Intel® SSD New Users Guide

SSD Optimizations

If you're using Microsoft's Windows 7 operating system, please utilize these system settings to ensure compatibility, endurance, and performance. If you're using Microsoft's Windows XP operating system, please disregard the Superfetch setting.

Make sure your SSD isn’t scheduled for disk defragmentation

- If you’re using an SSD with Microsoft’s Windows 7, the operating system will automatically disable scheduled defragmentation.
- If you’re running Microsoft’s Windows Vista operating system, navigate to “My Computer”.
- Right click on your SSD and choose properties from the drop-down menu.
- Navigate to the “Tools” tab and click “Defragment Now” in the “Defragmentation” menu.
- Near the top, there is a “Schedule” menu. Click “Configure Schedule” and ensure that there is no check next to the “Run on a schedule” option.
- If you’re running Microsoft’s Windows XP operating system, you must run disk defragmentation automatically. Simply make sure not to run the utility.
- Due to the design of SSDs, disk defragmentation is unnecessary and can even have a negative effect on the endurance of the drive.

Disable Superfetch (For Microsoft Windows Vista and Windows 7)

- On your “Start” search menu, type “services.msc”. Scroll down and find the “Superfetch” line, and double click it to open up its properties.
- Change the “Startup Type” to “disabled”.
- Superfetch is designed to open your frequently used programs more quickly. However, this technique doesn’t speed up an Intel SSD’s performance significantly and can ultimately have a negative effect on the performance of the drive. Superfetch is not a feature on Microsoft Windows XP.

Ensure you have the proper drivers installed

Intel recommends using the Intel® Rapid Storage Technology v.9.6 driver available here:

http://downloadcenter.intel.com/detail_desc.aspx?agr=&ProductID=&DwnldID=18859&strOss=&OSFullName=&lang=eng

This driver enables your Intel SSD to receive the TRIM command natively and automatically. Additionally, it is optimized for performance and endurance.

Intel® SSD Communities Frequently asked questions

General SSD FAQs
http://www.intel.com/support/ssdc/hpssd/sb/CS-029623.htm

Will the Intel® SSD Optimizer be updated to support Intel® 50nm SSDs?

No, the Intel® Solid-State Drive Toolbox Optimizer tool will not work on Intel 50nm SSDs. The TRIM function had not been specified at the time Intel® 50nm SSDs were developed and released. However, the 50nm users will still see significant performance over a traditional HDD.

Are there any known issues with regards to compatibility or performance?

Known issues are located in the Intel® Solid-State Drive Toolbox Read Me and Firmware Update Tool Guidelines found here:

http://downloadmirror.intel.com/18455/eng/README%20rev11.rtf

http://downloadcenter.intel.com/T8Clearance.aspx?sType=&agr=Y&ProductID=&DwnldID=18363&url=/18363/eng/SATA_SSD_Firmware_Update_Tool_Guidelines_322570.pdf&PrdMap=&strOSs=&OSFullName=&lang=eng

Intel® Solid-State Drives have not been validated on systems using PATA to SATA or USB to SATA interface adapters as these interfaces don’t take advantage of the Intel® SSD’s increase in performance.

Why can’t Microsoft’s ® Trim command be passed to Intel® SSDs configured in a RAID array?

Intel ® 34nm SSDs with the latest firmware release are able to receive the TRIM command, and will execute TRIM when issued. If two or more Intel® SSDs are configured in a RAID array and the TRIM command is not received, this is a constraint of the RAID controller rather than the drives or their firmware.

How-to Videos

Intel SSD How To Series - Updating Firmware
http://www.youtube.com/watch?v=QpYEIwPXDXk
Intel SSD How To Series - Data Migration
http://www.youtube.com/watch?v=xE7yGQbSplU
Intel SSD How To Series - Using the Intel SSD Toolbox
http://www.youtube.com/watch?v=F8owkFF-AZ0

Resources

Check your PC's SSD Compatibility:

http://download.intel.com/design/flash/nand/whichssd/320956.pdf

Where to Buy Intel Solid State Drives:

http://www.intel.com/buy/components/ssd/embedded.htm?fmlid=-1&sSKU=-1

Intel SSD Facebook Page:

http://zh-cn.facebook.com/pages/Intel-Solid-State-Drive-Official/97164766102

Intel SSD Twitter Feed:

http://twitter.com/intelssd