



Silicon Motion, Inc.

SM32X Test Program and ISP Release Note

**SM3257 Test Program and ISP Release Note:**

Release Date	ISP Version	ISP Check Sum	Test AP Version	Description
2010/06/07	SM3257AA 2010-06-07	SM3257AAISP 0x005ABF6E	V2.03.28 V5 10/06/07 build	1. SM3257AAISP support Samsung 32nm TLC bucket00 flash K9ABG08U0A, K9BCG08U1A and K9CDG08U5A
	SM3257AA 2010-06-07	SM3257AAISP-bucket01 0x005A981D		2. SM3257AAISP support Samsung 27nm MLC K9GBG08U0A
				3. SM3257AAISP-bucket01 support Samsung 32nm TLC bucket01 flash K9ABG08U0A, K9BCG08U1A and K9CDG08U5A.
2010/07/02	SM3257AA 2010-07-02	SM3257AAISP 0x005D3C3E	V2.03.29 V3 10/07/02 build	1. SM3257AAISP support Samsung 32nm MLC
		SM3257AAISP-bucket01 0x005D12F0		2. SM3257AAISP support Intel/Micron L74A
				3. SM3257AAISP support Intel/Micron L73A
				4. SM3257AAISP enhance suddenly power cycling protection
				5. SM3257AAISP-bucket01 enhance suddenly power cycling protection
				6. SM3257AAISP support Hynix 26nm MLC.
				7. MP tool fixed device disconnection issue when MP tool initial card.
2010/08/18	SM3257AA 2010-08-09	SM3257AAISP 0x005D3AEF	V2.03.31 V1 10/08/18 build	1. SM3257AAISP, SM3257AAISP-bucket01 and SM3257AAISP-HY32 fixed power cycling issue to cause system block occurs ECC fail.
	SM3257AA 2010-08-16	SM3257AAISP-bucket01 0x005D9003		2. SM3257AAISP, SM3257AAISP-bucket01 and SM3257AAISP-HY32 fixed build link block issue when plug in UFD.
	SM3257AA 2010-08-09	SM3257AAISP-HY32 0x005D8449		3. SM3257AAISP support Hynix 26nm MLC H27UCG8T2MYR.
				4. SM3257AAISP-HY32 support Hynix 32nm TLC H27UBG8M2A.



				<ol style="list-style-type: none"> MP tool fixed update ISO issue (CDROM + Public mode change to Public only mode without do-pretest) . MP tool add QC function which check capacity and used space. MP tool add Multiple Erase all function.
2010/09/23	SM3257AA	SM3257AAISP.bin	V 2.03.31 v13	<ol style="list-style-type: none"> SM3257AAISP fixed Cache read and 2Plane Read to cause burn in fail without mark bad block for Hynix 26nm MLC H27UCG8T2MYR supporting. SM3257AAISP adjust clock rate from 60MHz to 48MHz for Hynix 32nm MLC 16Gbit H27UAG8T2BTR supporting. SM3257AAISP-HY32 fixed 2Plane Read cause burn-in fail issue for Hynix 32nm TLC HY27UBG8M2A. SM3257AAISP-bucket01 fixed Samsung framework, Getstatus, setfeature and clearfeature do endpoint halt for EP0. SM3257AAISP support Micron L74A new flash ID (2C 88 24 49) SM3257AAISP support Micron L72A MT29F16G08CBACA SM3257AAISP support new Led function when MP tool initialization SM3257AAISP support Micron L73A MT29F32G08CBACA with 1CE2Die bonding. MP tool support LED blinking when initial UFD device.
	2010-09-22	0x005E3C38	10/09/08	
	SM3257AA	SM3257AAISP-bucket01.bin		
	2010-09-14	0x005E5DAA		
	SM3257AA	SM3257AAISP-HY32.bin		
	2010-09-22	0x005E24B3		
2010/09/23	SM3257AA	SM3257AAISP.bin	V 2.03.32 v12	<ol style="list-style-type: none"> SM3257AAISP support Micron L72A MT29F16G08CBACA. SM3257AAISP support Intel L72A 29F16G083AME1.
	2010-09-22	0x005E3C38	10/10/15	



