



Release Notes

# Seagate® Nytro™ WarpDrive® and Nytro XP6000 Application Acceleration Cards Release 15.1

NWD-BFH8-3200  
XP6209-4A1024  
XP6209-4B2048  
XP6210-4A2048  
XP6210-4B2048  
XP6302-8B1536  
XP6302-8B2048  
XP6302-8B4096

100767759  
June 2016

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## Revision History

Date	Description of Changes
June 2016	<ul style="list-style-type: none"><li data-bbox="342 306 1360 363">■ Updated XP6302 device information for Firmware Package versions. See, <a href="#">Section 2, Supported Products</a>.</li><li data-bbox="342 369 1360 426">■ Updated XP6302 device information for IBUTTON initialization and uEFI boot fixes. See, <a href="#">Section 5, Defects Fixed Since Release 13</a>.</li></ul>
April 2016	NA

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When referring to drive capacity, one gigabyte, or GB, equals one billion bytes and one terabyte, or TB, equals one trillion bytes. Your computer's operating system may use a different standard of measurement and report a lower capacity. In addition, some of the listed capacity is used for formatting and other functions, and thus will not be available for data storage. Actual quantities will vary based on various factors, including file size, file format, features and application software. Actual data rates may vary depending on operating environment and other factors. The export or re-export of hardware or software containing encryption may be regulated by the U.S. Department of Commerce, Bureau of Industry and Security (for more information, visit [www.bis.doc.gov](http://www.bis.doc.gov)), and controlled for import and use outside of the U.S. Seagate reserves the right to change, without notice, product offerings or specifications.

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## Seagate Technology Support Services

For Nytro Support, visit: <http://www.seagate.com/support/by-product/ssd-and-pcie-flash/>

For information regarding online support and services, visit: <http://www.seagate.com/contacts/>

Available services include:

- Presales & Technical support
- Global Support Services telephone numbers & business hours
- Authorized Service Centers

For information regarding Warranty Support, visit: <http://www.seagate.com/support/warranty-and-replacements/>

For information regarding data recovery services, visit:

<http://www.seagate.com/services-software/seagate-recovery-services/recover/>

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# Seagate Nytro WarpDrive and Nytro XP6000 Application Acceleration Card Release Notes

## 1 Release Notes Overview

These release notes correspond to the current release of the firmware, drivers, and utilities for the Seagate<sup>®</sup> Nytro<sup>™</sup> WarpDrive<sup>®</sup> and Nytro XP6000 Application Acceleration cards release version 15. [Table 1](#) shows the package versions of individual devices and models.

This release of the Nytro WarpDrive and Nytro XP6000 card includes the Nytro command line interface support. For more information about the supported Nytro CLI commands and DDCLI commands to Nytro CLI commands mapping, refer to the *Seagate Nytro Command Line Interface User Guide*.

For a complete list of features supported, refer to the *Seagate Nytro XP6000 Series Application Acceleration Cards Product Brief* and *Seagate Nytro XP6000 Application Acceleration Card User Guide*.

## 2 Supported Products

[Table 1](#) shows the supported products, their model name, firmware, firmware version, package version, Flash Module, Flash Module Firmware version and usable capacity.

**Table 1 Supported Products**

DEVICE NAME	MODEL NAME	NYTRO FIRMWARE PACKAGE VERSION	NYTRO FLASH MODULE	NYTRO FLASH MODULE FIRMWARE VERSION	USABLE CAPACITY
Nytro WarpDrive 6301	NWD-BFH8-3200	15.00.07.00	2E512, 1E512	PROLUI6H	3200 GB
Nytro XP6209	XP6209-4A1024	15.00.06.00	1M256	PROLUI6H	930 GB
Nytro XP6209	XP6209-4B2048	15.00.04.00	2M512	PROLU617	1796 GB
Nytro XP6210	XP6210-4A2048	15.00.06.00	1M512	PROLUI6H	1860 GB
Nytro XP6210	XP6210-4B2048	15.00.06.00	1E512	PROLUI6H	1860 GB
Nytro XP 6302	XP6302-8B1536	15.00.08.00	1E192	PROLUI6H	1300 GB
Nytro XP 6302	XP6302-8B2048	15.00.08.00	1E256	PROLUI6H	1750 GB
Nytro XP 6302	XP6302-8B4096	15.00.06.00	1E512	PROLU617	3512 GB

### 3 Software Components and Drivers

The following table lists the current versions of the software components for the Nytro WarpDrive and Nytro XP6000 cards.

**Table 2 Nytro WarpDrive and Nytro XP6000 Cards Software Components**

OPERATING SYSTEM	DRIVER VERSION
Windows® Server® 2012 R2 x64	Version 2.10.72.00
Windows Server 2008 R2 SP1 x64	Version 2.10.72.00
Oracle® Solaris® x86 x64 Version 11	Operating system built-in driver
SUSE® Linux® Enterprise Server (SLES™) x64 and x32 Version 11 SP3	Version 20.00.00.00
CentOS® x64 Version 6.5 and 6.6 Version 7.0 and 7.1	Version 20.00.00.00
Debian® x64 Version 7.8	Version 20.00.00.00
Red Hat® Enterprise Linux (RHEL) x64 Version 5.9, 5.10, and 5.11 Version 6.6 Version 7.0	Version 20.00.00.00
VMware® ESXi x64 Version 5.1	Version 18.00.00.00.1VMW
NYTRO WARPDRIVE AND NYTRO XP6000 FIRMWARE	FIRMWARE PACKAGE VERSION
Nytro WarpDrive and Nytro XP6000 firmware revision	See, <a href="#">Table 1, Supported Products, on page 4</a>
NYTRO FLASH MODULE	VERSION
Nytro Flash Modules	See, <a href="#">Table 1, Supported Products, on page 4</a>
SEAGATE UTILITY	VERSION
DDCLI for Linux, Windows, VMware, FreeBSD, and Solaris	Version 115.00.05.00
Enterprise Storage Manager	Version 1.2.0.1
SNMP	Version 2.00-00.00
SMIS	Version 90.03.V0.02

To download the latest software components and drivers, visit the following website:  
<http://www.seagate.com/products/solid-state-flash-storage/accelerator-cards/>.

## 4 New Features

This section lists new features included in the current release of the Nytro WarpDrive and Nytro XP6000.

- Support for vCenter Plugin
- Support for uEFI 2.4.1
- Support for Enterprise Storage Manager
- Included the Secure Media Erase option as part of the `format` command in general purpose Nytro CLI and DDCLI.

## 5 Defects Fixed Since Release 13

This section lists the critical defects fixed since the 13 release of Nytro WarpDrive.

- In XP6302 devices, during power-on reset, IBUTTON initialization failed very rarely and the controller was not detected. This issue is fixed.
- In XP6302 devices, servers having debug version of BIOS crashed rarely during uEFI boot state. This issue is fixed.
- A modest improvement in I/O performance for 4K and 8K random reads at higher Queue Depths is achieved. To achieve this improvement, buffer logging is optimized.



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