

IBM LTO-7 Firmware Version MA70 (FH) and MA71 (HH) Release Announcement

March 2021

Preface

This Product Information Bulletin announces the release of IBM LTO-7 firmware updates MA70 for full-height (FH) drives and MA71 for half-height (HH) drives. These updates are intended, among other things, to increase overall reliability, improve tape handling, further reduce any possibility of error, and provide continued enhancements to diagnostic capabilities.

Models Affected

This firmware affects all IBM LTO-7 drives, both FH and HH.

Upgrade Considerations

All systems running code IBM LTO-7 M570/M571 can be upgraded to LTO-7 MA70/MA71.



CAUTION: To prevent data corruption, verify that all active backup and recovery jobs to the NEO tape library are completed prior to performing the upgrade.

Downgrades

Downgrades are not supported.

Functional Improvements (Reduce Permanent Errors)

Firmware fixes included with the MA70 FH and MA71 HH updates:

General Drive Improvements

- **Prevent drive hang on Write Attribute command:** Drive hung during a write attribute command due to no space left in the CM. Put in function to handle this condition.
- **Allow FORMAT of a cartridge with invalid EOD:** Drive would not allow a format of a cartridge if the EOD was invalid.
- **Improve high speed tape motion handling:** Added high speed tape motion improvements to reduce media damage due to pack slippage.
- **FSC 6601 on READ at BOP:** Due to a corruption of the BOP (beginning of partition) cache, the drive incorrectly failed.
- **Correct FSC and drive panic when write-protected uninitialized cart is inserted:** The FSC was 4101 and this was changed to FSC 2C30.
- **Changed MP 1Ah to be savable:** Changed MP 1AH to be savable so that changes to this mode page would be persistent over power cycles.

- **Change SCD of FSC 53A0/53A1/53A2 from “6” to “5”:** Changed the SCD for the FSCs listed from a drive/media problem (SCD 6) to a drive problem (SCD 5).
- **Drive failed with an FSC 78B5:** Improved the estimated calculation LPOS to more accurately estimate and solve EOT shutdown (78B5).
- **Correct FSC and Tape Alert for CRC error on READ:** The drive incorrectly set TA 32 and FSC 6010 on a READ. These should be TA3 and FSC 601D.
- **Improved ERPs to better recover from repositioning perms (FSC 6353).**
- **Drive Panic during a READ:** Drive was not handling DS fragment which spanned a wrap turn.
- **Drive failed a LOCATE with a FSC 78A0:** Drive incorrectly moved tape in the wrong direction due to an incorrect parameter being passed in code.
- **FSC 6712 on WRITE append of a WORM cartridge:** Incorrect buffer handling caused the drive to fail a WRITE append of a WORM cartridge.
- **12V Power was not accurately turn off after entering power saving mode:** When setting the Power Down time via Mode Page 1Ah, the drive took longer to power off the 12 V power.

FC Drive Improvements

- **Drive incorrectly reports PEOT (and FSC 6261) on Write:** If the host writes past early warning and then backs up to just before early warning and attempts to write again, the drive may report physical end of tape encountered when the drive is not actually at physical end of tape.

Downloads

Firmware update codes IBM LTO-7 MA70 (FH) and MA71 (HH) are available for download for supported NEO users. To download IBM LTO firmware, browse to this site:

https://ftp.overlandtandberg.com/Firmware/Tape_Drives/IBM_LTO7_Drive/