	SM3257AA 2010-09-14 SM3257AA 2010-09-22	SM3257AAISP-bucket01.bin 0x005E5DAA SM3257AAISP-HY32.bin 0x005E24B3		<ol style="list-style-type: none"> SM3257AAISP support Samsung 42nm SLC K9F8G08U0A. SM3257AAISP support Samsung 51nm MLC K9LBG08U0M. SM3257AAISP support Intel L74A new flash ID (89 88 24 CB) with 1CE2Die bonding. SM3257AAISP support Micron 34nm SLC MT29F32G08AFABA MP tool add FDD only function supporting MP tool Fixed MAC OS dismount device issue MP tool add QC function check disk label with all eleven characters.
2010/11/03	SM3257AA 2010-11-02 SM3257AA 2010-11-02 SM3257AA 2010-11-02	SM3257AAISP.bin 0x005EAD3A SM3257AAISP-bucket01.bin 0x005F0CDF SM3257AAISP-HY32.bin 0x005E9347	V 2.03.33 v1 10/11/02	<ol style="list-style-type: none"> SM3257AAISP support Hynix 32nm MLC H27UEG8YEA and H27UDG8V5A. SM3257AAISP fixed four die build link table issue when suddenly power cycling testing. MP tool fixed serial number issue with production date update. MP tool fixed show much bad block issue with non-initial card. MP tool fixed QC format issue. MP tool fixed QC check used space issue.
2010/11/22	SM3257AA 2010-11-18 SM3257AA 2010-11-02 SM3257AA 2010-11-18	SM3257AAISP.bin 0x005E9C5F SM3257AAISP-bucket01.bin 0x005F0CDF SM3257AAISP-HY32.bin 0x005E8599	V 2.03.34v12 10/11/22	<ol style="list-style-type: none"> SM3257AAISP support Intel L73A JS29F32G08AAME1 1CE2Die bonding (Flash ID: 89 88 05 CA) SM3257AAISP support Samsung 27nm MLC K9HDG08U1A SM3257AAISP support Intel L72A 29F16G08AAME1. SM3257AAISP support Samsung 42nm MLC K9PDG08U5D 16GB ULGA.



				<ol style="list-style-type: none"> SM3257AAISP fixed Hynix 32nm MLC, 26nm MLC and 32nm TLC write performance faster than read performance when WINSAT testing. MP tool add function reset hub with auto-handle. MP tool fixed QC check disk label issue with FAT32.
2010/12/10	SM3257AA 2010-12-01 SM3257AA 2010-12-01 SM3257AA 2010-12-01	SM3257AAISP.bin 0x005EAADB SM3257AAISP-bucket01.bin 0x005F0B7F SM3257AAISP-HY32.bin 0x005E91E7	V 2.03.35 v4 10/12/07	<ol style="list-style-type: none"> SM3257AAISP support Samsung 27nm MLC K9HGD08U1A SM3257AAISP fixed enable watch dog cause USB disconnection issue when high-low temperature swing test SM3257AAISP support Toshiba 24nm MLC TC58NVG6D2GTA00. SM3257AAISP support SanDisk 24nm MLC SDTNOQAHHER - 008G SM3257AAISP support Samsung 32nm MLC K9HCG08U2E SM3257AAISP fixed enable Cache Read and Two Plane Read Cause “占容量” issue for Samsung 27nm MLC K9GBG08U0A supporting. MP tool fixed QC function without erase issue for ISP verifies. MP tool fixed Auto handler with Ethernet function issue.
2011/01/06	SM3257AA 2010-12-30 SM3257AA 2010-12-30 SM3257AA	SM3257AAISP.bin 0x005EE61C SM3257AAISP-bucket01.bin 0x005F43D6 SM3257AAISP-HY32.bin	V 2.03.36 v1 11/01/06	<ol style="list-style-type: none"> SM3257AAISP modify cross die function process to fixed Samsung 35nm MLC K9PFG08U5M burn in issue. SM3257AAISP add check VDT before build link table to fixed occupied capacity of UFD issue. SM3257AAISP support Hynix 26nm MLC HY27UBG8T2BTR.



	2010-12-30	0x005EC37B		<ol style="list-style-type: none"> MP tool add QC debug option. MP tool support Static Size function.
2011/01/31	SM3257AA 2010-01-20 SM3257AA 2010-12-30 SM3257AA 2010-12-30	SM3257AAISP.bin 0x005EE1F0 SM3257AAISP-bucket01.bin 0x005F43D6 SM3257AAISP-HY32.bin 0x005EC37B	V 2.03.36 v9 11/01/27	<ol style="list-style-type: none"> SM3257AAISP support Toshiba 24nm MLC TC58NVG6D2GTA00. SM3257AAISP support SanDisk 24nm MLC SDTNOQAHHER-008G and SDTNPMASHM-008G. SM3257AAISP modify R/W clock rate from 60MHz to 80MHz for Toshiba/SanDisk 24nm MLC supporting. MP tool add external execute file to call function with tool initial and destroy. MP tool add external option to bypass check USB 2.0. MP tool add function which support two current limit control board.
2011/03/03	SM3257AA 2011-01-20 SM3257AA 2010-12-30 SM3257AA 2010-12-30	SM3257AAISP.bin 0x005EE1F0 SM3257AAISP-bucket01.bin 0x005F43D6 SM3257AAISP-HY32.bin 0x005EC37B	V 2.03.37 v4 11/03/03	<ol style="list-style-type: none"> SM3257AAISP support Toshiba 43nm MLC TH58NVG8D2ELA89. SM3257AAISP support Toshiba 32nm MLC TH58NVG8D2FLA89. MP tool add function for auto-Handler HT3315 connect and agent used.
2011/03/23	SM3257AA 2011-03-10 SM3257AA 2010-12-30 SM3257AA	SM3257AAISP.bin 0x005EDD13 SM3257AAISP-bucket01.bin 0x005F43D6 SM3257AAISP-HY32.bin	V 2.03.37 v13 11/03/23	<ol style="list-style-type: none"> SM3257AAISP modify set register data to default value after retry command correct for Hynix 26nm MLC supporting. SM3257AA ISP support Samsung 32nm SLC K9KBG08U1M. MP tool add two encrypt buffer to match Korea customer request. MP tool add external option for customer to do original format



