



Compatibility report

Deskstar 40GV & 75GXP

Ultra ATA/100



| | | |
|---------|-------------|-------------|
| Models: | DTLA-305010 | DTLA-307015 |
| | DTLA-305020 | DTLA-307020 |
| | DTLA-305030 | DTLA-307030 |
| | DTLA-305040 | DTLA-307045 |
| | | DTLA-307060 |
| | | DTLA-307075 |

Compatibility

The IBM SIT Lab thoroughly tests Deskstar drives for compatibility with a wide variety of systems, controller cards, and operating systems. Testing was done to demonstrate compatibility with the hardware and software listed in this document. Other combinations of hardware and software are expected to function with this drive, but have not been tested.

See *Deskstar 40GV & 75GXP Hints & Tips* for an explanation of the following:

- BIOS limitations and display errors
- UDMA operating difficulties experienced with certain motherboards and operating systems
- Capacity limitation issues and solutions
- Enabling / checking UDMA operation under Linux
- UDMA cabling requirements

Systems / System boards

Processors

| | |
|-----------------------------------|-------------|
| ABIT BE6 | Celeron |
| ABIT BP6 (with HPT366) | Celeron |
| AOPEN AX6B | PII |
| Apple Power Mac G3 (Beige) | Power PC G3 |
| Apple Power Mac G3 (Blue & White) | Power PC G3 |
| Apple Power Mac G4 | Power PC G4 |
| ASUS P5A / P5S-VM | AMD-K6-3 |
| Biostar M6SBA | Celeron 466 |
| Biostar M6TWC100 | Celeron 466 |
| Chaintech 6LTM | PII-266 |
| Compaq AP 550 | PIII |
| Compaq DeskPro EN /EP | Celeron |
| Compaq DeskPro EN/D | PIII |

| | |
|---------------------------------------|-----------------|
| Compaq DeskPro EN SFF | PIII |
| Compaq DeskPro EP 6500 | PIII |
| Compaq Presario 5050 / 5610/5900 | PIII |
| Compaq Presario 5900Z | AMD |
| Compaq ProSignia | Celeron |
| Compaq Workstation AP550 | PIII |
| Dell Dimension L466C | Celeron |
| Dell Dimension L500c | Celeron |
| Dell Dimension L500r | PIII |
| Dell Dimension XPS B600r | PIII |
| Dell Dimension XPS T450 | PIII |
| Dell OptiPlex GX1M / GX1pM+ | PIII |
| Dell OptiPlex GX100 / GX110/T | PIII |
| Dell Precision WS 220MT / 400MT/410MT | PIII |
| Dell Precision WS 420MT | Dual PIII |
| Dell Precision WS 610MT | PIII Xeon |
| DFI P5-BV3 | P5-200 (note 3) |
| Elitegroup P6BX-A+ | PII-333 |
| Elitegroup P5SS_Me | AMD-K6-3 |
| EPOX EPOX | Pentium |
| EPOX EP-51MVP3E-M | Pentium |
| FIC CW31 | |
| FIC SD 11 | AMD |
| Gateway E-1400 500c | Celeron |
| Gateway E-3200 | PII |
| Gateway E-4400 | PIII |
| Gateway E-5200 | PII |
| Gateway E-5250 | PIII Xeon |
| Gateway E-5400 | PIII |
| Gateway Essential 466c | Celeron |

IBM storage products

| | |
|-----------------------------------|--------------|
| Gateway GP6 350 | PII (note 4) |
| Gateway 550LS | PIII Xeon |
| Gateway Performance 550 | PIII |
| Gateway Select 475/800/1000 | AMD-K6-2 |
| Gigabyte GA-686BXS | PII-333 |
| Gigabyte GA-71X | AMD-K7 |
| HP Kayak XA6 | PII - 300 |
| HP Kayak XU800 | PIII - 500 |
| HP Vectra VL6 / 450 | PII-450 |
| HP Vectra XW6 / 200 | Dual P6-200 |
| IBM Intellistation MPro | PIII |
| IBM PC 300PL | PIII |
| IBM PC 300GL | Celeron |
| Intel CA810E | Celeron |
| Intel ICH 2 (ATA100) | Intel |
| Micron Millennia EX | PIII |
| Micron ClientPro DX500 | PIII |
| Micron ClientPro CF | Celeron |
| Micron Millennia Max | PIII |
| Microstar MS-5169 K6-233 & K6-350 | (note 5) |
| M-Tech MIG-R557 | Cyrix-P200+ |
| NEC Direction SPL-266 | PII (note 6) |
| QDI Advance 5 / 133E | |
| Shuttle SpaceWalker | AMD-K6-2 |
| Soyo SY6KB PII-266 | |
| Soyo SY61ZA | Celeron |
| Supermicro P6DGE / P6DGU | PIII |
| Supermicro PIIISWA | |
| Tekram P5M4-M | AMD-K6-3 |
| Tekram P6B40-A4X PII-333 | AMD-D-K-3 |
| Tyan S2054 | Celeron 433 |
| Tyan Thunderbolt | |

