. ● Add 2-steps PS4 feature. The number of PS3 stay time in LightSwitch is used to toggle this feature (e.g. number != 0 to enable; number = 0 to disable). ● Update MPTool to support 2x 4-port tester (cascaded as 8-port tester). ● Enable NAND ODT features. ● Disable L0s support in ASPM by default (configurable in MPTool). ● Bug fixes for 2TB drive and enhance error recovery statistics for 2TB configuration. ● Update SMI drive to "WinDrv2260_141800_20161024.zip". ● Update EZTool to "EzTools_2260_Micron_P1114A_V1.2.12".
C2.1.3	V3.1.3	C2.1.3	<ul style="list-style-type: none"> ● Snap Read enablement, code optimization, and Flash command process flow optimization for random performance enhancement (mainly for 1024GB). ● Enable 2TB support. ● Enable P-Fail feature (needs PCB power circuit to support). ● Enhance sequential write performance (especially 128/256GB) by changing ultra-block RAID to super-block, cache program, and DA/DF commands. Due to higher RAID overhead, the "binary capacity" would be not achievable. ● Add features of MPTool, including new logs by date and bar code scan. ● Add configurability of APST in MPTool, and default is APST disabled.
C2.0.8	V3.1.2	C2.0.8	<ul style="list-style-type: none"> ● Remove IEEE in Identify Controller and EUI64 in Identify Namespace. ● Update NGUID for Win10 compatibility issue. ● Shrink write cache size to 3MB. ● Disable setup PERST GPIO20 interrupt. ● Upgrade MP Tool to V3.1.2 and driver, "WinDrv2260_141700_20160921.zip".
C2.0.5	V3.1.0	C2.0.5	<ul style="list-style-type: none"> ● Enable "Whole Drive SLC Mode", which is configurable via MP Tool. ● Bug fixes for PCIe 4-port Tester MFG SW. ● Update MP Tool driver, "WinDrv2260_9941501_20160913.zip".
C2.0.0	V3.0.1	C2.2.0	<ul style="list-style-type: none"> ● Enable Intel L06B.

			<ul style="list-style-type: none">● Update DRAM parameters.● Enable multi-port initialization on 4-port Tester.
C1.0.5	V2.2.2	C1.0.5	<ul style="list-style-type: none">● Initial FW release, including MPTool and EZTool.● Support Micron L06B.

Note:

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

This document is for information only and is subject to change without notice. Silicon Motion, Inc. reserves the right to make changes in the product design without reservation and without notice to its users.