

# QUICKSPECS

Compaq ProLiant ML350

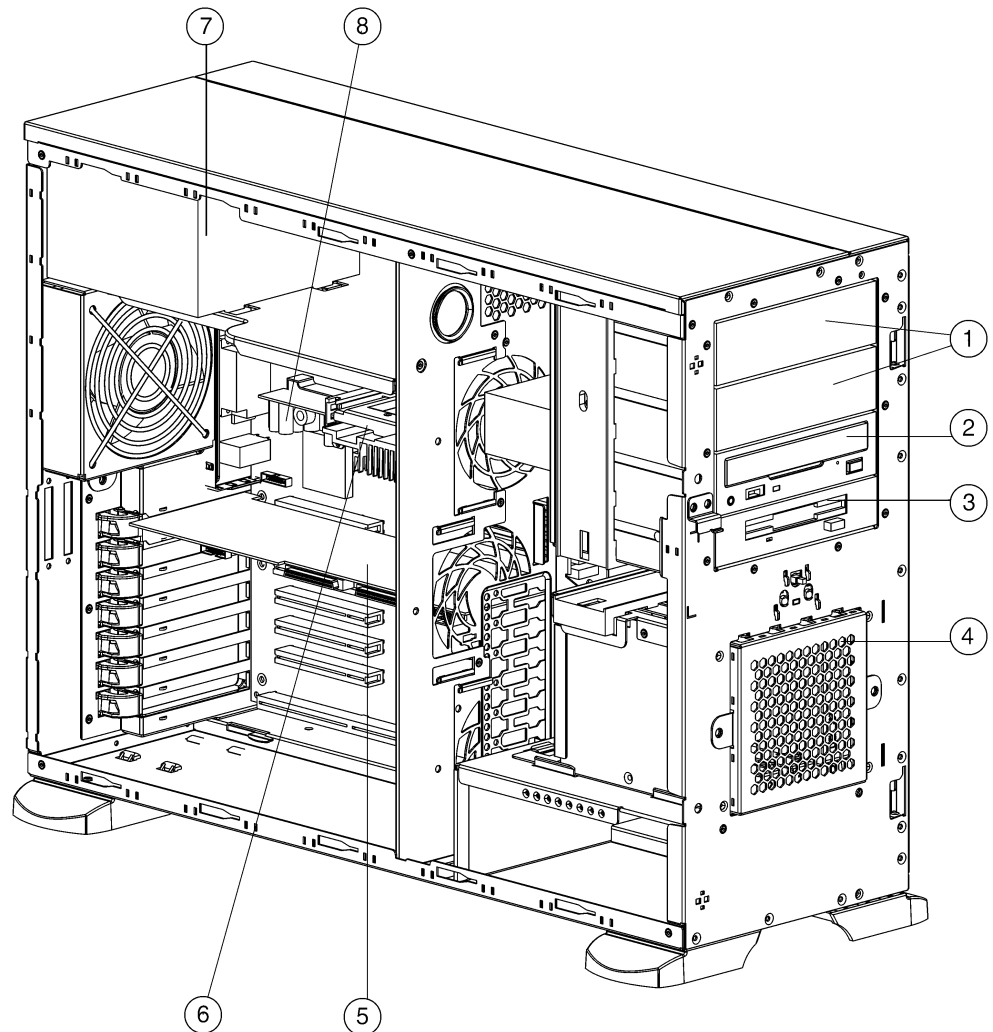
## Overview

### WHAT'S NEW

- Intel Pentium® III 866 MHz and 800 MHz processors (dual processor capability)
- ServerWorks (RCC) 3.0 Chipset with 133-MHz Front Side Bus
- New Bundled Models with Tape Drive and software (NA only)

