Dell Solid State Drive User's Guide



Notes, cautions, and warnings



NOTE: A NOTE indicates important information that helps you make better use of your computer.



CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem



WARNING: A WARNING indicates a potential for property damage, personal injury, or death.

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What's in the box



NOTE: The contents of the box may vary based on the configuration you ordered.

Dell solid state drive kit (SATA 2.5")



1 solid state drive (SSD) 2 documents

Dell solid state drive upgrade kit (SATA 2.5")



- 1 Solid state drive
- 3 USB enclosure
- 5 USB cable

- 2 adapter frame
- 4 power cable
- 6 Acronis activation key coupon

- 7 documents 8 data cable
- 9 screws (4) 10 solid state drive bracket

Features

Solid state drive



- 1 SATA data connector
- 2 SATA power connector

USB enclosure and cable



NOTE: These parts are only available if you purchased the Dell solid state drive upgrade kit (SATA 2.5").



Before working inside your computer

NOTE: The illustrations in this document may differ from your computer.

- Save and close all open files and exit all open applications. 1
- 2 Shut down your computer.
 - Windows 10: Click or tap Start \rightarrow Power \rightarrow Shut down.
 - Windows 8.1: On the Start screen, click or tap the power icon \rightarrow Shut down.
 - Windows 7: Click or tap Start \rightarrow Shut down.



NOTE: If you are using a different operating system, see the documentation of your operating system for shut-down instructions.

- 3 Disconnect your computer and all attached devices from their electrical outlets.
- 4 Disconnect all cables such as telephone cables, network cables and so on, from vour computer.
- 5 Disconnect all attached devices and peripherals, such as keyboard, mouse, monitor, and so on, from your computer.
- 6 Remove any media card and optical disc from your computer, if applicable.
- 7 After the computer is unplugged, press and hold the power button for 5 seconds to around the system board.
- 8 Disconnect your computer and all attached devices from their electrical outlets.
- 9 Disconnect all cables such as telephone cables, network cables and so on, from your computer.
- 10 Disconnect all attached devices and peripherals, such as keyboard, mouse, monitor, and so on, from your computer.
- 11 Remove any media card and optical disc from your computer, if applicable.
- 12 After the computer is unplugged, press and hold the power button for 5 seconds to ground the system board.

After working inside your computer



CAUTION: Leaving stray or loose screws inside your computer may severely damage your computer.

- 1 Replace all screws and ensure that no stray screws remain inside your computer.
- 2 Connect any external devices, peripherals, and cables you removed before working on your computer.
- 3 Replace any media cards, discs, and any other parts that you removed before working on your computer.
- 4 Connect your computer and all attached devices to their electrical outlets.
- 5 Turn on your computer.

Safety Instructions

CAUTION: To prevent damage from static electricity, please observe the following precautions:

- Shutdown your desktop or laptop and disconnect the power source. If using a laptop, disconnect the battery before installing the solid state drive.
- Allow the drive to remain in the anti-static container until you are ready to install the solid state drive.
- If possible, wear a wrist strap and connect the ground strap to the computer case to minimize static electricity. Otherwise, ground yourself by touching metal on the computer case or laptop.
- Use care when handling the solid state drive do NOT touch the connectors.



• Do not disassemble or remove the casing of the drive. Doing so will void the warranty.

CAUTION: To prevent unexpected damage, please observe the following precautions:

- Do not drop the solid state drive.
- Do not expose the solid state drive to liquids.



• When connecting the cables, ensure that the ports and connectors are properly oriented and aligned.



Recommended tools

The procedures in this document may require the following tools:

- Phillips screwdriver

Setting up your solid state drive

- NOTE: The adapter frame, solid state drive bracket, screws, data cable, USB cable, power cable, and USB enclosure mentioned in the installation steps below are only available if you purchased the Dell solid state drive upgrade kit (SATA 2.5").
- IJ

NOTE: If you have an existing solid state drive/hard drive and you would like to clone your operating system before replacing the solid state drive, see <u>Cloning your storage device</u>.



NOTE: For installation instructions for your Dell computer, see *Service Manual* at <u>Dell.com/support</u>.



WARNING: Before working inside your computer, read the safety information that shipped with your computer and follow the steps in <u>Before working inside your computer</u>. After working inside your computer, follow the instructions in <u>After working inside your computer</u>.



CAUTION: Solid-state drives are fragile. Exercise care when handling the hard drive.



CAUTION: To avoid data loss, do not remove the solid-state drive while the computer is in sleep or on state.

