CloudSpeed Gen II

2.5" SATA, SSD Product Line Channel

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Revision History

Date	Revision	Description
February 2017	D	ZH07
June 2016	C	Legal Disclaimer updated and Western Digital branding
April 2016	B	ZH06
February 2016	A	ZH05 – Initial Release

Part Number - SKU	Product Description	Firmware Code Name
SDLF1DAR-480G-1HA2	CloudSpeed Gen II Eco 2.5" 480GB (.6 DWPD)	ZH07RP41
SDLF1DAR-960G-1HA2	CloudSpeed Gen II Eco 2.5" 960GB (.6 DWPD)	ZH07RP91
SDLF1CRR-019T-1HA2	CloudSpeed Gen II Eco 2.5" 1.92TB (.6 DWPD)	ZH07RPA1
SDLF1DAM-400G-1HA2	CloudSpeed Gen II Ultra 2.5" 400GB (1.8 DWPD)	ZH07RE41
SDLF1DAM-800G-1HA2	CloudSpeed Gen II Ultra 2.5" 800GB (1.8 DWPD)	ZH07RE91
SDLF1CRM-016T-1HA2	CloudSpeed Gen II Ultra 2.5" 1.60TB (1.8 DWPD)	ZH07REA1

ESD Caution – Handling

Static electricity may be discharged through this disk subsystem. In extreme cases, this may temporarily   interrupt the operation or damage components. To prevent this, make sure you are working in an ESD- safe environment. For example, before handling the disk subsystem, touch a grounded device, such as a computer case.

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Overview

This document describes the changes, known issues, and important notes for the 2.5" CloudSpeed Eco and Ultra Gen II Channel SATA drives and firmware.

ZH07 Firmware
The ZH07 firmware contains the following fixes for channel SKU's ending with SDLF1XXX-XXXX-**1HA2**:

- Corrected an issue where erase on super block with bad EBs end prematurely when there is a high rate of FRAME invoke activity.
- Corrected an issue where the number of free blocks could get to a critical level due to host write pattern.
    - The cause was due to the recycle rate was slower than required leading to higher rate of Super Blocks consumption than generation.
- Corrected issue where stale reference to open Super Blocks in de-activated write stream causes read errors and FRAME invokes on certain pages of particular Super Blocks.
- Corrected issue where I/O latency is increased when drive is processing TRIM command.
- Corrected an issue where drive was sensitive to COMRESET during download command.
- Improved scheduling of recycle reads during write.
- Improved sequential read performance when data retention recycle was in progress.

ZH06 Firmware
The ZH06 firmware contains the following fixes for channel SKU's ending with SDLF1XXX-XXXX-**1HA2**:

- Fixed an issue that allowed firmware for a 0.6 DWPD product to be loaded on-top of a 1.8 DWPD product, causing the SSD to no longer function.
- Fixed an issue where the firmware was not being initialized properly, leading to security-set-password failing sporadically.
- Performance improvement that had shown excessive jitter during Random Writes.
- Fixed performance degradation that could be seen after the drive had been left setting idle for an extended period of time. Issue was due to unnecessary recycling.
- Fixed an issue when running Extended DST that could cause Periodic DST to run while Extend DST was still running.
- Performance improvement: Fixed a performance issue seen when processing read commands at full performance, when the prior test involved heavy write activity.

ZH05 Firmware
This is the initial release of firmware ZH05 for channel SKU's ending with SDLF1XXX-XXXX-**1HA2**

- There are no known firmware issues that have been identify in ZH05

<u>Known issues identified specifically when using an Interposer Card</u>

<u>Interposer Cards: LSISS 2530 and LSISS 2520</u>

- Secure Erase – Enhanced
    - o Interposers do not handle enhanced secure erase command properly
- Crypto Erase
    - o Support is not available in interposers for Sanitize command

<u>Interposer Card: LSISS 2530</u>
- Block Erase
    - o SCSI command fails.
        - ▪ Note: Block Erase command does work with the LSISS 2520 card