### AT A GLANCE

- The affordable two-way server that powers your applications today and anticipates your needs for tomorrow
- Intel Pentium III 866 MHz, 800 MHz, 733 MHz or 600 MHz processors
- Hot Plug Models available
- 256-KB second level ECC cache standard (full speed)
- 133-MHz GTL Bus Design
- 128-MB PC133-MHz Registered ECC SDRAM DIMM memory standard, expandable to 2-GB
- Seven total slots: two 64-bit PCI, four 32-bit PCI, and one ISA
- Compaq NC3163 Fast Ethernet NIC (embedded) 10/100 WOL (Wake On LAN)
- Integrated Dual Channel Wide Ultra2 SCSI Adapter
- Support for up to four 1" Wide Ultra2/Ultra3 SCSI hard drives
- Internal storage capacity of up to 72.8-GB
- Internal mass storage capacity of up to 109.2 GB (including the two removable media bays)
- Standard 4 x 1" Drive Cage (Hot Plug or Non-Hot Plug depending on Model)
- Compaq Insight Manager, SmartStart and Automatic Server Recovery (ASR)
- Protected by Compaq Services, including a three-year, Next Business Day on-site limited Global warranty and extended Pre-Failure Warranty which covers processors, memory, and hard drives — Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center at 1-800-345-1518 for details.



- |  |                            |
|--|----------------------------|
| 1. 5.25-inch Available Removable Media Bays        | 5. Server Feature Board    |
| 2. High Speed IDE CD-ROM Drive                     | 6. Processor with Heatsink |
| 3. 1.44-MB Diskette Drive                          | 7. 300-Watt Power Supply   |
| 4. 4 x 1" Hot Plug or Non-Hot Plug Hard Drive Cage | 8. Processor Power Module  |

# QUICK SPECS

Compaq ProLiant ML350

## Standard Features

### MODELS

Available in multiple configurations.

#### Processor – One of the following:

Intel Pentium III 866 MHz processor  
Intel Pentium III 800 MHz processor  
Intel Pentium III 733 MHz processor  
Intel Pentium III 600 MHz processor

#### Cache Memory

Integrated 256-KB Level 2 ECC cache (full speed)

#### Memory

|          |   |
|----------|---|
| Standard | 128 MB (PC133-MHz ECC Registered SDRAM DIMM memory) |
| Maximum  | 2 GB  |

#### Network Controller

Compaq NC3163 Fast Ethernet NIC (embedded) PCI 10/100 WOL (Wake On LAN)

#### Expansion Slots

|             |                 |
|-------------|-----------------|
| I/O (Total) | 7 (6 available) |
| 64-bit PCI  | 2 (2 available) |
| 32-bit PCI  | 4 (3 available) |
| ISA         | 1 (1 available) |

#### Storage Controller

Integrated Dual Channel Wide Ultra2 SCSI Adapter

#### Storage

|                          |   |
|--------------------------|---|
| Diskette Drives          | 1.44 MB   |
| CD-ROM                   | High Speed IDECD-ROM Drive  |
| Hard Drives              | One of the following:<br>None<br>9.1 GB Wide Ultra2 (7200 rpm) 1"   |
| Maximum Internal Storage | 72.8 GB (internal drive cage only)<br>109.2 GB (internal drive cage in addition to placing 18.2GB (1") hard drives in the two removable media bays; brackets required to place these drives come in the bezel blanks that come with the server) |

#### Interfaces

|                         |   |
|-------------------------|---|
| Parallel                | 1 |
| Serial                  | 2 |
| Pointing Device (Mouse) | 1 |
| Graphics                | 1 |
| Hot Plug Keyboard       | 1 |
| Network RJ-45           | 1 |

#### Graphics

Integrated ATI Rage IIC Video Controller with 4MB Video Memory

#### Form Factor

Tower or optional 5U rack conversion kit

#### Compaq Software

|  |   |
|--|---|
| Compaq Insight Manager   | The comprehensive system management tool that monitors the operation of Compaq servers, workstations and clients                                |
| Compaq SmartStart  | The server configuration and software integration tool from Compaq  |
| Array Configuration Utility (ACU) with Smart Array Controllers | Same easy to use yet powerful graphical user interface (GUI) configuration utility and easy to navigate wizards for all Smart Array Controllers |

