Tutorial – Switching the AHCI driver on your computer.

Version 1.0

Some AHCI drivers work better for certain applications, tasks, and hardware configurations. This tutorial will show you how to switch from the Intel Rapid Storage Technology AHCI driver (iaStor) to the Microsoft Standard AHCI driver (MSAHCI).

NOTE: MyDigitalDiscount is not responsible for any loss of information or damage to equipment if the following tutorial is not compatible with the end users configuration.

In our experience, there have been times when the Intel iaStor driver has outperformed the Microsoft MSAHCI driver but, as we've recently found when using a MyDigitalSSD Smart series mSATA drive with a desktop adapter in a Lenovo X220, for some reason the iaStor driver will not give us SATA 6G speeds in the 2.5 inch bay. A simple switch to the MSAHCI driver quickly fixes this problem.

PC Used In This Tutorial

Lenovo ThinkPad X220 featuring the i5-2520M CPU, 4GB of RAM, and Windows 7/8 64 bit.
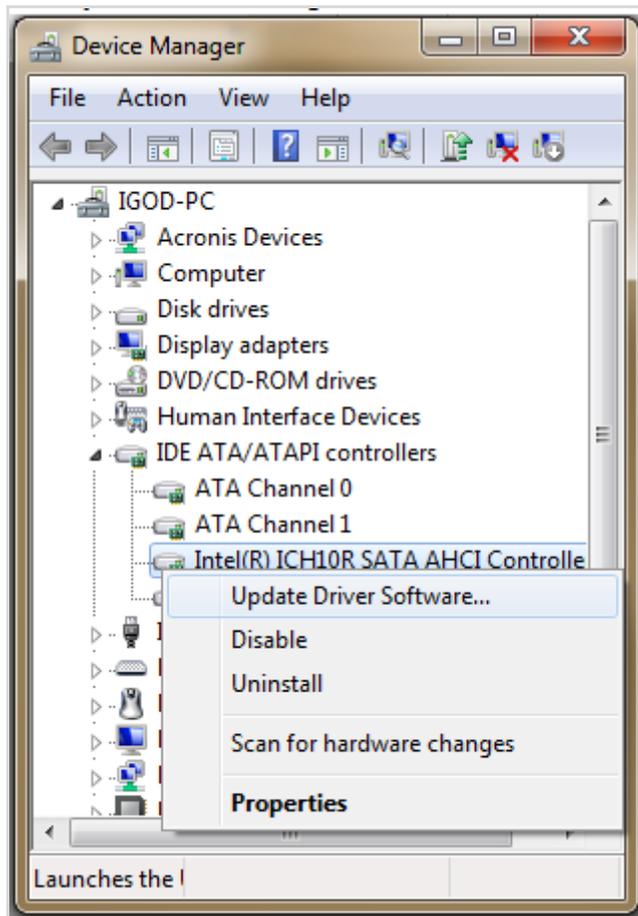
Accessing the Device Manager

1) The fastest and most common way to do this is to open the file explorer on your Windows machine and use the quick links on the left hand side to access your computer. Right click and choose 'Properties' as shown below:
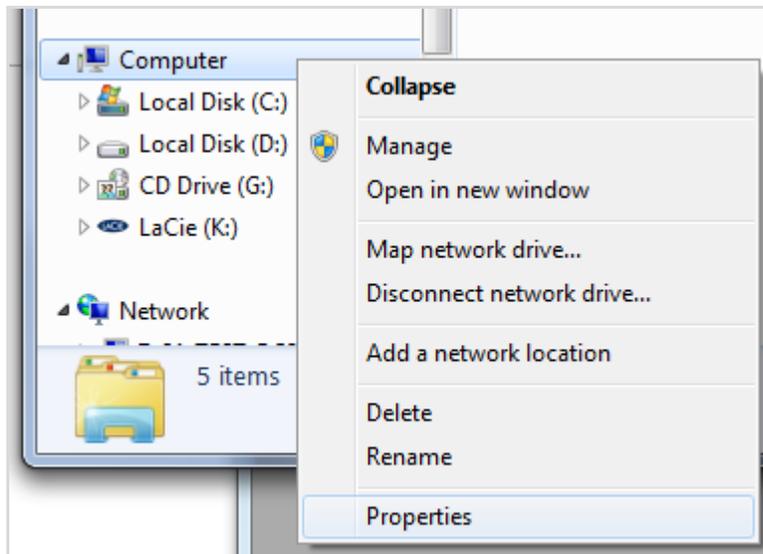
2) This will bring up a new window where, again on the left hand side, you will choose the 'Device Manager' as demonstrated below:
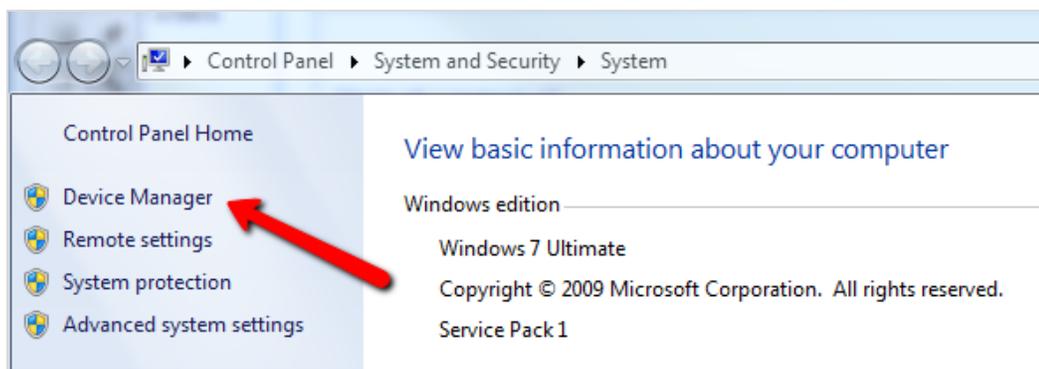
3) In the Device Manager, find the 'IDE ATA/ATAPI controllers' dropdown. Inside that you will find the Intel driver, right click and go to 'Update Driver Software' as shown below:


