KIOXIA

SSD Utility

User Guide

Software Version 5.6

Contents

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Welcome!

SSD Utility enables you to manage and get the best out of your SSDs.

Key features

SSD Utility enables you to:

- See a dashboard view of the status of your SSD
- See a detailed view of SMART attributes
- Update SSD firmware
- Manage over provisioning
- Secure erase data to make it unrecoverable
- Assist technical support in diagnosing problems with views and logs of SSD, computer and SSD Utility details
- Be alerted of issues with drive health, reliability or temperature
- Run a quick benchmark to evaluate your drive performance

For more details of SSD Utility features, see SSD Utility Features on page 5.

System requirements

Supported SSDs include:

	Windows 10 x64
EXCERIA SATA SSD	✓

⚠ CAUTION: Before you start, make back-up copies of any data on the SSD that you want to keep; some operations result in the complete loss of data on the SSD (you are warned if this will happen).

ⓘ Before using SSD Utility:
- Set the SATA controller to AHCI mode in the motherboard BIOS; for instructions see the user documentation for your computer
- You must run SSD Utility as an administrator
- For firmware updates, your computer must be connected to the internet.
- To create a Bootable Media for secure erase / NVMe format your computer must be connected to the internet.

Installing SSD Utility

This guide assumes that you have already correctly installed your SSDs. You can:

- Install SSD Utility in Windows.

- Create a Bootable Media. This enables you to do some things that you cannot do from within your operating system. For example, for some SSDs you cannot update the firmware when running the Windows Operating System. Similarly, secure erase and NVMe format is blocked by the Windows Operating System. The Bootable Media is written to a USB flash drive.

Install SSD Utility in Windows

Download and then run the installer and follow the onscreen instructions.

Create a Bootable Media

You can use a USB flash drive to create a standalone bootable tool called Bootable Media which can be used on your system to do a firmware update to your SSD or a secure erase of your SSD; the SSD Utility will only offer a Bootable Media if it is required – you should create the Bootable Media if prompted.

These instructions assume that you are familiar with the functionality of SSD Utility for firmware update and secure erase / NVMe format.

⚠ CAUTION: Before you start, make back-up copies of any data on the SSD that you want to keep. Also any data on the flash drive is erased during this operation.
The USB flash drive is automatically formatted as FAT32, which ensures that any files saved onto the drive can be easily read from any Windows system.

Start a Bootable Media

1. Insert your USB flash drive into your system, then restart your system.

2. Set your BIOS to boot from your USB flash drive; see the relevant user documentation for your system. If your BIOS supports both UEFI and legacy boot, select the legacy boot first.
   You only need to use UEFI boot if you experience any issues with legacy boot.

3. After the system has booted, the script for either firmware update or secure erase will run automatically:

   Firmware Update:

   This will automatically update the firmware on the SSD selected when the Bootable Media was created. The Bootable Media running a firmware update will provide a warning message and ask you to confirm the firmware update; please type yes to proceed.

   ⚠ CAUTION: Do not power off the system until the operation is complete.

   Secure Erase:

   This will automatically secure erase the SSD selected when the Bootable Media was created. Since this will delete all data from the SSD, the script will provide a warning message then request confirmation that the secure erase command should be run; with the following message:

   "Are you sure you want to erase your drive? (yes/no):"

   To proceed, type yes. To cancel the operation type no.

   The script will ask you to confirm the suspend/resume erase process; please type yes to proceed.

After the system has shutdown, remove the USB flash drive from the system, power-on your system and select boot from internal drive and UEFI boot to restart your Windows system.

ⓘ If your selected SSD is a SATA drive, the system will lock the drive during the boot process. The script will unlock the drive using suspend and resume commands; however, these commands can stop the display from working on some systems. The secure erase will still be executed, but there will not be a message displayed when the erase finishes; instead the system will automatically shutdown after the command has completed. The process should take no longer than 5 minutes. If your PC does not shutdown please manually shutdown, remove USB and contact KIOXIA Customer Support.