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## Standard Features

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### Manageability

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Compaq Insight Manager  
Automatic Server Recovery (ASR)  
Drive Parameter Tracking (with Smart Array Controller)  
Dynamic Sector Repairing (with Smart Array Controller)  
Pre-Failure Warranty (covers processors, memory and hard drives)

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### Security

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Power-on password  
Setup password  
Diskette boot control  
Parallel and serial interface control  
Disk configuration lock  
Power switch security

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### Power Supply

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300 Watts, 100 to 240 VAC Rated Input Voltage, CE Mark Compliant

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### Required Cabling

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For required cabling information, refer to the Compaq website at  
<http://www.compaq.com/products/servers/proliantML350>.  
**Note:** This web site available in English only.

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### OS Support

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Microsoft Windows NT  
Microsoft BackOffice Small Business Server  
Microsoft Windows 2000  
Novell NetWare  
SCO OpenServer  
SCO UnixWare  
RedHat Linux

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### Service and Support

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Compaq Services provides a wide range of service offerings, including a three-year limited warranty fully supported by a worldwide network of resellers and service providers, lifetime toll-free 7 x 24 hardware technical phone support, and Pre-Failure Warranty coverage of hard drives, memory, and processors. Disaster recovery services are available through partnership with Comdisco.

**Note:** Certain restrictions and exclusions apply. Consult the Compaq Customer Support Center at 1-800-345-1518 for details. This web site available in English only.

# QUICK SPECS

Compaq ProLiant ML350

## Standard Features

**ML350T01 P866-256K**  
**128MB 9.1GB HP**  
159843-002

**Note:** Model not available in North America

### Models

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 866 MHz              | <b>Hard Drives</b>        | 9.1 GB Wide Ultra2 (7200 rpm HP)                      |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC          | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB                                 | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |  | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P866-256K**  
**128MB HP**  
159843-001

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 866 MHz              | <b>Hard Drives</b>        | None  |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC          | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB                                 | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |  | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P866-256K**  
**128MB NHP 9.1GB Tape**  
159844-003

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 866 MHz  | <b>Hard Drives</b>        | 9.1 GB Wide Ultra2 (7200 rpm NHP)                     |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC  | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM   | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB   | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
| <b>Bundled with</b> | 12/24-GB DAT Tape Drive and<br>VERITAS Backup Exec Quick<br>Start Edition Software | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P866-256K**  
**128MB 9.1GB NHP**  
159844-002

**Note:** Model not available in North America

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 866 MHz              | <b>Hard Drives</b>        | 9.1 GB Wide Ultra2 (7200 rpm NHP)                     |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC          | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB                                 | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |  | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

# QUICKSPECS

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## Standard Features

**ML350T01 P866-256K**  
**128MB NHP**  
159844-001

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 866 MHz              | <b>Hard Drives</b>        | None  |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC          | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB                                 | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |  | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P800-256K**  
**128MB 9.1GB HP**  
159845-002

**Note:** Model not available in North  
America

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 800 MHz              | <b>Hard Drives</b>        | 9.1 GB Wide Ultra2 (7200 rpm HP)                      |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC          | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB                                 | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |  | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P800-256K**  
**128MB HP**  
159845-001

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 800 MHz              | <b>Hard Drives</b>        | None  |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC          | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB                                 | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |  | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P800-256K**  
**128MB NHP 9.1GB Tape**  
159846-003

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 800 MHz  | <b>Hard Drives</b>        | 9.1 GB Wide Ultra2 (7200 rpm NHP)                     |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC  | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM   | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB   | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
| <b>Bundled with</b> | 12/24-GB DAT Tape Drive and<br>VERITAS Backup Exec Quick<br>Start Edition Software | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

