

Intel® Rapid Start Technology User Guide

Intel® Rapid Start technology enables your system to get up and running faster from even the deepest sleep, saving time and power consumption. Feel secure knowing that your system will still resume to working conditions in the event of unexpected power loss while in sleep mode.

System Requirements:

For a system to support Intel Smart Response Technology it must have the following:

- Intel® Z77/H77/Q77 Express Chipset-based desktop board
- Intel® Core™ Processor in the LGA1155 package
- Solid State Drive (SSD)
- Hard Disk Drive (optional for Intel Smart Response Technology)
- Operating system: Microsoft Windows* 7 32-bit Edition and 64-bit
- Intel Rapid Start Technology software

Setup Guide

Operating System Installation

Note: If installing the OS on the SSD, ensure that there's enough partition space left on the SSD to create a Hibernation Partition. Size of the Hibernation Partition must be equal or larger than the amount of system memory.

1. Install the Windows 7 operating system on the SSD. If you plan to implement Intel Smart Response Technology, then install the operating system on the HDD instead.
Note: Guide for enabling Intel Smart Response Technology will not be covered here. Please complete the setup for Intel Smart Response Technology before proceeding for Intel Rapid Start Technology.
2. Install all required device drivers. Do not install the Intel Rapid Start Software yet.

Configure Intel Rapid Start Technology in BIOS Setup (Visual BIOS)

3. Press the F2 key during boot up to enter the Visual BIOS
4. Click on the button for Advanced Setup, and then click on Power.
5. Locate the setting for "Intel Rapid Start Technology", and click on the check box to enable it.
6. For the setting "Hibernation Timer", set it to Immediately.
7. Press the F10 key to save settings and restart the system.

Alternate Steps to Configure Intel Rapid Start Technology in BIOS Setup (non-Visual BIOS or Classic Mode)

3. Press the F2 key during boot up to enter the BIOS setup
4. Scroll to the Power menu.
5. Locate the setting for "Intel Rapid Start Technology", and change the setting to Enabled.
6. For the setting "Hibernation Timer", set it to Immediately.
7. Press the F10 key to save settings and restart the system.

Create a Hibernation Partition on the SSD

8. In the OS, click the Windows Start button.
9. In the Search box, type in "cmd.exe".
10. Do a right-click on the "cmd" tool and select to "Run as administrator".
11. A command line utility will open. Type in "diskpart.exe" and press Enter.
12. At the diskpart prompt, type the following commands as shown:

```
DISKPART> list disk
```

```

Administrator: C:\Windows\System32\cmd.exe - diskpart
Microsoft Windows [Version 6.1.7600]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Windows\system32>diskpart

Microsoft DiskPart version 6.1.7600
Copyright (C) 1999-2008 Microsoft Corporation.
On computer: TME01-PC

DISKPART> list disk

   Disk ###  Status         Size         Free          Dyn  Gpt
   -----  -
   Disk 0    Online         10 GB        1781 MB
   Disk 1    Online        1863 GB      1716 GB
   Disk 2    Online         29 GB         0 B

DISKPART>

```

DISKPART> select disk X

(X is disk number where you want to create the hibernation partition. Refer to results from "list disk" for exact disk number. Disk must be a SSD)

DISKPART> create partition primary size=YYYY

(YYYY is the hibernation partition size in megabytes larger than the amount of memory installed on the system. As an example, for 4 GB of system memory, the value should be 4096 or higher)

DISKPART> detail disk

DISKPART> select Volume Z

(Z is Volume of your store partition. Refer to results from "detail disk" for exact volume number)

