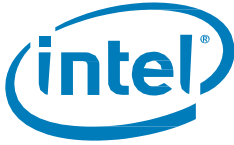


Intel® Solid State Drive Toolbox

Installation Guide

August 2018

Software Version 3.5.4



Revision History

Revision	Description	Revision Date
001	Initial release	September 2010
002	Updated for software version 3.1.0 Added updates for Windows 8	October 2012
003	Updated for software version 3.1.5 Updated known issues and known limitation sections	June 2013
004	Updated for software version 3.3.0	May 2015
005	Updated for software version 3.4.0 Updated known issues and known limitation sections	October 2016
006	Updated for software version 3.5.4	August 2018

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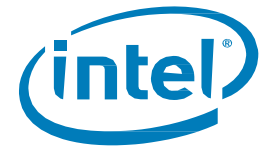
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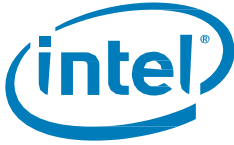
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Contents

1	Overview	4
1.1	Requirements.....	4
1.2	Known Limitations.....	5
1.3	Known Issues.....	6
2	Installation and Start Up	7
2.1	Downloading the Intel® SSD Toolbox.....	7
2.2	Installing the Intel SSD Toolbox.....	7
2.3	Starting the Intel SSD Toolbox.....	7



1 Overview

This guide describes how to install the Intel® Solid State Drive Toolbox (Intel® SSD Toolbox). For information on using Intel SSD Toolbox once installed, see the help system included with the application. For more information on Intel SSDs, go to: www.intel.com/ssd.

1.1 Requirements

Intel SSD Toolbox 3.5.4 requires the following:

- Supported operating systems:
 - Microsoft Windows Server 2016*
 - Microsoft Windows Server 2012*
 - Microsoft Windows Server 2008*
 - Microsoft Windows 10 Enterprise*
 - Microsoft Windows 8.1 Pro*
 - Microsoft Windows 8.1 Enterprise*
 - Microsoft Windows 8 Enterprise *
 - Microsoft Windows 7 Professional*
 - Microsoft Windows 7 Enterprise *

- Microsoft* .NET Framework version 4.0

.NET Framework version 4.0 is included with Windows 10*.

If your system is running Windows 7*, Windows 8* or Windows 8.1*, or does not have version 4.0 of .NET Framework installed, it can be installed via Windows Update or downloaded from Microsoft*.

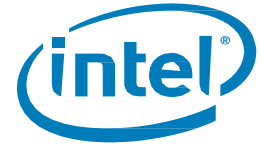
- Visual Studio 2015 C++ redistribution package

The Intel SSD Toolbox installer will install this package; however, there are certain dependencies that it requires to install. These dependencies are resolved by Windows* Updates

- At least 60 megabytes (MB) of available space.

To determine whether the drive has enough available space:

1. Double-click **My Computer**.
2. Right-click the drive you want to check and click **Properties** to display the amount of free space.



1.2 Known Limitations

Review the following limitations before installing Intel SSD Toolbox.

- **RAID, Dynamic Disk or Storage Space Configurations**

Intel SSD Toolbox works with single SSDs, SSDs in a simple Dynamic Disk configuration, and SSDs that are part of Intel® Matrix Storage Manager or Intel® Rapid Storage Technology (Intel® RST) RAID configurations.

Intel SSD Toolbox provides limited functionality for SSDs that are part of RAID, Dynamic Disk or Windows 8*, Windows 8.1* or Windows 10* Storage Space configurations with multiple partitions: Intel SSD Optimizer and Secure Erase are not supported in these configurations.

- **Systems with Virtualization**

Intel SSD Toolbox 3.4 does not work on systems running in a virtualized environment as it cannot detect the SSDs.

- **SSD Formatted with FAT32 File System**

Intel SSD Optimizer does not work on SSDs formatted with file allocation system FAT32. New Technology File System (NTFS) is required to run Intel SSD Optimizer.

- **Systems in IDE Mode**

Intel SSD Toolbox 3.4 cannot update firmware on certain Intel SSDs in IDE mode. These include:

- Intel® Solid State Drive DC S3700 Series
- Intel® Solid State Drive 335 Series
- Intel® Solid State Drive 311 Series
- Intel® Solid State Drive 310 Series
- Intel® X25-M/X18-M Solid State Drives
- Intel® X25-V Solid State Drive

- **Firmware Updates on Intel SSDs**

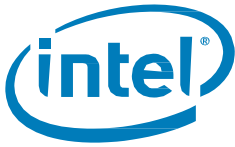
Intel SSD Toolbox 3.4 supports firmware updates on all Intel SSDs except for the following:

- Intel® Solid State Drive 510 Series
- Intel® X25-E Solid State Drive and Intel® X25-M/X18-M Solid State Drives (50nm)

Use the [Intel® Solid State Drive Firmware Update Tool](#) to update firmware on these SSDs.