Installing the solid-state drive

Laptop

1 Peel off the tape on the adapter frame and adhere it to the top surface of your solid-state drive (optional).



NOTE: The 2.5 mm adapter frame is designed for 7 mm drives that require installation in a standard 9.5 mm HDD bay. This adapter will fit your 7 mm solid-state drive.

Check the documentation that came with your computer to determine if you need to install this adapter to your solid-state drive. See *Specifications* at <u>Dell.com/support</u>



2 Remove the screws that secure the storage device cover to your computer.



3 Remove the existing storage device from the connector.

NOTE: If the existing hard drive or solid-state drive on your computer is connected to a bracket, tray or special connector, install these to the new solid-state drive before installing it to your computer.





4 Connect the new solid-state drive to the system by sliding the drive into the slot at a shallow angle.



5 Replace the storage device cover.



6 Follow the procedure in <u>BIOS Configuration</u>.



NOTE: Your old drive may be used as a backup storage device or as secondary storage. To use the drive as secondary storage, slide it into the USB enclosure, place the enclosure cover on, lock it and connect the USB cable to your computer.

Desktop

- 1 Place the solid-state drive right side up (logo showing) on the solid-state drive bracket.
- 2 Align the screw holes on the solid-state drive bracket with the screw holes on the solid-state drive.



The solid-state drive bracket only needs to be installed on computers with a 3.5-inch bay,

Check the documentation that came with your computer to determine if you need to install the bracket to your solid-state drive. See *Specifications* at <u>Dell.com/support</u>



3 Install the screws to secure the solid-state drive to the solid-state drive bracket.



4 Remove the computer cover off the chassis.



5 Locate and available drive bay in your chassis to mount your solid-state drive.



- 6 Attach one end of the SATA data cable included in your solid-state drive kit to the solid-state drive SATA data connector and connect the other end to the connector on your motherboard.
- 7 Look for an available SATA power cable within your desktop and connect it to your solid-state drive. If you do not have an available SATA power cable, take the 4-pin to SATA power adapter cable included with your solid-state drive kit and connect it to an available 4-pin power cable within your desktop, then connect it to your solid-state drive.



- 8 Replace the computer cover.
- 9 Follow the procedure in <u>BIOS Configuration</u>.



NOTE: Your old drive may be used as a backup storage device or as secondary storage. If you choose to use the drive as secondary storage, leave it in place within the desktop computer, make sure the SATA data and power cables are still connected and it will be accessible when you boot back into your operating system.

Cloning your storage device

Before cloning the storage device on your laptop

To clone the existing storage device in your computer, you need to install the new solid-state drive to your laptop. See <u>Installing the solid-state drive</u>.

Install your old hard drive or solid-state drive to the USB enclosure to clone it.

- 1 Slide the locking mechanism on the USB enclosure to unlock it.
- 2 Remove the cover plate.
- 3 Connect the solid-state drive to the SATA interface connector located within the enclosure by aligning the connector and sliding the drive in until it fits securely.



4 Replace the cover plate.



5 Connect one end of the USB cable to the USB enclosure.



6 Connect the other end of the USB cable to the USB port on your laptop.

Before cloning the storage device on your desktop

To clone the existing storage device in your computer, you need to install the new solid-state drive to your desktop. See <u>Installing the solid-state drive</u>.

Leave the existing storage device in your computer to clone it.

Installing Acronis True Image

Acronis True Image is an integrated software suite that allows you to back up your entire disk drive or selected partitions, clone your operating system, restore from data previously backed up and create bootable media from USB drives or CD/DVD discs.



NOTE: In order to clone your operating system over to your new solidstate drive, you will need to install the Acronis True Image software. Locate the Acronis activation key included with your solid-state drive bundle and then proceed to the steps below.



CAUTION: Back up your data before proceeding.

- 1 Turn on your computer.
- 2 Go to <u>www.kingston.com/cloning/SNP</u>.
- 3 Click Download Acronis.
- 4 After the download is complete, navigate to the folder where you saved the Acronis file.
- 5 Double-click the file icon and follow the instructions on the screen to install the software.



Registering the Acronis software

1 After you install and run the Acronis application, a prompt will appear for a 64character product activation key. To obtain this key, click on the I have only short key link and you will be redirected to the Acronis software registration webpage.



