



**Silicon Motion, Inc.**

## **SM2244/2250AB Test Program/ ISP Release Note**

**SM2244/2250 Test Program and ISP Release Note:**

Release Date	ISP Version	Test AP Version	Description
2011/06/13	AB:2011-06-01	2011-05-30	SM2244/2250AB FW formal release <ul style="list-style-type: none"><li>• New DRAM pretest function for card initialization</li><li>• Solve the 4ch+ 8way interleave card mode issue</li><li>• Solve 512GB card initialization issue</li></ul>
2011/08/15	AB:2011-08-04	2011-08-01	SM2244/2250AB beta release <ul style="list-style-type: none"><li>• Add SMART features</li><li>• To fix the data scramble issue</li><li>• Add security erase feature</li><li>• Pre-reservation area adjustment from 1/16 to 1/2</li><li>• Support S27, S32 MLC and S32 SLC, IM L74A, L62, L63 MLC and M62B</li><li>• Add power count for SSDLifeGuard application</li><li>• Optimize the random write performance in DMA mode</li></ul>
2011/09/15	AB: 2011-09-01	2011-09-07	SM2244/2250 formal release <ul style="list-style-type: none"><li>• Build a code for DRAM access test for customer</li><li>• Reset PHY if the consecutive common reset happens</li><li>• Fix some SataError handle bug.</li><li>• Debug command queue</li><li>• Wait slot ready before issue read/program command</li><li>• Add all RW command(PIO/DMA/NCQ) into command loop in ISR</li></ul>



			<ul style="list-style-type: none"><li>• Separate RW command FIFO and service one type per time</li><li>• Modify DMA transfer setting to fit HW limitation</li><li>• Add S.S. auto-read-retry control when ECC fail during copy</li><li>• Support 1TB SSD</li></ul>																
	AB: 2011-11-01		<div>SM2244/2250 FW change:</div> <ul style="list-style-type: none"><li>• Improve PCMark performance</li><li>• Add read retry function while ECC error occurs</li><li>• Fix the bug of build link process in TRIM</li><li>• Optimize Intel SRT performance for dual disk hybrid sotrage</li><li>• Support quick erase function and revise the GPIO info as below:</li></ul> <table><tr><td>GPIO1.b1</td><td>ISP/ROM code selection</td></tr><tr><td>GPIO1.b0</td><td>Toggle flash selection</td></tr><tr><td>GPIO0.b7</td><td>All flash RB pin wire-or</td></tr><tr><td>GPIO0.b6</td><td>Host access LED (DASP)</td></tr><tr><td>GPIO0.b5</td><td>Quick erase control pin</td></tr><tr><td>GPIO0.b4</td><td>Hardware write protect control pin</td></tr><tr><td>GPIO0.b3</td><td>Quick erase working LED</td></tr><tr><td>GPIO0.b2</td><td>Hardware write protect working LED</td></tr></table>	GPIO1.b1	ISP/ROM code selection	GPIO1.b0	Toggle flash selection	GPIO0.b7	All flash RB pin wire-or	GPIO0.b6	Host access LED (DASP)	GPIO0.b5	Quick erase control pin	GPIO0.b4	Hardware write protect control pin	GPIO0.b3	Quick erase working LED	GPIO0.b2	Hardware write protect working LED
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	AB: 2011-11-07		<div>SM2244/2250 FW change:</div> <ul style="list-style-type: none"><li>• Speed up the power on duration of SATA signature&lt;200us</li><li>• Modified the NCQ error handling flow for compliance test</li></ul>																



			<ul style="list-style-type: none"><li>• Support RDT self test function</li></ul>
2011/11/11	AB: 2011-11-11	2011-11-10	SM2244/2250 FW change: <ul style="list-style-type: none"><li>• Modify the dummy program flow</li><li>• Fix DIPM error handling flow</li><li>• Fix temperature sensor offset problem</li></ul>
2011/11/29	AB/AC: 2011-11-24	2011-11-23	SM2244/2250 FW change <ul style="list-style-type: none"><li>• Fix the DIPM/HIPM CMD error handling flow</li><li>• Fix the thermal sensor offset issue</li><li>• Support RDT self test function</li><li>• Fix the data error due to dummy write flow for TSB24nm MLC</li><li>• Fix the data error from LSB program issue</li><li>• Fix the bug of ATA security password issue</li></ul>
2011/12/05	AB/AC:2011-11-30	2011/11/28	SM2244/2250 FW change <ul style="list-style-type: none"><li>• Fix HPA bug about set max addr and read native max addr</li><li>• Return RW command error under security lock state</li><li>• Fix power cycling in TRIM case</li></ul>