	2010-12-30	0x005EC37B		FAT32. 5. MP tool fixed read flash ID show card mode error issue.
2011/04/26	SM3257AA	SM3257AAISP.bin 0x 00605EF1 SM3257AAISP-bucket01.bin 0x 005EEEF9 SM3257AAISP-HY32.bin 0x 005E6181 SM3257AAISP-TS.BIN 0x 005F9069	V2.03.38 v5 11/04/19 Build	1. Support SanDisk 32nm MLC SDZNNMDHER-08G/016G 2. SM3257AAISP Update the Read-Retry Table for SanDisk & Toshiba 24nm MLC 3. SM3257AAISP Update the Read-Retry Table for HY 26nm MLC. and support enhanced SLC PGM for ISP and system blocks. 4. SM3257AAISP fix Build Link Table for 5V normal power cycling issue. 5. SM3257AAISP fix Strong Page A&AB Group Table issue. 6. Pretest modifies SanDisk 24nm 64Gb failed on block 0 is bad block issue. 7. MP added "Fixed Capacity" function. 8. MP tool fixed auto start function fail.
2011/04/29	SM3257AA	SM3257AAISP-HY32.BIN 0x 005FB855	V2.03.38 v5 11/04/19 Build	1. SM3257AAISP-HY32 improve HY32nm TLC read performance (Disable CE delay) 2. Pretest modified the group A/AB table issue.
2011/05/20	SM3257AA 2011-05-17	SM3257AAISP-TS.BIN 0x 005FF7BC SM3257AAISP.BIN	V2.03.40 v11 11/05/18 Build	1. SM3257AAISP-TS updated the latest Read-Retry Table for TSB 24nm MLC 2. SM3257AAISP-TS support SanDisk 24nm MLC read retry



		0x 00608738 SM3257AAISP-HY32.BIN 0x 0060096D		<ol style="list-style-type: none"> SM3257AAISP Improve HY TLC/MLC Read performance with Disable CE delay. Disable cache for Hynix 26nm MLC function caused the burn-in issue. Support Powerchip A1U4GA30GT Support Toshiba 32nm MLC TH58NVG7D2FTA20 MP tool support Flash ID from 4 bytes to 6 bytes. MP Tool added option for copy compare N bytes could compare new bad block number to show fail.
2011/05/30	SM3257AA 2011-05-25	SM3257AAISP.BIN 0x 00609C14	V2.03.41 v2 11/05/27 Build	<ol style="list-style-type: none"> SM3257AAISP.BIN update HY26nm MLC Enhance SLC program procedure fix the burn-in issue.
2011/06/17	SM3257AA 2011-06-14	SM3257AAISP.BIN 0x 0061D46F SM3257AAISP-HY32.BIN 0x 0060D11D SM3257AAISP-TS.BIN 0x 0061814B SM3257AAISP-IM.BIN 0x 0061511B SM3257AAISP-L84.BIN 0061B2AD	V2.03.42 v3 11/06/16 Build	<ol style="list-style-type: none"> SM3257AAISP support IM 20nm MLC -L84 SM3257AAISP updated SCSI Command for latest DTM v1.6 new testing item. SM3257AAISP updated Enhance SLC program procedure for system blocks in Hynix 26nm MLC. SM3257AA Pretest file solved HY32nm 16Gb H27UAG8T2B bad block over setting when original bad blocks over 5 blocks. MP tool fixed correct ISP length for calculating ISP checksum with DialogReadCID dialog. MP tool Resolved "CheckFlashID can't work issue"



