



NVMe Firmware Update Instructions

FireCuda 530 firmware update version STNSC016



This firmware update is for the Seagate **FireCuda 530 SSD NVMe** family only.

Backup all data contained on the drive prior to running the update.

See the End User License Agreement below for specific information about these software tools.

This firmware release only supports the following capacity models and part numbers:

FireCuda 530 SSD NVMe

Models	Part number	Firmware File
ZP500GM30013	2XY316-300	FireCuda530_SU6SM003.bin
ZP1000GM30013	2XY317-300	
ZP2000GM30013	2XY318-300	
ZP4000GM30013	2XY319-300	
ZP500GM3A013	2XY320-570	
ZP1000GM3A013	2XY321-570	
ZP2000GM3A013	2XY322-570	
ZP4000GM3A013	2XY323-570	

FireCuda 530 HS SSD NVMe

Models	Part number	Firmware File
ZP500GM30023	2XY324-300	FireCuda530_SU6SM003.bin
ZP1000GM30023	2XY325-300	
ZP2000GM30023	2XY326-300	
ZP4000GM30023	2XY327-300	
ZP500GM3A023	2XY328-570	
ZP1000GM3A023	2XY329-570	
ZP2000GM3A023	2XY330-570	
ZP4000GM3A023	2XY331-570	

FireCuda 530 SE Beskar SSD NVMe

Models	Part number	Firmware File
ZP500GM30033	2XY334-300	FireCuda530_SU6SM003.bin
ZP1000GM30033	2XY335-300	
ZP500GM3A033	2XY332-570	
ZP1000GM3A033	2XY333-570	

Note: Seagate part numbers have 9 digits made from two groups (6 digits-3 digits) like *2XC101-300*. The first 6-digit group is the base part number and the 3-digit “tab” extension indicates a particular customer configuration. The drive does not report the part number electronically, like it does the model number, making the part number visible only on the drive label.

Note: The firmware above is only for the twenty models in the list.

Warning, possible loss of data if this firmware is downloaded to unsupported models!

DO NOT run this firmware update on RAID systems.
DO NOT turn the power off during the firmware update procedure.

BEFORE YOU BEGIN:

1. Make sure you have backed up all of your important files and critical data.
2. Save any work in progress.
3. Close all other open applications.
4. Disconnect all external storage devices.

Always handle the drive carefully so you do not cause internal damage to the circuitry inside the drives. Drives are sensitive devices.

A warning about RAID

RAID systems are extremely sensitive to disruptions to individual drives. It is not uncommon for low level disk drive diagnostics to cause RAID management software to fault a drive that is slowed down by testing or firmware download. For this reason, we highly recommend that you use disk management tools provided by your RAID controller manufacturer if they are available. If these tools are not available, you might consider taking the RAID offline to a maintenance mode or rebooting the system to temporary bootable media and running diagnostics from there. Seagate recommends that you use disk utility tools provided by your RAID controller manufacturer.

Among others, RAID management software may be available from Adaptec and Broadcom (formerly Avago and LSI).

Here are the instructions for updating NVMe firmware:

The method you choose to update the firmware on the drive will depend on your operating system, system utilities or work bench environment.

Command Line Interface Tools

The line interface tool is available for firmware download. SeaChest_Firmware is available for both Linux and Windows and they share the same command line structure. Therefore, there are two command line choices for Linux and one for Windows. All of these tools have extensive documentation available.

Note: Windows operating systems do NOT allow firmware download to NVMe drives unless the drives support the Deferred Download mode.

SeaChest_Firmware is our most current tool. The Linux version is shown below. The Windows version does not reference devices as “/dev/sg” but rather as PDx. Please see the SeaChest_Firmware for Windows documentation for specific examples.

```
=====
SeaChest_Firmware - Seagate drive utilities - NVMe Enabled
Copyright (c) 2014-2021 Seagate Technology LLC and/or its Affiliates, All Rights Reserved
SeaChest_Firmware Version: 3.0.0-2_2_1 X86_64
Build Date: Apr 27 2021
Today: Tue Apr 27 15:11:15 2021      User: tyler
=====

Usage
=====

    SeaChest_Firmware [-d <sg_device>] {arguments} {options}

Examples
=====

    SeaChest_Firmware --scan
    SeaChest_Firmware -d /dev/sg2 -i
    SeaChest_Firmware -d /dev/sg2 --fwdlInfo
    SeaChest_Firmware -d /dev/sg2 --downloadFW fwfilename
    SeaChest_Firmware -d /dev/sg2 --fwdlConfig configfile.cfs

Utility Arguments    (partial listing)
=====
    -s, --scan
    -F, --scanFlags [option list]
    -d, --device <device handle>
    -i, --deviceInfo
    --SATInfo
    --testUnitReady
    --fwdlInfo
    --downloadFW [fwfilename]
    --downloadMode [full | segmented | deferred]
    --activateFW
    --fwdlConfig [config file]
    --fwdlDryRun
    --fwdlSegSize [segment size in 512B blocks]

Utility Options    (partial listing)
=====
    -h, --help
```

```
-V, --version
--license
```

First, run the `--scan` option to determine what `/dev/sg#` assignment lines up to your disk drive. This option also will show you other details about the drive including the current firmware revision. Like this:

Vendor	Handle	Model Number	Serial Number	FwRev
ATA	/dev/sg0	ST94813AS	3AA043KP	3.03
SEAGATE	/dev/sg1	ST1000NM0011	ZAA15VAS	SN03

The typical ordinary command line looks something like this:

```
SeaChest_Firmware -d /dev/sg2 --downloadFW fwfilename
```

`--modelMatch` is a model number verification based on the device Inquiry response. `--modelMatch` scans all sg devices on the system.

The tool has two batch modes, which can be used thusly:

```
SeaChest_Firmware -d all --modelMatch <model_number> --downloadFW fwfilename
```

Note: Use of `-d all --modelMatch` mode is preferred for batch processing of sg (SCSI generic) SAS disk drives. The `--modelMatch` mode may also be used on Enterprise SATA disk drives. Desktop and notebook SATA drives firmware is usually combined with a Seagate-prepared CFS firmware configuration file.

Both of these modes assume that the relevant firmware files are located in the current working directory.

See the `SeaChest_Firmware.txt` file for a complete description of the software.

Raw Firmware Data Files

You will need the Seagate firmware file to run the simple command line Linux tool. This file will have the `.bin` filename extension and should be located in the current working directory. This firmware file should never be used outside of the specific product family models and part numbers listed with the firmware release. Incorrect usage of the `.bin` may result in data loss or even product failure. Seagate Technology is not responsible

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Support

Seagate offers technical support for disk drive installation. If you have any questions related to Seagate products and technologies, feel free to submit your request on our web site. See the web site for a list of world-wide telephone numbers.

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Linux USB Boot Maker FAQ:
http://support.seagate.com/firmware/usbbootmaker_faq.html

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