# QUICK SPECS

Compaq ProLiant ML350

## Standard Features

**ML350T01 P800-256K**  
**128MB 9.1GB NHP**  
159846-002

**Note:** Model not available in North America

|                     |                                     |                           |   |
|---------------------|-------------------------------------|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 800 MHz           | <b>Hard Drives</b>        | 9.1 GB Wide Ultra2 (7200 rpm NHP)                     |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC       | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2 SCSI Adapter      |
| Standard            | 128 MB                              | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |                                     | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P800-256K**  
**128MB NHP**  
159846-001

|                     |                                     |                           |   |
|---------------------|-------------------------------------|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 800 MHz           | <b>Hard Drives</b>        | None  |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC       | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2 SCSI Adapter      |
| Standard            | 128 MB                              | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |                                     | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P733-256K**  
**128MB 9.1GB HP**  
158343-002

**Note:** Model not available in North America

|                     |                                     |                           |   |
|---------------------|-------------------------------------|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 733 MHz           | <b>Hard Drives</b>        | 9.1 GB Wide Ultra2 (7200 rpm HP)                      |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC       | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2 SCSI Adapter      |
| Standard            | 128 MB                              | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |                                     | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P733-256K**  
**128MB HP**  
158343-001

|                     |                                     |                           |   |
|---------------------|-------------------------------------|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 733 MHz           | <b>Hard Drives</b>        | None  |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC       | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2 SCSI Adapter      |
| Standard            | 128 MB                              | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |                                     | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

# QUICKSPECS

Compaq ProLiant ML350

## Standard Features

**ML350T01 P733-256K**  
**128MB NHP 9.1GB Tape**  
158341-003

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 733 MHz  | <b>Hard Drives</b>        | 9.1 GB Wide Ultra2 (7200 rpm NHP)                     |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC  | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM   | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB   | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
| <b>Bundled with</b> | 12/24-GB DAT Tape Drive and<br>VERITAS Backup Exec Quick<br>Start Edition Software | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P733-256K**  
**128MB 9.1GB NHP**  
158341-002

**Note:** Model not available in North  
America

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 733 MHz              | <b>Hard Drives</b>        | 9.1 GB Wide Ultra2 (7200 rpm NHP)                     |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC          | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB                                 | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |  | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P733-256K**  
**128MB NHP**  
158341-001

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 733 MHz              | <b>Hard Drives</b>        | None  |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC          | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB                                 | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |  | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P600-256K**  
**128MB 9.1GB HP**  
152843-002

**Note:** Model not available in North  
America

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 600 MHz              | <b>Hard Drives</b>        | 9.1 GB Wide Ultra2 (7200 rpm HP)                      |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC          | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM | <b>Storage Controller</b> | High Speed IDE CD-ROM Drive                           |
| Standard            | 128 MB                                 | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |  | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

# QUICK SPECS

Compaq ProLiant ML350

## Standard Features

**ML350T01 P600-256K**  
**128MB HP**  
152843-001

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 600 MHz              | <b>Hard Drives</b>        | None  |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC          | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB                                 | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |  | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P600-256K**  
**128MB NHP 9.1GB Tape**  
116185-003

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 600 MHz  | <b>Hard Drives</b>        | 9.1 GB Wide Ultra2 (7200 rpm NHP)                     |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC  | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM   | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB   | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
| <b>Bundled with</b> | 12/24-GB DAT Tape Drive and<br>VERITAS Backup Exec Quick<br>Start Edition Software | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P600-256K**  
**128MB 9.1GB NHP**  
116185-002

**Note:** Model not available in North  
America

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 600 MHz              | <b>Hard Drives</b>        | 9.1 GB Wide Ultra2 (7200 rpm NHP)                     |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC          | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB                                 | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |  | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

**ML350T01 P600-256K**  
**128MB NHP**  
116185-001

|                     |  |                           |   |
|---------------------|--|---------------------------|---|
| <b>Processor(s)</b> | Intel Pentium III 600 MHz              | <b>Hard Drives</b>        | None  |
| <b>Cache Memory</b> | Integrated 256-KB Level 2 ECC          | <b>Network Controller</b> | NC3163 Fast Ethernet NIC (embedded)<br>PCI 10/100 WOL |
| <b>Memory</b>       | PC133-MHz ECC Registered<br>SDRAM DIMM | <b>Storage Controller</b> | Integrated Dual Channel Wide Ultra2<br>SCSI Adapter   |
| Standard            | 128 MB                                 | <b>Internal Storage</b>   | 109.2 GB max  |
| Maximum             | 2 GB                                   | <b>Optical Drive</b>      | High Speed IDE CD-ROM Drive                           |
|                     |  | <b>Form Factor</b>        | Tower or optional 5U rack conversion kit              |

