Intel® Smart Response Technology User Guide

Note: This feature requires that the SATA controller be set to RAID mode via the system BIOS.

Intel® Smart Response Technology is an Intel® Rapid Storage Technology (Intel® RST) caching feature that improves computer system performance. It allows a user to configure computer systems with a Solid State Drive (SSD) used as cache memory between the hard disk drive and system memory. This provides the advantage of having a hard disk drive (or a RAID volume) for maximum storage capacity while delivering an SSD-like overall system performance experience. Intel Smart Response Technology caching is implemented as a single drive letter solution; no additional drive letter is required for the SSD device used as cache.

System Requirements
For a system to support Intel Smart Response Technology it must have the following:
- Intel® Z68/Z77/H77/Q77 Express Chipset-based desktop board
- Intel® Core™ processor in the LGA1155 package
- System BIOS with SATA mode set to RAID
- Intel Rapid Storage Technology software 10.5 version release or later
- Single Hard Disk Drive (HDD) or multiple HDD's in a single RAID volume
- Solid State Drive (SSD) with a minimum capacity of 18.6GB
- Operating system: Microsoft Windows* Vista 32-bit Edition and 64-bit Edition, Microsoft Windows* 7 32-bit Edition and 64-bit

Setup Guide

Configure SATA Mode in BIOS Setup
1. Press the F2 key during boot up to enter the BIOS setup menu
2. Go to Configuration > SATA Drives
3. Select the setting for Chipset SATA Mode and change the value to RAID
4. Press the F10 key to save settings and restart the system.

Operating System Installation
5. You may now begin installation of the operating system on the HDD (or RAID volume)
6. Install all required device drivers
7. Install the Intel Rapid Storage Technology software version 10.5 or later

Enabling Intel Smart Response Technology
Note: The Intel RST software denotes Intel Smart Response Technology as Accelerate
8. Run the Intel RST software through the All Programs menu or the task bar icon.
9. Click "Enable acceleration" either under "Status" or "Accelerate".
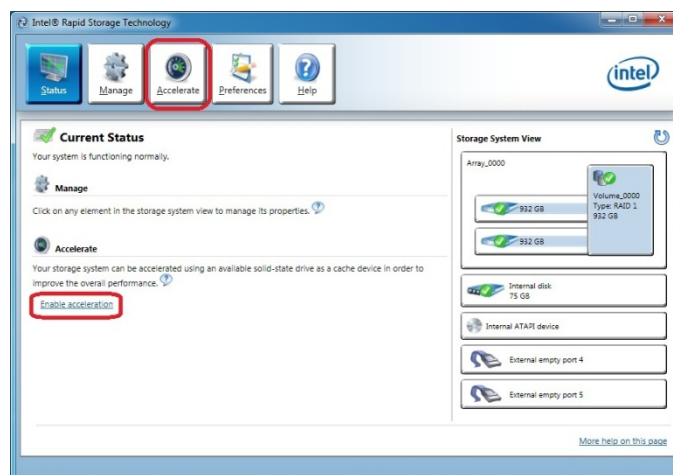
10. Select the SSD to be used as a cache device.
11. Select the size from the SSD to be allocated for the cache memory.
    Note: *Any remaining space on the SSD may be used for data storage using the simple data single-disk RAID 0 volume that is automatically created.*
12. Select the HDD (or RAID volume) to be accelerated. It is highly recommended to accelerate the system volume or system disk for maximum performance.
13. Select the acceleration mode, and then click "OK". By default, Enhanced mode is selected.
    Note: *Enhanced mode (default): Acceleration optimized for data protection.*
    Maximized mode: Acceleration optimized for input/output performance.
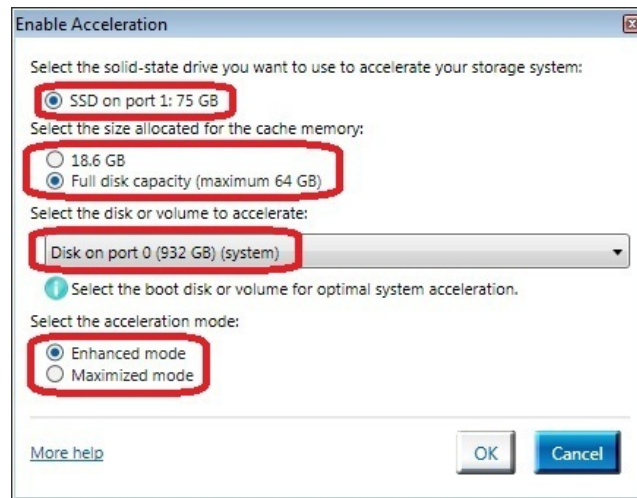
14. The page refreshes and reports the new acceleration configuration in the Acceleration View.
15. Congratulations! Your system is now successfully configured with the Intel Smart Response Technology!

For more information on Intel Smart Response Technology, please visit:
http://www.intel.com/p/en_US/support/highlights/chpsts/imsm