System board chipsets

Ali Aladdin 543c
AMD-750 (note 9)
HPT-366
HPT-377
Intel 430TX
Intel 440BX/EX/FX/GX/LX/ZX
Intel 810 / 810e / 820 / 840 (82801AA)
Intel 82801AC
VIA Apollo MVP3 / VT82C586B
VIA Apollo MVP4
SiS 530 / 5595 (UDMA/66)
SiS 620 / 5595 (UDMA/66)

System board BIOS

AMI
Apple
Award (note 1)
Compaq
HP (AMI)
HP (Phoenix)
Phoenix
Surepath

IDE add-on controllers

CMD PCI-649 (ATA100)
Highpoint HPT 377 (ATA100)
Promise Ultra33 ATA Accelerator (note 7)
Promise Ultra66 ATA Accelerator (note 7)
Promise Ultra100 ATA (note 8)
Promise FastTrack100 (RAID)

Operating systems

Apple Mac OS 8.6 & 9.0
Linux (Redhat 6.1 & 6.2 / SuSe 6.1 / Corel)
MS DOS 6.22
MS DOS 6.3
PC DOS 7.0
PC DOS2000
SCO Unixware v7.1.1
Windows 95 (OSR2.1 & OSR2.5)
Windows 98 & Windows 98 SE
Windows NT 4.0 (with SP5 / SP6a)
Windows 2000 (note 2)

Drive capacity

Ontrack's DiskManager/DiskGo software has been successfully used to allow full drive capacity in systems that will not support large capacity drives.

StorageSoft's DriveGuide has also been verified to successfully install these Deskstar products.

Master/Slave operation

The DTLA-3xxxxx product family has been tested to the limits of the ATA/ATAPI-5 specification Master/Slave timings in both Master and Slave configurations to ensure compliance and correct functionality with all other ATA/ATAPI-5 compliant devices.

Hard disk drive management utilities

The following third-party utilities have been tested with the DTLA-3xxxxx product family:

| | |
|------------------|---------------|
| Norton Utilities | (Symantec) |
| Ghost | (Symantec) |
| Partition Magic | (Power Quest) |

Third party certification

Microsoft Combined Logo/PC98/PC99 Compliance Certification is in progress. The Submission IDs are listed below:

- Deskstar 40GV:
Submission ID: 27044/27603
- Deskstar 75GXP:
Submission ID: 27044/27603

Third party evaluations

The following companies have evaluated the DTLA-3xxxxx product family for compatibility with their products:

- Adaptec
- AMD
- AMI
- CMD Technology Inc
- High Point Technologies Inc
- Intel Corp
- IWill Corp
- Linux SUSE
- Micron Electronics
- Microsoft
- Novell
- OnTrack Data International Inc
- Pacific Digital Corp
- Phoenix Technologies LTD
- Promise Technology
- SIIG
- StorageSoft

- Tyan Computer
- Unicore Software

Notes:

- 1) At the time of testing older releases of Award BIOS do not support hard drives with capacity greater than 33.8 GB. A common symptom is a hang condition during System Post. Installing drives of more than 32 GB requires use of a third-party utility. See the section titled Drive Capacity.
- 2) Windows 2000 setup does not allow a FAT32 file system larger than 32 GB. With drives larger than 32 GB multiple partitions will be required. Alternatively, the NTFS file system can be used.
- 3) Enabling UDMA operation with these boards can cause a malfunction. See the *Deskstar 40GV & 75GXP Hints & Tips* for specific instructions to solve this problem.
- 4) To use the Promise ATA Accelerator in this system the operating system must first be installed using the on-board ATA interface. The Promise Driver can then be added and the hard drive can be moved to the Promise interface.

- 5) At the time of testing correct UDMA/33 operation could only be achieved under Windows by using a thirdparty driver rather than the drivers provided by MSI.
- 6) To use the 3Ware Disk Switch in this system the operating system must first be installed using the on-board ATA interface. The 3Ware Driver can then be added and the hard drive moved to the 3Ware interface.
- 7) Power management features provided by the operating system do not extend to drives attached to the Promise card.
- 8) Write performance may be impacted unless this controller is used in an ATA/66 capable system.
- 9) The AMD driver incorrectly responds to the UDMA mode 5 capability posted by the DTLA-3xxxxx. Performance is therefore limited to UDMA mode 0 when attached to this chipset. AMD is working on a new driver to resolve and provide correct UDMA mode 4 operation.



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