## Options

### Processor

|  |            |
|--|------------|
| P866 Pentium III 256K Processor Option Kit   | 161085-B21 |
| P800 Pentium III 256K Processor Option Kit   | 161084-B21 |
| P733 Pentium III 256K Processor Option Kit   | 161083-B21 |
| P667 Pentium III 256K Processor Option Kit   | 159756-B21 |
| <b>Note:</b> This option kit is made available for those customers that have purchased a ProLiant ML350 667 MHz (667 MHz models are <i>only</i> available Direct or configured through the web from Compaq). |            |
| P600 Pentium III 256K Processor Option Kit   | 128292-B21 |

### Memory (DIMMs)

|   |            |
|---|------------|
| 512-MB PC133MHz Registered ECC SDRAM DIMM Memory Option Kit | 128279-B21 |
| 256-MB PC133MHz Registered ECC SDRAM DIMM Memory Option Kit | 128278-B21 |
| 128-MB PC133MHz Registered ECC SDRAM DIMM Memory Option Kit | 128277-B21 |
| 64-MB PC133MHz Registered ECC SDRAM DIMM Memory Option Kit  | 128276-B21 |

### Optical Drives

|  |            |
|--|------------|
| DVD-ROM Drive Option Kit (Opal)<br>(DVD-ROM Drive Option Kit only supported by Windows NT or Windows 2000 OS.) | 388481-B21 |
|--|------------|

### Internal Storage

|  |            |
|--|------------|
| Compaq ProLiant ML350 Hot Plug Drive Cage Upgrade Option Kit (4 x 1")  | 161275-B21 |
| <b>Note:</b> When upgrading a Non-Hot Plug Model to Hot Plug, the purchase of the Hot Plug Drive Cage Upgrade Option Kit (161275-B21) is required to support hot plug (Ultra2/Ultra3) hard drives. |            |

### Hard Drives

#### Wide Ultra2 SCSI – Universal Hot Plug

|  |            |
|--|------------|
| 18.2-GB Wide Ultra2 SCSI 10,000 rpm Drive (1") | 128418-B22 |
| 18.2-GB Wide Ultra2 SCSI Drive (1")            | 388144-B22 |
| 9.1-GB Wide Ultra2 SCSI 10,000 rpm Drive (1")  | 328939-B22 |
| 9.1-GB Wide Ultra2 SCSI Drive (1")             | 123065-B22 |

**Note:** When upgrading a Non-Hot Plug Model to Hot Plug, the purchase of the Hot Plug Drive Cage Upgrade Option Kit (161275-B21) is required to support hot plug (Ultra2/Ultra3) hard drives.

#### Wide Ultra2 SCSI – Non-Hot Plug

|                                     |            |
|-------------------------------------|------------|
| 18.2-GB Wide Ultra2 SCSI Drive (1") | 388143-B21 |
| 9.1-GB Wide Ultra2 SCSI Drive (1")  | 349526-B21 |

#### Wide Ultra3 SCSI – Universal Hot Plug

|  |            |
|--|------------|
| 18.2-GB Wide Ultra3 SCSI 10,000 rpm Drive (1") | 142673-B22 |
| 9.1-GB Wide Ultra3 SCSI 10,000 rpm Drive (1")  | 142671-B22 |

**Note:** When upgrading a Non-Hot Plug Model to Hot Plug, the purchase of the Hot Plug Drive Cage Upgrade Option Kit (161275-B21) is required to support hot plug (Ultra2/Ultra3) hard drives.