Starting SSD Utility

A shortcut to SSD Utility is installed along with the application, for example in the Start menu under **KIOXIA Corporation - SSD Utility**. Click this to run SSD Utility.
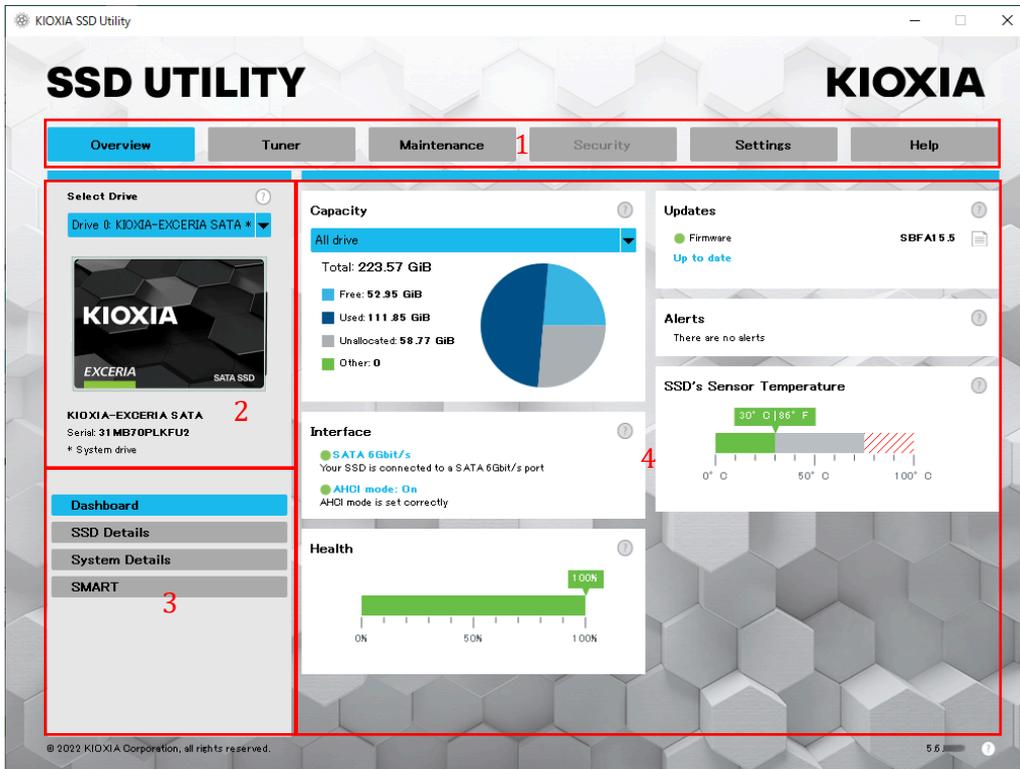
Uninstall SSD Utility

To uninstall from Windows, use the standard uninstall facility in Control Panel, or run the installer again and select **Remove**.

To remove Bootable Media from your USB flash drive:

1. Insert the USB drive into a Windows computer.

2. Reformat the USB drive, which enables you to access the full drive capacity again.

UI overview

The SSD Utility window is divided into panes.

1. **Options bar** - main tasks you can carry out; what you click here changes what is shown in the main pane and further tasks are listed in the drive list pane

2. **Select drive list** - a list of SSDs attached to the current computer. If you only have one SSD attached to your computer, it is automatically selected. When you have more than one SSD attached, ensure that you select the SSD you want before you click an option in the options bar

3. **Task list** - tasks you can carry out; task status information

4. **Main pane** - displays information you request, or fields for a task

SSD Utility Features

SSD Utility supports the features in the following table, listed by their location in the user interface. Only the features supported by the selected drive are available. If you have more than one supported SSD, then options apply to the drive in the **Select Drive** list. To access the features that can apply to more than one drive, select **All Drives** from this list.

To view instructions for a task or information about what is shown in a pane, click 7. The Help is shown in a separate window that you can move, scroll through and close when finished. The Help includes links to further information online.