To identify your Intel SSD, view the model number on the Intel SSD Toolbox home screen. To identify if the Intel SSD is 50nm:

1. Select the Intel SSD on the Intel SSD Toolbox home screen.
2. Click **Drive Details**.
3. View the Model Number (Word 27-46). If the number contains **G1**, the Intel SSD is 50nm.



- **Device Initiated Power Management on Intel SSDs**

Intel SSD Toolbox System Tuner can configure Device Initiated Power Management (DIPM) settings for the following configurations only:

- Intel® Rapid Storage Technology (Intel® RST) driver
- Microsoft* AHCI driver in Windows 7*, Windows 8*, Windows 8.1* or Windows 10*

- **Windows 7* NVMe native driver on Intel SSDs**

By default, the Windows 7* drivers will not detect Intel NVMe* SSDs. There is a hotfix available for users to install on Windows 7* that will enable the Intel SSD Toolbox to be able to detect NVMe drives however, this driver does not support the Intel SSD Toolbox features beyond detecting the drive.

1.3 Known Issues

- **Cannot run Intel SSD Optimizer on RAID configurations**

Description: Some systems without a RAID configuration display the following error message when running Intel SSD Optimizer: "Cannot run the Intel SSD Optimizer on RAID Configurations." There is currently no workaround for this issue.

Known Systems Affected: Dell* Inspiron* Mini 10 netbook

- **Not all drives in a RAID configuration are recognized by Intel SSD Toolbox**

Not all drives in a RAID configuration are recognized by Intel SSD Toolbox

Not all drives in a RAID configuration are recognized by Intel SSD Toolbox. Drive details and SMART information may be obtained with another program.

Known systems affected: HP* Compaq* dc7800 Convertible Minitower PC, HP Compaq dc7800 Small Form Factor PC, HP Compaq dc7800 Ultra Slim Desktop PC

- **Intel SSD Toolbox does not communicate with drives on some systems**

On some systems, Intel SSD Toolbox does communicate with drives and all functionality is disabled. There is no workaround for this issue.

Known systems affected: Supermicro* H8DAi-2, TYAN* Thunder N3600M motherboard – NVIDIA nForce* Pro 3600

- **RAID Volume may display extended serial number**

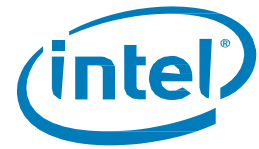
When a RAID volume is selected on the home screen, the serial number may contain an extended number of characters. There is no workaround for this issue.

Known system affected: GIGABYTE* GA-790FXTA-UD5

- **SSD may report "BAD_CONTEXT" if Secure Erase operation is interrupted**

During a Secure Erase operation, if the SSD loses power or if the SSD is removed from the system once the Secure Erase operation is 40% or more complete, the SSD may report "BAD_CONTEXT" in the Serial Number field. There is no workaround for this issue.

Known drive affected: Intel® X25-E Solid State Drive



2 Installation and Start Up

2.1 Downloading the Intel® SSD Toolbox

1. Go to the Intel support website located at <http://www.intel.com/ssd/toolbox>.
2. Chose **Run** to begin installing the application immediately, or **Save** the Intel SSD Toolbox 3.4 application (.exe file) to a folder on your computer.

2.2 Installing the Intel SSD Toolbox

1. Double-click the downloaded .exe file to start the Intel SSD Toolbox setup wizard (skip if you chose **Run** from step 2 above).
2. Click **Next** on the Welcome screen.
3. Review the Intel Software License Agreement, and click **Yes** to continue.
4. Click **Yes**, if you wish to install the Intel Update Manager (IUM), or **No** to continue.
You will see a list of files as they are installed on your computer.
5. Click **Next** to proceed.
Choose **No** if you don't want to run the Intel SSD Toolbox right away.
6. Click **Finish** when the Installation Complete dialog box appears.

The Intel SSD Toolbox installs at the default location: Program Files (x86)\Intel\Intel(R) SSD Toolbox\

2.3 Starting the Intel SSD Toolbox

Start Intel SSD Toolbox one of two ways:

- Double-click the Intel SSD Toolbox icon on your desktop.
- Open the Windows **Start** menu > **Intel SSD Toolbox**.