#### Wide Ultra3 SCSI – Non-Hot Plug

|  |            |
|--|------------|
| 18.2-GB Wide Ultra3 SCSI 10,000 rpm Drive (1") | 142674-B21 |
| 9.1-GB Wide Ultra3 SCSI 10,000 rpm Drive (1")  | 142672-B21 |

## Options

### Storage Controllers

|  |            |
|--|------------|
| Smart Array 431 Controller                           | 127695-B21 |
| Smart Array 221 Controller                           | 388099-B21 |
| Smart Array 3200 Controller                          | 295643-B21 |
| 64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter   | 129803-B21 |
| 64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter | 154457-B21 |
| Wide-Ultra SCSI-3 Adapter                            | 272514-001 |

### Communications

|   |            |
|---|------------|
| Compaq NC3122 Dual Port Fast Ethernet NIC                                     | 317450-B21 |
| Compaq NC3123 Fast Ethernet NIC PCI 10/100 WOL                                | 174830-B21 |
| Compaq NC3134 Fast Ethernet NIC 64 PCI Dual Port 10/100                       | 138603-B21 |
| Compaq NC3135 Fast Ethernet Module Dual 10/100 Upgrade Module for NC3134      | 138604-B21 |
| Compaq NC6132 Gigabit Module 1000 SX Upgrade Module for NC3134 and NC3131     | 338456-B23 |
| Compaq NC3133 Fast Ethernet Module 100FX Upgrade Module for NC3131 and NC3134 | 338456-B25 |
| Compaq NC6134 Gigabit NIC 64 PCI 1000SX                                       | 174818-B21 |
| Compaq NC4621 Token Ring NIC PCI WOL  | 379956-B21 |
| IBM 16/4 Token Ring PCI Special   | 133749-B21 |
| Compaq 56K ISA Fax Modem v.90   | 294900-002 |

### Internal Tape Drives

**Note:** In order to install certain tape drives internally, you may need to remove the rails that come standard on the drives and then re-insert the screws in the mounting holes.

|  |            |
|--|------------|
| Internal 20/40-GB DAT DDS-4 Tape Drive             | 157769-B21 |
| Internal 12/24-GB DAT Drive (Opal)                 | 295513-B22 |
| Internal 4/8-GB DAT Drive (Opal)                   | 295353-B22 |
| Internal AIT 50-GB Tape Drive                      | 157766-B21 |
| Internal AIT 35-GB Tape Drive                      | 388504-B21 |
| 20/40-GB DAT DDS-4 8 Cassette Autoloader, Internal | 166504-B21 |
| Internal 35/70-GB DLT Drive                        | 242520-B21 |
| Internal 20/40-GB DLT Drive (Opal)                 | 340743-B22 |
| 12.0-GB DDS-3 DAT Cassette (10 pack)               | 295515-B21 |
| DAT Cleaning Cassette                              | 242781-001 |
| DDS-4 Media (10 pack)                              | 152842-001 |
| 20/40-GB DAT DDS-4 8 Cassette Magazine with Media  | 171532-B21 |
| AIT 50-GB Data Cassette (5 pack)                   | 152841-001 |
| AIT 35-GB Data Cassette (5 pack)                   | 402371-B21 |
| AIT Cleaning Cassette                              | 402374-B21 |
| DLT IV Data Cartridges (single pack)               | 295194-B21 |
| DLT IV Data Cartridges (7 pack)                    | 295192-B21 |
| DLT Cleaning Cartridge                             | 199704-001 |
| DLT Magazine with five Type IV DLT Tapes           | 295168-B21 |

### Management Options

|  |            |
|--|------------|
| Compaq Remote Insight Lights-Out Edition                   | 157866-001 |
| Compaq Remote Insight (PCI) LAN + NA Modem                 | 294013-002 |
| Compaq Remote Insight Board (PCI) LAN/Serial without modem | 294013-B24 |
| Compaq Remote Insight Board (PCI) LAN only                 | 294013-B25 |