If you do not find the information you need in the Help or in this guide, you can contact our technical support team; for details, see the company Website online or the contact details on the help page in the product. (see below).

Option	Task	Feature
Overview	Dashboard	A quick overview of the status the of the drive, including: **Capacity** - current usage of the drive **Updates** - available updates to firmware and device drivers **Interface** - status of the physical interface connection **Alerts** - any drive condition needing attention **Health** - remaining drive lifetime ▊ = SSD operating optimally (100% to 21%) ▊ = consider replacing your SSD to prevent future data loss (20% to 11%) ▊ = replace your SSD urgently (10% to 0%) When the value of the "Health Gauge" reaches zero (0), the SSD has reached its warranty limit. This may occur within the warranty period. **SSD's sensor temperature** - temperature measured by the SSD's sensor (may be higher or lower than SSD case temperature)
	SSD Details	Shows details on your SSD, which may be useful when contacting technical support
	System Details	Shows details on your computer, which may be useful when contacting technical support
	SMART	Shows current SMART attribute values, which can help you decide if there is a problem with your SSD
Tuner	SSD Tuner	**Over Provisioning** - reserve an area of your SSD to improve the performance and lifetime of your drive (Windows NTFS volumes only)
	Benchmark	Provides a quick benchmark to evaluate the performance of your SSD in your system

Option	Task	Feature
Maintenance	Updates	**Firmware Update** - for a selected drive, provides advanced methods of updating SSD firmware, including from a local file.
		Firmware Updates - when **All Drives** is selected, you can apply any firmware updates that are available for all drives in your system in a single operation **Note:** To update firmware on many types of SSD you will need to create a Bootable Media on to a USB flash drive – see section "**Create a Bootable Media**"
	Tools	**Secure Erase** - delete all the data from your SSD so that it is unrecoverable (non-NVMe SSDs)
		NVMe™ Format - low level format an NVMe SSD, including changing the LBA format and securely erasing the data
		Note: To secure erase / NVMe format SSDs you may need to create a bootable system on to a USB flash drive – see section "**Create a Bootable Media**"
	Alerts	Shows a detailed report of all the alert conditions that may require attention, plus any that have occurred in the past. If **All Drives** is selected, the alerts for all drives are shown, including any drives that may no longer be active in your computer
Security	Password Protection	**Set Password** on a device
		Lock/unlock a portable SSD with a password **Remove Password** from a password protected device
Settings	Settings	General application configuration, including:
		Language - the user interface language
		Monitoring - whether SSD Utility stays running to monitor your SSDs
		Notifications - suppress task tray notifications for alerts, updates and system events
		Logging - enable logging to help technical support diagnose problems
		Run in the Background - enable tool to run in the Background
		Run at login - automatically runs tool when login
Help	Help	**Contact Us** - links to online support information
Any	View Alerts	Appears at the bottom of each task list if there are active alerts; click it to take you to the detailed alerts report
	SSD Utility Update	Appears next to the version number at the bottom right of the UI if a new version of SSD Utility is available

Option	Task	Feature	EXCERIA SATA SSD	Note
Overview	Dash Board	Capacity	✔	Only supported on Windows NTFS formatted drives for Bootable Media.
		Updates	✔	
		Interface	✔	
		Alerts	✔	
		Health	✔	
		SSD's sensor temperature	✔	
	SSD Details	SSD Details	✔	
	System Details	System Details	✔	
	SMART	SMART	✔	
Tuner	SSD Tuner	Over Provisioning	✔	Only supported on Windows NTFS formatted drives.
	Benchmark	Benchmark	✔	
Maintenance	Updates	Firmware Update	✔	
	Tools	Secure Erase	✔	
		NVMe Format	✔	
	Alerts	Alerts	✔	
Security	Password Protection	Password Protection		
Settings	Settings	Language	✔	
		Monitoring	✔	
		Notifications	✔	
		Logging	✔	
		Run in the Background	✔	
		Run at login	✔	
Help	Help	Contact US	✔	
All	View Alerts	View Alerts	✔	
	SSD Utility Update	SSD Utility Update	✔	