



IBM Drive Firmware Release Notes

Release	KAJ8 (FH) KAJ9 (HH)
Supported Product	IBM Gen 6 FH and HH Drives
Date	June 2020

Overview

IBM has released a firmware update KAJ8 (Full Height) and KAJ9 (Half Height). This firmware affects all Gen 6 Full Height (FH) and Half Height (HH) Drives. This update is intended to increase overall reliability, improve tape handling, further reduce any possibility of error, and provide continued enhancements to diagnostic capabilities. Firmware fixes since FH KAJ0 code and HH code KAJ1 follow:

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Fixes That Affect All Drives

- **Locate or space failure:**

Locate failure on file mark near beginning of wrap resulting in FSC 6353, position error on media with a secondary FSC 7230, Media inconsistent fragment.

- **A drive could hang or fail for a FSC 601D on Space to EOD:**

If a previous WRITE command had permed, a drive spacing/locating to EOD might hang or fail.

- **Log Page 0x38 was incorrectly updated during FC SRR:**

The log page counters for blocks was incorrectly updated when an SRR occurs on an FC drive. This caused the values to go very large.

- **Host interface may incorrectly log byte counts when a CRC spans a burst boundary:**

Fix the boundary case so that the byte count is correct.

Fixes That Affect Only Certain Drives

Library Drives

- **Drive incorrectly sends check condition on LUN1 (library) command:**

With the drive running as the Control Path drive it would incorrectly check LUN1 sense data pending for any initiator rather than just for the active one causing unexpected LUN1 check conditions when determining if the library is ready.

- **An aborted command with delayed processing caused a panic:**

The drive did not clean up an aborted command completely which caused the drive to panic.

- **Set VHF Cleaning Requested when the Clean is indicated in the Tape Alerts for a 7060 error which creates TA 3 and 5:**

The drive did not set the VHF cleaning bits used by the library to trigger cleaning in a specific case that resulted in a 0x7060 (Read Error).

- **ADI drive communication failures:**

If many re-login occurs for error recovery, some IUs may not be cleared correctly from tracker list, which can cause the drive to stop communicating with the library.

FC Drives

- **Panic due to HBA re-use of OX_ID too quickly:**

Improve the re-use of host HBA originator exchange id in the drive to avoid unexpected reboot.

SAS Drives

- **Multi-initiator on SAS may stop receiving frames:**

Prevent race condition on multiple initiator SAS that interfere with open request.

- **SAS command Timeout:**

When being accessed by multiple SAS initiators, a rare race condition that could cause the drive to timeout in handling multi-initiator change of initiators.

- **Drive may do unnecessary host interface retries:**

Retry counts were not always cleared for test unit ready and request sense commands causing the drive to think it needed to issue host retries.