## Options

### Monitors

|  |            |
|--|------------|
| TFT8020 18" Flat Panel Monitor (Opal)  | 326100-001 |
| TFT8020 18" Flat Panel Monitor (Carbon)                                      | 159244-001 |
| TFT8020 18" Flat Panel Monitor (Opal, bulked packed 2 monitor heads per box) | 173610-001 |
| TFT5010 15" Flat Panel Monitor (Opal)  | 104741-001 |
| TFT5010 15" Flat Panel Monitor (Carbon)                                      | 154486-001 |
| P1100 Color  | 325606-001 |
| P900 Color   | 386326-001 |
| P700 Color   | 380207-001 |
| V1100 Color Monitor  | 386472-001 |
| V700 Color (opal)  | 325800-001 |
| V500 Color   | 325900-001 |
| S910 Color   | 138485-001 |
| S710 Color   | 152991-001 |
| S510 Color   | 168636-001 |

### External Tape Drives

|   |            |
|---|------------|
| External 20/40-GB DAT DDS-4 Tape Drive      | 157770-001 |
| External AIT 50-GB Tape Drive               | 157767-001 |
| External AIT 35-GB Tape Drive               | 388507-001 |
| 20/40-GB DAT 8 Cassette Autoloader External | 166505-001 |
| External 35/70-GB DLT Drive                 | 242521-B21 |
| External 20/40-GB DLT Drive (Opal)          | 340744-B22 |
| 12.0-GB DDS-3 DAT Cassette (10 pack)        | 295515-B21 |
| DAT Cleaning Cassette                       | 242781-001 |
| DDS-4 Media (10 pack)                       | 152842-001 |
| 20/40-GB DAT 8 Cassette Magazine with Media | 171532-B21 |
| AIT 50-GB Data Cassette (5 pack)            | 152841-001 |
| AIT 35-GB Data Cassette (5 pack)            | 402371-B21 |
| AIT Cleaning Cassette                       | 402374-B21 |
| DLT IV Data Cartridges (single pack)        | 295194-B21 |
| DLT IV Data Cartridges (7 pack)             | 295192-B21 |
| DLT Cleaning Cartridge                      | 199704-001 |
| DLT Magazine with five Type IV DLT Tapes    | 295168-B21 |

### External Storage - Tower

|  |            |
|--|------------|
| Compaq StorageWorks Enclosure Model 4214T (tower)  | 124875-001 |
| <b>Note:</b> The Compaq StorageWorks Enclosure 4200 Family support the Wide Ultra2/Ultra3 1" Hot Plug Hard Drives. |            |
| SCSI Storage Expander II   | 332609-001 |
| ProLiant Storage System Tower Model UE   | 348710-002 |
| ProLiant Storage System Tower Model U2   | 304110-B22 |
| <b>Note:</b> The Compaq ProLiant Storage System Models UE and U2 support the Wide-Ultra SCSI-3 Drives.             |            |
| ProLiant Storage System Model F1 or U1 to Model UE Upgrade Kit   | 348718-B21 |
| ProLiant Storage System Model F2 or U2 to Model UE Upgrade Kit   | 348706-B21 |
| Conversion Kit, SB to DB/U   | 304116-B21 |
| Conversion Kit, DB to SB/U   | 304115-B21 |
| StorageWorks Enclosure 4200 Redundant Power Supply Option  | 119826-B21 |
| StorageWorks Enclosure 4200 Ultra2 Dual Bus I/O Module Option  | 119829-B21 |
| StorageWorks Enclosure 4200 Ultra3 Single Bus I/O Module Option  | 190212-B21 |

## Options

### External Storage – Tower *(continued)*

|   |            |
|---|------------|
| StorageWorks Enclosure 4200 Ultra3 Dual Bus I/O Module Option | 190213-B21 |
| StorageWorks Enclosure Tower to Rack Conversion Kit           | 150213-B21 |
| ProLiant Storage System/U Redundant Power Supply Option       | 224206-001 |

