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Report of Successful Completion of Qualification Testing

International Business Machines Corporation and Hitachi, Ltd. have successfully completed compatibility and interoperability testing of the Hitachi Virtual Storage Platform (VSP®) 5000 Series at code level DKCMain 90-04-02 in the IBM Z® environments listed in the table below.

IBM and Hitachi hereby confirm that testing for the support of FICON® and zHPF® connectivity and extended functions, described in the Test Summaries (below) and in Attachment A - Test Matrix, has been successfully completed for the following:

Servers	IBM z15™ Models T01 and T02
	IBM z14™, z14 Model ZR1
Operating Systems	z/OS® V2.4, z/OS V2.3
Extended Functions	Modified Indirect Data Address Word (MIDAW) facility support on FICON and High Performance FICON for IBM Z (zHPF) including: Multi-Track Bi-Directional Data Transfer (Bi-Di) BSAM/QSAM support Format Write
Storage	Hitachi Virtual Storage Platform (VSP®) 5000 Series

More detailed testing results are available from IBM or Hitachi upon request.

Test Summaries:

- Hitachi Virtual Storage Platform (VSP®) 5000 Series - running DKCMain code level: 90-04-02.
- FICON and zHPF (including Multi-Track and Bi-Directional Data Transfer) on a z15 T01 & T02, z14, z14 ZR1 through supported directors/switches and direct connection.
- Limited MIDAW facility (z15 T01 & T02, z14, z14 ZR1) testing was completed at IBM.

Attachment A -- Test Matrix

Test Case	Successfully Completed Error Free Test Shifts (REFTS)	Test Case Description
System Assurance Kernel (SAK) Testing	✓	SAK is an IBM proprietary test suit which can perform a range of architectural limit testing. The DASD test programs that were run on FICON and zHPF (including Multi-Track and Bi-Directional Data Transfer) channels include IFDASD, IDASD0, IDSCAN, IDASDX, IFCKD0, and ICTVDR.
z/OS CHNLDRVR	✓	CHNLDRVR is an IBM proprietary DASD test program that runs under z/OS on FICON and zHPF (including Multi-Track and Bi-Directional Data Transfer) channels.
MixPlex Configurations	✓	Testing of different MixPlex system configurations. Systems are added and removed from Plex. Various error conditions are invoked to make sure the Plex recovers gracefully.

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Qualification Letter Version History:

- 02/12/2021: Initial Version
- 02/19/2021: Corrected Operating System levels