- 2 In order to register your software, you will need to provide:
 - Your name
 - Your email address
 - A password
 - Your 16-character short key located on your Acronis software download coupon
 - Your country of origin
 - Your state (if applicable)

iinimum russ Maximum value:		
register here to complete the installation of y	our Acronis Softwa	ire.
o complete the installation of your Acronis software, you will	I already have an acc	ount on the Acronia website.
e registration on this page. In addition, as a registered Acronis	First Name:"	114
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 A secure place to archive your senal number 	Email.*	
 Exclusive information about new products and special offers 	Confirm your e-mail*	
	Password:"	
	Confirm password*	
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	Address:	
	City:	
	Country:*	- select country -
	ZIP code:	
	Lagree to Acronis'	
	Privacy Statement.	-
		Register now.
	-	

Once you have provided this information, please review and accept the Acronis privacy statement and then select **Register now** to continue.

6 Acronis will send an email to the account used for registration. Locate the email and click on the link within the email to confirm that you wish to create an account with Acronis.

Dear Customer

Acronis has	s received vour request to create an account for your e-mai	
address	Customer's email address	
Please, clic	ck here	

-----Validation Link------

to confirm your wish to create an account.

Once you have confirmed your account by clicking the link above, you will be registered and logged into your Acronis account. To obtain trial products select "Download" in the Corporate Solutions or Home and Home Office sections of the website.

If you did not request that an Acronis account be created, please disregard this notice. No account will be created without your confirmation.

Acronis International GmbH http://www.acronis.com

7 Obtain your 64-character key by clicking on the link. Copy and paste this key into the box provided on the key activation window.

	usa waximum valuei	
legister he	are to complete the installation of you	ur Acronis Software.
o complete the eed to obtain yo	installation of your Acronis software, you will our full license key/serial number by completing in this name in addition, as a renistered Acronis	Thank you very much!
ser you will be a	able to take advantage of.	Key located here
J A secure p	lace to archive your serial number	
 Exclusive in offers 	nformation about new products and special	

If you do not see the 64-character key once the link is clicked, you may find the key in your registered email.

Click **Activate** to proceed with software activation. You may now use the Acronis cloning software.

Cloning your operating system

1 Locate your Acronis installation and launch the application. When you first launch the application, you will see the **Get started** window.



CAUTION: Before attempting to clone your operating system, close all other open applications as Acronis will require a system restart in order complete the cloning process.



CAUTION: To prevent data loss, disconnect all unnecessary storage devices attached to the system.



2 Navigate to **Tools and Utilities** located at the top of the **Get started** window and select **Clone disk** to continue.



3 Within the **Clone Disk Wizard** window, select **Automatic** and click **Next** to proceed.

Clone Disk Wizard	time table attents
Required steps:	Choose clone mode.
Clone Mode Source Disk Destination Disk Finish	 Automatic (recommended) All your partitions from the source hard disk will be copied to the target disk in a few simple steps and your new hard disk will be made bootable. Your existing partitions will be automatically resized to fit the target hard disk. Manual Manual mode will give you full control over the hard disk cloning procedure. You will be able to adjust the size of the target partitions, change their parameters, and much more.
Optional steps: What to exclude	Next > Cancel

4 Select the source disk you wish to clone your data from and click **Next** to proceed. The source disk is your Operating System disk.

Clone Disk Wizar	d				
Required steps:	Select the sou	rce hard disk	from the list below.		
Clone Mode	Disk properties	_			2
Destination Disk	Drive	Capacity 238.5 GB	Model TOSHIBA THNSNC256GNSJ	Interface Serial ATA	
Finish	Disk 2	7.267 GB	Kingston DT 101 G2 PMAP	USB	
Optional straps: What the exclusive	238.5 GB B C: (B. 238.3 GP Primary // Logic	asic GPT) GB NTFS al // Dynamic 🏾 💽	Acronis Secure Zone 🔝 Unallocated /	// Unsupported	
0				Next > Cance	el

5 Select the target disk you wish to clone to. If this is a new solid-state drive and you have not yet initialized the disk, it will appear as **Disk X – Not Initialized** where **X** is the number of the disk.





CAUTION: If you select a target disk that already has data present, you will see a message that reads:

The destination hard disk drive you have chosen contains some partitions that could contain useful data. Click OK to confirm deletion of all the partitions on the destination hard disk drive

If you **DO NOT** want to delete the data on the target disk, select **CANCEL**. Otherwise, select **OK** to continue.

6 Once you confirm that you have selected the proper drives as **Source** and **Target**, select **Proceed** to continue.

