

NextSeq 550Dx Instrument Software Release Notes

NextSeqDx System Suite Installer
NextSeqDx Operating Software
NextSeqDx Service Software
Local Run Manager
Real-Time Analysis
Universal Copy Service
DMA Driver
Firmware

**For NextSeq 550Dx Instrument
(Diagnostic Mode)**

Version History

Version	Date	Description of Change
00	05-APR-2019	Initial version
01	22-SEP-2020	Change formatting, remove Germline Variant and Somatic Variant Modules since they are not part of the software system suite, and add versions 1.2.0 and 1.3.1 release details for completeness

Introduction

These Software Release Notes detail new features, optimizations, defect repairs, and known issues for the Illumina NextSeq 550Dx Sequencing System. Contact your field representative to schedule a software upgrade.

For more information on the NextSeq 550Dx, see the NextSeq 550Dx Instrument Reference Guide (document # 1000000009513) available on the [NextSeq 550Dx Instrument support pages](#).

I. Illumina NextSeqDx System Suite v1.3.1

- **Release Date:** September 2020

Software Application	Version
NextSeqDx Operating Software (NOS)	1.3.1 *
NextSeqDx Service Software (NSSDx)	1.3.1 *
Local Run Manager	1.5.2
Real-Time Analysis (RTA)	2.9.5
Universal Copy Service	1.4.2
DMA Driver	4.5.3
Firmware	2019.2.0 *

* indicates change from previous release

NEW FEATURES

- Updated NOS and NSSDx to v1.3.1
- Updated firmware to v2019.2.0 to align with NextSeq RUO mode software and prevent potential Bit Error Rate (BER) issue

OPTIMIZATIONS

- Improved the retry logic when low Signal-To-Noise Ratio (SNR) is encountered during focus model generation. This reduces the chances of unnecessarily disabling a camera

DEFECT REPAIRS

- None

KNOWN ISSUES

- Instrument does not notify user to perform a required restart if an unrecoverable error during wash occurs

II. Illumina NextSeqDx System Suite v1.3.0

- **Release Date:** March 2019

Software Application	Version
NextSeqDx Operating Software (NOS)	1.3.0 *
NextSeqDx Service Software (NSSDx)	1.3.0 *
Local Run Manager	1.5.2
Real-Time Analysis (RTA)	2.9.5
Universal Copy Service	1.4.2
DMA Driver	4.5.3
Firmware	2018.2.0 *

* indicates change from previous release

NEW FEATURES

- Updated NOS and NSSDx to v1.3.0.15
- Updated firmware to v2018.2.0
- Added compatibility for v2.5 flow cells
- Allow RUO flow cells to be used for manual post-run wash

OPTIMIZATIONS

- Added additional instrument performance metrics
- Updated error messaging when a flow cell is not compatible with other consumable components

DEFECT REPAIRS

- Fixed an issue where mid throughput flow cells were causing errors during post run wash
- Fixed an issue where the consumable RFIDs were not marked as used if power failure occurred
- Fixed an issue where LED exposures were not being logged
- Fixed an issue where flow cell temperature was not being logged appropriately
- Fixed an issue where retry logic was not being logged

KNOWN ISSUES

- Instrument does not notify user to perform a required restart if an unrecoverable error during wash occurs

III. Illumina NextSeqDx System Suite v1.2.0

- **Release Date:** October 2017

Software Application	Version
NextSeqDx Operating Software (NOS)	1.2.0
NextSeqDx Service Software (NSSDx)	1.2.0
Local Run Manager	1.5.2
Real-Time Analysis (RTA)	2.9.5
Universal Copy Service	1.4.2
DMA Driver	4.5.3
Firmware	2017.6.0

NEW FEATURES

- Initial Release

OPTIMIZATIONS

- N/A

DEFECT REPAIRS

- N/A

KNOWN ISSUES

- N/A