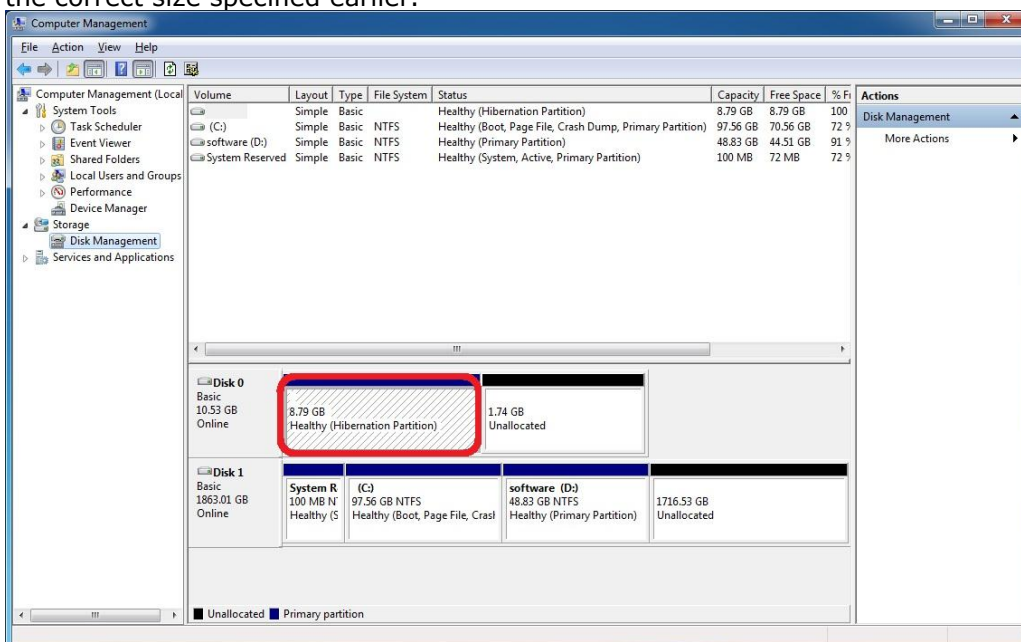
DISKPART> set id=84 override

(The id must be set to 84)

DISKPART>exit

13. Go to "Control Panel\System and Security\AdministrativeTools\Computer Management\Disk Management"

14. Confirm in Disk Management that there is now a Hibernation Partition on the SSD with the correct size specified earlier.



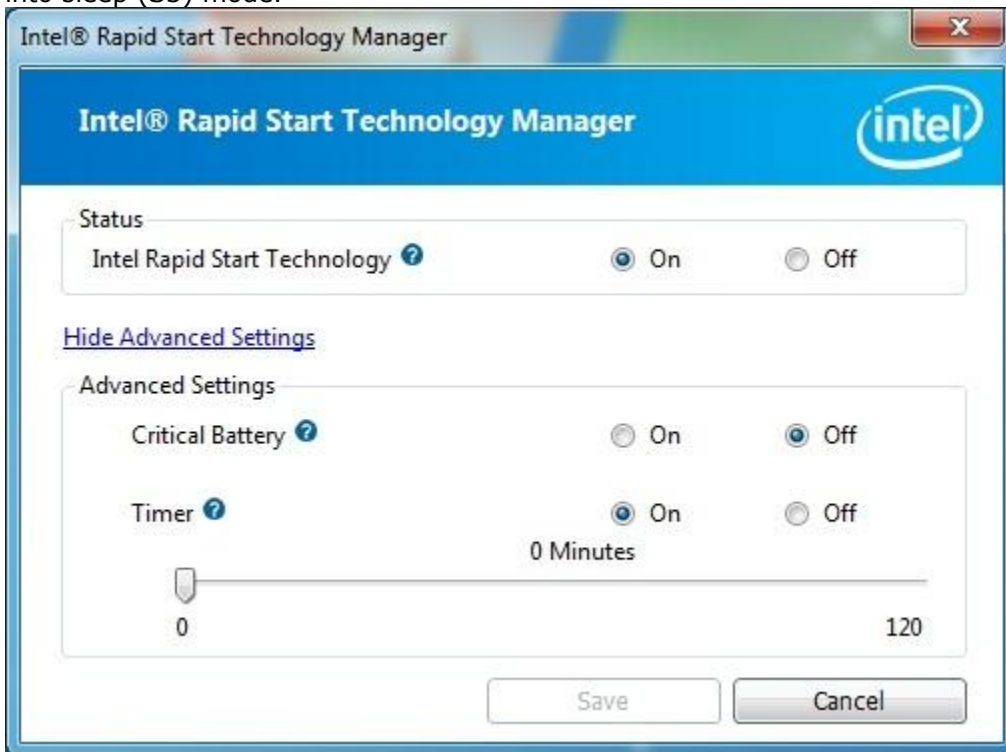
15. Close Disk Management and restart the system for the BIOS to identify the existence of the newly created hibernation partition for Intel Rapid Start Technology.

Installing the Intel Rapid Start Technology software

16. Run the "setup.exe" file for the Intel Rapid Start Technology software package.
17. Complete the installation process.
18. Once installation is done, click the Task Bar on the bottom right of the desktop and look for the icon for Intel Rapid Start Technology Manager. Click to launch the tool.



19. Check that the status for Intel Rapid Start Technology is On.
20. Ensure that the Timer is set to On and the slider bar is at position 0. This is to ensure system will immediately begin utilizing Intel Rapid Start Technology once system is put into sleep (S3) mode.



Testing the Intel Rapid Start Technology

21. Click on the Windows Start button, and then click on Sleep. This will put the system into S3 state.

22. Observe that system will go into sleep mode, and then quickly wake up again before going into sleep state again. This is normal behavior as the system first transitions into the S3 state (per the OS), and then Intel Rapid Start will wake the system up and move it into the S4 state.
23. System is now in the S4 state as it cannot be woken up using USB devices such as USB keyboard or mouse.
24. Press the Power Button to resume the system.
25. Observe that the system resume time is as fast as a wake from S3.