G Clone Disk Wizar	d
Required steps: Clone Mode Source Disk Pestination Disk Finish	Summary Source disk: Disk 1 Target disk: Disk 3
	Before: 447.1 GB 447.1 GB After: 447.1 GB C. (Basic GPT)
Optional steps: What to exclude	Primary // Logical // Dynamic Acronis Secure Zone Duallocated // Unsupported The selected disk will be restored as is (disk's layout will remain GPT).
0	Qptions Proceed Cancel

7 When the cloning process initiates, your system will require a reboot.

A warning message box will appear notifying you that a computer restart is required for the cloning process to complete. If you are ready to restart, select **Restart** to continue.

Warning
Computer restart is required
Note that the operation will be canceled if you choose not to restart your computer now.
Restart Cancel

During the restart, the system will boot into the cloning application, clone the operating system to the target disk, and then shutdown.

8 Once the cloning process completes, shutdown your computer.

After cloning the storage device on your laptop

Your old storage device can be used as a backup storage device or as secondary storage. To use the drive as a secondary storage, leave it in the USB enclosure and connect the USB cable to your computer.

After cloning the storage device on your desktop

Your old storage device can be removed from the chassis or used as a backup or secondary storage.

If you choose to use the drive as secondary storage, leave it in place within the desktop, make sure the SATA data and power cables are still connected and it will be accessible when you boot back into your operating system.

BIOS Configuration



NOTE: For instructions on entering the BIOS, see *Service Manual* at **Dell.com/support**.

- 1 Turn on or restart your computer.
- 2 Press F2 when the Dell logo is displayed on the screen to enter the system setup.



NOTE: If you are using a different computer, see the documentation that came with your computer.

- 3 Select the Boot menu from the available options.
- 4 Configure the new solid-state drive as your first or primary boot device.
- 5 Save your changes and exit the BIOS.
- 6 Restart or power on your computer and boot into the operating system.

Troubleshooting

Problems Solid-state drive is not detected within the BIOS	Possible causes Solid-state drive might not be connected properly	Possible 1 2	solutions Confirm that the solid-state drive is connected to SATA power and SATA data cables. Power on system and confirm drive is present in BIOS.
Solid-state drive is not detected within the BIOS	Solid-state drive might be damaged	1 2 3	Confirm that the solid-state drive is connected to SATA power and SATA data cables. Try the solid-state drive on another computer. Try a different storage device on your computer. If that device works, contact Dell support to replace the defective solid-state drive.
Solid-state drive is not detected within Windows	Solid-state drive may need to be initialized first	1 2 3	Open disk management by pressing the Windows key, typing Disk Management and then press Enter. Click on Create and Format hard disk partitions . Follow the on-screen instructions to initialize your new solid-state drive.
Activation key for Acronis software is lost or does not work.	A new key may be needed	1	Contact Dell support to obtain a new activation key or receive additional support related to activation.

Acronis software reports not enough space available for cloning Your existing storage device may contain too much data

- 1 Determine if you are able to reduce the content on your existing storage device so that you have adequate cloning space on your solidstate drive.
- 2 If you cannot reduce the existing storage device to an adequate level enabling the cloning process, contact Dell for further support. You may need to purchase a larger capacity solid-state drive model.

Specifications

Interface	Serial ATA (SATA)
Form Factor	2.5-inch, 7mm drive
Capacities	120GB-1024GB
Read Performance	Up to 500MBs
Write Performance	Up to 500MBs

Statutory information

Warranty

Limited warranty and return policies

Dell-branded solid state drives carry a 3-year limited hardware warranty. If purchased together with a Dell system, it will follow the system warranty.

For U.S. customers:

This purchase and your use of this product are subject to Dell's end user agreement, which you can find at **Dell.com/terms**. This document contains a binding arbitration clause.

For European, Middle Eastern and African customers:

Dell-branded products that are sold and used are subject to applicable national consumer legal rights, the terms of any retailer sale agreement that you have entered into (which will apply between you and the retailer) and Dell's end user contract terms.

Dell may also provide an additional hardware warranty—full details of the Dell end user contract and warranty terms can be found by going to **Dell.com**, selecting your country from the list at the bottom of the "home" page and then clicking the "terms and conditions" link for the end user terms or the "support" link for the warranty terms.

For non-U.S. customers:

Dell-branded products that are sold and used are subject to applicable national consumer legal rights, the terms of any retailer sale agreement that you have entered into (which will apply between you and the retailer) and Dell's warranty terms. Dell may also provide an additional hardware warranty

-full details of Dell's warranty terms can be found by going to **Dell.com**, selecting your country from the list at the bottom of the "home" page and then clicking the "terms and conditions" link or the "support" link for the warranty terms.