

Areca SAS/SATA Controllers HDD Compatibility Matrix

As of Aug-31-2009

The Enterprise RAID-ready SATA drive goes beyond desktop-class disc drives to address the unique needs of nearline applications with higher reliability and smoother integration into multi-disc nearline applications.

The following table is the list of current qualified and supported SATA drives

| Brand | Model Name | Capacity | Firmware | SATA HBAs | SAS HBAs |
|---------|-------------------|----------|-------------|-----------|----------------|
| Hitachi | HDE721010SLA330 | 1000.2GB | ST60A31B | Pass | Pass *12 |
| Hitachi | HDT721010SLA360 | 1000.2GB | ST60A31B | Pass*10 | Pass*10,12 |
| Hitachi | HDS721010KLA330 | 1000.2GB | GKAOA70M | Pass | Pass*10 |
| Hitachi | HDS721075KLA330 | 750.2GB | GK8OA70M | Pass | Pass*10 |
| Hitachi | HDS725050KLA360*4 | 500.1GB | K2AOA51A | Pass | Pass*10 |
| Hitachi | HDT725040VLA360 | 400GB | V5COA52A | Pass | Pass*10 |
| Hitachi | HDT725025VLA380 | 250GB | V5DOA52A | Pass | Pass*10 |
| Hitachi | HDS724040KLSA80 | 400.1GB | KFAOA30A | Pass*6 | -- |
| Hitachi | HDS722580VLSA80 | 82.3GB | V320A60A | Pass*6 | -- |
| Hitachi | HDS722525VLSA80 | 250GB | V360A60A | Pass | -- |
| Hitachi | HDS722516VLSA80 | 160GB | V360A60A | Pass | -- |
| Hitachi | HDS722512VLSA80 | 123.5GB | V330A60A | Pass | -- |
| Seagate | ST31000340NS | 1000.2GB | SN05 | Pass | Pass *11 |
| Seagate | ST31000340AS | 1000.2GB | SD01 | Pass*10 | Not Compatible |
| Seagate | ST3750330NS | 750GB | SN05 | Pass | Pass *11 |
| Seagate | ST3750330AS | 750GB | SD15 | Pass*10 | Not Compatible |
| Seagate | ST3750640NS | 750.2GB | 3.AEE | Pass | -- |
| Seagate | ST3750640AS | 750.2GB | 3.AAC | Pass*10 | -- |
| Seagate | ST3500320NS | 500GB | SN05 | Pass | Pass *11 |
| Seagate | ST3500320AS | 500GB | SD15 | Pass*10 | Not Compatible |
| Seagate | ST3500641NS | 500.1GB | 3.AEH | Pass | -- |
| Seagate | ST3500641AS | 500.1GB | 3.AAE/2.AAA | Pass*10 | -- |
| Seagate | ST3400832AS | 400GB | 3.01 | Pass*10 | -- |
| Seagate | ST3250824NS | 250GB | 3.AEH | Pass | -- |
| Seagate | ST3250823NS | 250GB | 5.01 | Pass | -- |
| Seagate | ST3160023AS | 160GB | 3.04 | Pass | -- |
| Seagate | ST3120026AS | 120GB | 3.05 | Pass | -- |
| Seagate | ST380023AS | 80GB | 3.01 | Pass | -- |
| Seagate | ST380013AS | 80GB | 3.18 | Pass | -- |
| WD | WD2002FYPS- | 2.0TB | 04.05G04 | Pass | Pass *13 |
| WD | WD1000FYPS- | 1.0TB | 02.01B01 | Pass | Pass *12 |
| WD | WD1002FBYS- | 1.0TB | 03.00C05 | Pass | Pass *12 |
| WD | WD7502ABYS- | 750GB | 03.00C05 | Pass | Pass *12 |
| WD | WD7500AYPS- | 750.2GB | 02.01B01 | Pass | Pass *12 |
| WD | WD7500AYYS- | 750.2GB | 30.04G30 | Pass | Pass *12 |
| WD | WD5002ABYS- | 500.1GB | 02.03B02 | Pass | Pass *12 |
| WD | WD5001ABYS- | 500.1GB | 59.01D01 | Pass | Pass *12 |
| WD | WD5000ABPS- | 500.1GB | 02.01B01 | Pass | Pass *12 |
| WD | WD5000ABYS-01TNA0 | 500GB | 11.02N11 | Pass | Pass *12 |
| WD | WD5000YS-01MPB0 | 500GB | 07.02E07 *9 | Pass | -- |
| WD | WD4000YR-01PLB0 | 400GB | 01.PLB0 | Pass*8 | -- |
| WD | WD4000KD-00NAB0 | 400GB | 01.06A01 | Pass*2 | -- |
| WD | WD3000HLFS- | 300GB | 04.04V01 | Pass | Pass *12 |

