

## Intel® X79 SATA AHCI/RAID Mode Notice

Due to Intel® IRST driver specification, there are some restrictions in Intel® X79 platform when loading Intel® IRST driver for AHCI/RAID mode support during Windows® OS installation. Please see below detail information:

### Installing Intel® IRST driver during Windows OS installation

#### 1. Windows® XP 32 bit:

Intel® IRST driver for X79 platform will **NOT** support Windows XP 32 bit. Please set BIOS [SATA Mode] to [IDE Mode] for OS installation.

#### 2. Windows® XP 64 bit:

When BIOS [SATA Mode] is set to [AHCI Mode] or [RAID Mode], it is necessary to load IRST Driver from USB floppy disk drive during OS Windows® XP 64 bit installation for the system to detect the storage devices. For details, please refer to the section "4.5 Create a RAID driver disk".

##### • Installing AHCI driver in Windows® XP 64 bit

1. During the OS installation, the system prompts you to press the **F6** key to install third-party SCSI or RAID driver.
2. Press **<F6>**, and then insert the floppy disk with the Intel® IRST driver into the floppy disk drive.
3. When prompted to select the SCSI adapter to install, select the **AHCI/RAID Controller** for the corresponding OS version.
4. Follow the succeeding screen instructions to complete the installation.
5. During OS Installation, the program may show error message "cannot find iAstorF.sys" error. Please manually direct the path to the Floppy and load **iAstorF.sys** driver manually.
6. After getting in to OS, install **OS Hotfix(WindowsServer2003.WindowsXP-KB932755\*)** and all drivers to enable S3(Suspend to RAM) and S4(Suspend to Disk) function.

##### • Build RAID Procedure in Windows® XP 64 bit

1. BIOS -> SATA -> **RAID mode**
2. Do **NOT** build any RAID volume in the Intel Option ROM by **<Ctrl>+<l>** during POST.
3. Follow the "Installing AHCI driver in Windows® XP 64 bit" instruction 1 ~ 5
4. After getting in to OS, install **OS Hotfix(WindowsServer2003.WindowsXP-KB932755\*)** and all drivers.
5. Reboot and get into IRST Application to build RAID. After finished, wait for background data sync.
6. After file re-allocation is done, RAID is finished.

- **Windows® 7 & Vista 32/64 bit:**

When BIOS [SATA Mode] is set to [RAID Mode], you must load **Intel IRST Driver** during Windows 7 or Vista installation for the system to detect the Optical Disk Drive connecting to the Intel SATA port, or else the ODD will not run. We strongly recommend you save the IRST Driver from SCD to the USB Flash Drive before OS installation.



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Hotfix introduction: [http://technet.microsoft.com/en-us/library/cc766320\(WS.10\).aspx](http://technet.microsoft.com/en-us/library/cc766320(WS.10).aspx).  
Hotfix download path: <http://support.microsoft.com/kb/932755>

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### **Converting an existing system drive from IDE mode to AHCI mode**

If your existing Windows® operating system is installed to a SATA hard drive that is set to IDE mode during OS installation, you may encounter system boot failure after connecting the hard drive to the new motherboard with the SATA port set to AHCI mode by default. Follow the instructions below to prevent system boot failure.

- For Windows® 7 / Vista OS, refer to <http://support.microsoft.com/kb/922976> for system booting solution.
- For Windows® XP 64-bit OS, we recommend a clean installation of the OS for complete AHCI support.