4) On the next screen, choose this option:

→ Browse my computer for driver software
Locate and install driver software manually.

5) On the next screen, choose this option:

→ Let me pick from a list of device drivers on my computer
This list will show installed driver software compatible with the device, and all driver software in the same category as the device.

6) On the next screen, choose 'Standard AHCI X.X Serial ATA Controller', which should come standard on all Windows based machines. If it is not there we may need to question whether you're running in AHCI mode.
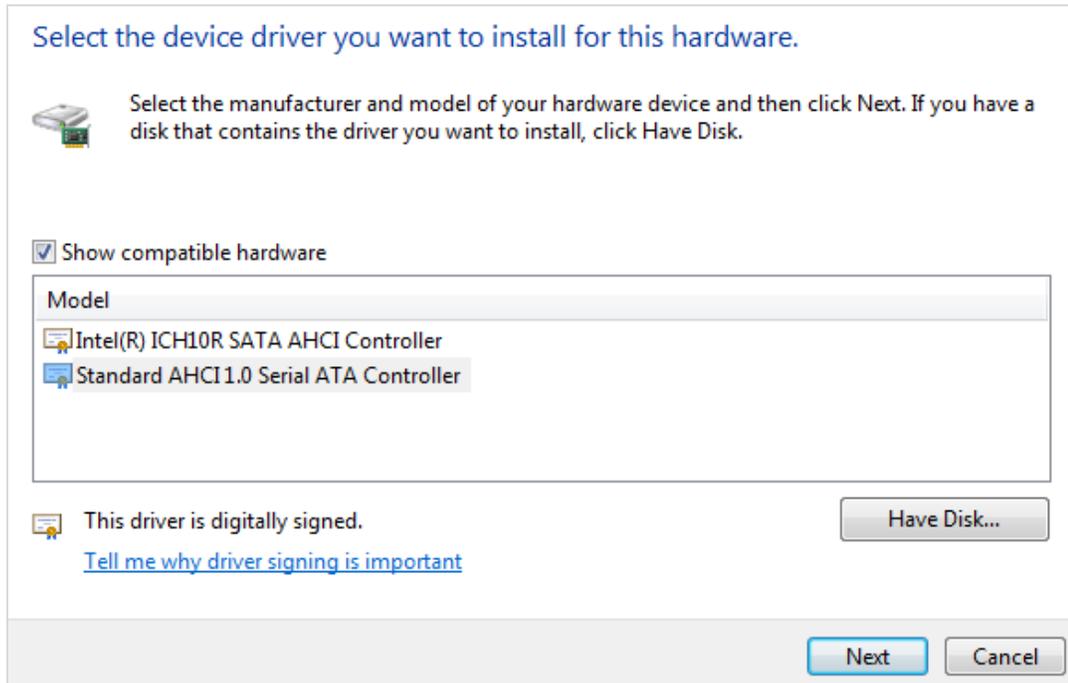
7) Click on 'Next' and restart your PC.

8) After the restart, we suggest checking to make sure the AHCI drivers have been applied properly. To do so, head back into the Device Manager (as seen in Step 1) and verify that the AHCI driver now states 'Standard AHCI X.X Serial ATA Controller.'

Alternatively you can can run one of the several bench programs that display this information. Crystal Disk Mark does not, however AS SSD Benchmark does as shown below.

9) Finished.

NOTE: If this fix still does not allow for SATA 6G speeds, you may need to check with the manufacturer to make sure the port you are testing is capable of performing at 6G speeds.