

IBM LTO-7 Firmware Version P380 (FH) and P381 (HH) Release Announcement

April 2022

Preface

This Product Information Bulletin announces the release of IBM LTO-7 firmware updates P380 for full-height (FH) drives and P381 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 N9M0/N9M1 can be upgraded to LTO-7 P380/P381.



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.

Fixes That Affect All Drives

- **Drive fails READ with a FSC 7060:** Code was enhanced to improve read ERP to distinguish between c2 verification and reread from tape.
- **Code Panic:** Fixed a code panic caused by a logic issue in the ERPs at a boundary condition.
- **Read failure during ERP:** When the drive was attempting a READ ERP (Error Recovery Procedure) and incorrect LPOS position limit caused that ERP to fail.
- **WRITE append time out:** The drive was having trouble getting the current position on tape and used an estimated value instead. This caused the drive to time out because it could not find the position to append.
- **Incorrect sense ASC/ASCQ reported for FSC 2C0B “Invalid Cartridge Type”:** When an unsupported cartridge type was loaded into the drive, the drive reported an ASC/ASCQ of 3/3001. It was determined that a 3/3002 was more appropriate.
- **WRITE failed with an FSC 7346:** The Drive failed a WRITE command incorrectly. A reporting action, which should have been handled without a failure, should have been suppressed as a perm failure.
- **LP17 not correct on a load/hold:** When a cartridge was loaded but not treaded, LP17 was incorrectly updated. LP17h should not be updated at the HOLD position but should keep the last mounts values until fully mounted (for example, completed threading and ready to be used).
- **Drive fails the READ at EOW with a FSC 6353:** Drive failed a READ at the EOW because it mistakenly read stale data from the buffer when it should have checked the Tape Directory.

- **Reject load of refurbished cartridge:** Added code to reject a refurbished cartridge on LOAD.
- **Avoid referring invalid TD for WP confirmation:** When reading the last wrap, which had failed a WRITE previously, the drive used the WP from the tape directory, which was invalid.
- **READ failed with an FSC 6353:** The starting position of a read ERP was not correct which caused the drive to start the ERP in the wrong position.
- **Drive failed a READ on a tape which had a previously failed WRITE:** The drive referred to an invalid tape directory caused by a previous WRITE failure. When the drive READ into the last wrap it failed. Drive should avoid referring to an invalid Tape Directory.
- **Drive incorrectly reported end of data:** Drive ran across an old EOD which had been overwritten by a suspended append write. A check was added to verify the EOD detected, was the EOD reported in the CM.
- **EOD READ failure on tape test:** During a tape test, the drive incorrectly read the EOD information from the CM which was not correct.
- **Full length LTU is sometimes done with no tape motion:** An unload command might take up to four minutes to complete even though no tape motion was done after the load command.
- **Reposition timeout due to incorrect location:** The drive would continually try to read from the same incorrect location and could not get to the proper position.
- **Reposition timeout:** The drive got into a condition where it could not get to the reposition target. The starting position of the reposition was corrected so that target could be found.

Downloads

Firmware update codes IBM LTO-7 P380 (FH) and P381 (HH) are available for download for supported NEO users. To download IBM LTO-7 firmware, browse to this site:

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

Additional documentation on how to operate, configure, and support your NEO library is available at:

<https://www.overlandtandberg.com/knowledgebase/>