2011/06/27	SM3257AA 2011-06-27	SM3257AAISP.BIN 0x 0061EC2D	V2.03.42 v4 11/06/20 Build	<ol style="list-style-type: none"> 1. SM3257AAISP modified HY26nm MLC 64Gb and 32Gb Enhance SLC program procedure 2. MP tool resolved "Open-card cannot work with USB-HDD mode"
2011/07/14	SM3257AA 2011-07-12	SM3257AAISP.BIN 0x 006266E1 SM3257AAISP-TS.BIN 0x 00621AD3	V2.03.43 v1 11/07/12 Build	<ol style="list-style-type: none"> 1. SM3257AAISP solved CDROM boot up issue in HP Note Book. 2. SM3257AAISP solved CDROM Autorun issue in Win2K, when device plug in first. 3. MP tool support exFAT format.
2011/07/25	SM3257AA 2011-07-20	SM3257AAISP.BIN 0x 006264A0 SM3257AAISP-HY32.BIN 0x 006218A0 SM3257AAISP-TS.BIN 0x 006218A0	V2.03.43 v5 11/07/22 Build	<ol style="list-style-type: none"> 1. SM3257AAISP solved the burn-in disconnection issue based on CD-ROM boot up function. 2. Remove Win98 Factory driver. 3. MP tool fixed "check and compare Flash ID 6 bytes problem".
2011/08/08	SM3257AA 2011-08-03	SM3257AAISP.BIN 0x0062D665 SM3257AAISP-HY32.BIN 0x0061CD46 SM3257AAISP-TS.BIN 0x00628B30	V2.03.46 v4 11/08/05 Build	<ol style="list-style-type: none"> 1. SM3257AAISP support special HID command set for Buffalo. 2. SM3257AAISP solved K0712 USB eye pattern cannot test issue.
2011/08/23	SM3257AA 2011-08-17	SM3257AAISP.BIN 0x 0062CEBE	V2.03.47 v2 11/08/17 Build	<ol style="list-style-type: none"> 1. SM3257ISP update SCSI Write 6 command for DTM v1.6. 2. MP tool fix "Show wrong serial number for multiple devices"



		SM3257AAISP-HY32.BIN 0x 0061C8BE SM3257AAISP-TS.BIN 0x 00628829 SM3257AAISP-bucket01.BIN 0x 00638588 SM3257AAISP-L84.BIN		3. MP tool fix "Show time value meets negative value after finish open-card"
2011/09/26	SM3257AA 2011-09-20	SM3257AAISP.BIN 0x 0063024F SM3257AAISP-HY32.BIN 0x 0061FE29 SM3257AAISP-TS.BIN 0x 0062B5A3 SM3257AAISP-bucket01.BIN 0x 0063B867		1. Update the Micron 20nm MLC L84A Strong Page Table 2. SM3257AAISP fixed LED doesn't be turn off in suspend mode. 3. SM3257AAISP fixed Write Protected switch function 4. SM3257AAISP check power stable to fix mark bad during power on 5. MP tool improve scan device speed for in-box driver mode. 6. MP support Windows 7 32-bit. 7. MP support "LED ON/OFF control for SM325X series". 8. MP support "SM3254AE can accept DBF file with flash ID 6 bytes". 9. MP support "Show disk letter status for all open-card procedures. 10. MP resolved "Program error dialog is happened during open-card for factory driver mode" 11. MP resolved "MP Time shows negative value".
2012/03/02	SM3257AA 2012-03-02	SM3257AAISP-Hy20.BIN 00640CCB	V 2.3.66 v9 12/02/23 Build	1. Support Hynix 20nm MLC 64Gb / H27UCG8T2ATR. 2. Support Toshiba TC58NVG4D2HTA00 24nm MLC. 3. Support Sandisk 24nm MLC SDZNPQCHER-032G. 4. Support Toshiba TC58DVG3S0ETA00 /TH58DVG5S0ETAK0 43nm



				<p>SLC.</p> <ol style="list-style-type: none">5. Modify the auto-load path for TS 32nm TLC.6. Support Toshiba 19nm MLC TC58NVG6D2JTA and disable CacheRead mode for 55En/57AA/57En.7. Modify Toshiba 24nm MLC TC58NVG4D2HTA00 flashID to 98D584327256/98D5843272D6.8. Disable Intel & Micron 20nm L84A MLC CacheRead & CacheProgram mode.9. Support Sandisk 24nm MLC SDTNPMAHEM-002G.
2012/04/03	SM3257AA 2012-04-03	SM3257AAISP-HY20.bin 0063A2EC	V 2.3.69 v9 12/03/23 Build	<ol style="list-style-type: none">1. Support Samsung 21nm SDR MLC K9GBG08U0B.2. Update Hynix 20nm H27UCG8T2ATR ISP L03263. Adjust Intel & Micron L84A clock rate from 60MHz to 80MHz.