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|---------|-------------------|----------|----------|-------------------|----------------|
| WD | WD2500YD*7 | 250GB | 10.02E01 | Pass | -- |
| WD | WD2500SD | 250GB | 02.05D02 | Pass | -- |
| WD | WD2500JD-22HBB0 | 250GB | 08.02D08 | Pass | -- |
| WD | WD2000JD-22HBB0 | 200GB | 08.02D08 | Pass | -- |
| WD | WD1200JD | 120GB | 02.05D02 | Pass | -- |
| WD | WD800JD-00HKA0 | 80GB | 13.03G13 | Pass | -- |
| WD | WD1500ADFD-00NLR0 | 150GB | 19.06P19 | Pass *3 | -- |
| WD | WD360GD-00FNA0 | 36GB | 35.06K35 | Pass | -- |
| Fujitsu | MHT2060BH | 60GB | 00000043 | Pass | -- |
| Maxtor | 6H500F0 | 500GB | 0601A01 | Pass *1 | -- |
| Maxtor | 7H500F0 | 500GB | YAR51BW0 | Pass *1 | -- |
| Maxtor | 6B300S0 | 300.1GB | BANC1980 | Pass *1 | -- |
| Maxtor | 7B300S0 | 300GB | BANC1980 | Pass *1 | -- |
| Maxtor | 6V300F0 | 300.1GB | VA111610 | Pass *1 | -- |
| Maxtor | 6Y250M0 | 250GB | YAR51BW0 | Pass *1 | -- |
| Maxtor | 7Y250M0 | 250GB | YAR51BW0 | Pass *1 | -- |
| Maxtor | 6Y120M0 | 120GB | YAR51BW0 | Pass *1 | -- |
| Maxtor | 6Y080M0 | 80GB | YAR51BW0 | Pass *1 | -- |
| Samsung | HD103UJ | 1.0TB | | PossibleProblem** | Not Compatible |
| Samsung | HD753LJ | 750.2GB | 1AA01107 | PossibleProblem** | Not Compatible |
| Samsung | SP2004C | 200GB | VM100-32 | Pass *5 | -- |

*** PossibleProblem ***

We had got some usage problem reports by customers, but not all problems are reproducible.

If you already use this drive, please disable NCQ for better compatibility.

1. We recommend running with " Read Ahead Cache Disable" & Disable NCQ when finding any compatibility
We had certified this drive, but some customer got problem still.
If you hadn't bought this drive yet, we will not recommend you used this drive.
2. Update controller firmware to version 1.41 & disable NCQ for solving the compatibility issue with this drive.
3. Update controller firmware to version 1.41 or later for solving the compatibility issue with this drive.
4. NCQ is currently has problem for this drive model. Please check with Hitachi Technical Support for updated microcode November, 2005. We recommend running with 'Queuing Disabled' when using this drive or update Areca firmware to 1.39 to solve the NCQ problem
5. SMART failure might be seen on this drive due to a drive firmware problem. NCQ is not recommended for this drive. Please check with Samsung for a firmware update to fix the bugs mentioned above.
6. Disable NCQ for solving the compatibility issue with this drive.
7. Please get new version firmware from WD.
8. We recommend running with NCQ Disabled when finding any compatibility
We had certified this drive, but some customer got problem still.
9. WD had released a new firmware for array application issue. Please visit WD official site to download the updated firmware
<http://support.wdc.com/download/index.asp?cxml=n&pid=15&swid=57>
10. We recommend Enterprise drives instead Desktop one, because enterprise drives are much more reliable for array applications.
11. The hard drive firmware must be SN06 or later
12. The SAS controller firmware must be V1.45 80915 or later.
13. For directly connections such as ARC-1680i or ARC1212/22, the hard drive must configured to SATA150 mode to avoid the compatible problem.