### Uninterruptible Power Supply - Tower

|   |            |
|---|------------|
| Compaq Pro UPS 500 (300 Watt) 120V                                | 136386-001 |
| UPS Model T700 (100-127 Volt/700 Volt Amp)                        | 295372-B21 |
| UPS Model T1000 (100-127 Volt/1000 Volt Amp)                      | 242688-001 |
| UPS Model T1500 (100-127 Volt/1440 Volt Amp)                      | 242688-003 |
| UPS Model T2000 (100-127 Volt/1920 Volt Amp)                      | 242688-005 |
| Multi-Server UPS Card<br>(Not available for UPS T700 or UPS 500.) | 123508-B21 |
| Scalable UPS Card<br>(Not available for UPS T700 or UPS 500.)     | 123509-B21 |
| SNMP-EN Adapter<br>(Not available for UPS T700 or UPS 500.)       | 347225-B21 |
| High to Low Voltage Transformer (250VA)                           | 388643-B21 |

### Rack Conversion Kit

|  |            |
|--|------------|
| Compaq ProLiant ML350 Tower to Rack Conversion Kit | 158438-B21 |
|--|------------|

### Other

|   |            |
|---|------------|
| Internal Wide Ultra3 Cable Option Kit, NHP                | 166389-B21 |
| ProLiant ML350 Internal to External SCSI Cable Option Kit | 159547-B21 |

### Service Upgrades (CarePaks)

#### Hardware Services 4-Hour On-site Service

|  |             |
|--|-------------|
| 4-Hour On-site Service, 9-Hour x 5-Day Coverage, 3 Years (2-5-2 Part Number for U.S.)    | FM-EL4HR-36 |
| 4-Hour On-site Service, 9-Hour x 5-Day Coverage, 3 Years (2-5-2 Part Number for Canada)  | FP-EL4HR-36 |
| 4-Hour On-site Service, 9-Hour x 5-Day Coverage, 3 Years (6-3 Part Number for U.S.)      | 162676-002  |
| 4-Hour On-site Service, 9-Hour x 5-Day Coverage, 3 Years (6-3 Part Number for Canada)    | 162676-122  |
| 4-Hour On-site Service, 24-Hour x 7-Day Coverage, 3 Years (2-5-2 Part Number for U.S.)   | FM-EL724-36 |
| 4-Hour On-site Service, 24-Hour x 7-Day Coverage, 3 Years (2-5-2 Part Number for Canada) | FP-EL724-36 |
| 4-Hour On-site Service, 24-Hour x 7-Day Coverage, 3 Years (6-3 Part Number for U.S.)     | 162675-002  |
| 4-Hour On-site Service, 24-Hour x 7-Day Coverage, 3 Years (6-3 Part Number for Canada)   | 162675-122  |

#### Installation & Start-up Services

|   |             |
|---|-------------|
| Hardware Installation (2-5-2 Part Number for U.S.)  | FM-ELINS-IN |
| Hardware Installation (2-5-2 Part Number for Canada)  | FP-ELINS-IN |
| Hardware Installation (6-3 Part Number for U.S.)  | 401791-002  |
| Hardware Installation (6-3 Part Number for Canada)  | 401791-122  |
| Hardware Installation (6-3 Part Number for U.S.)  | Quote       |
| O/S & Hardware Installation (2-5-2 Part Number for U.S.)<br>(Hardware installation plus two days O/S start-up activity (installation, configuration, network access & orientation)) | FP-CXHSI-01 |
| O/S & Hardware Installation (6-3 Part Number for U.S.)<br>(Hardware installation plus two days O/S start-up activity (installation, configuration, network access & orientation))   | 160555-002  |

## Options

### Service Upgrades (CarePacs) (continued)

#### **Business Solutions Priority Service Plan – Priority Level**

|   |             |
|---|-------------|
| 5 x 9 4-hour H/W, 5 x 9 2-hour O/S (NT & NetWare), Three Years (2-5-2 Part Number for U.S.)   | FP-CX101-36 |
| 5 x 9 4-hour H/W, 5 x 9 2-hour O/S (NT & NetWare), Three Years (2-5-2 Part Number for Canada) | FP-CZ101-36 |
| 5 x 9 4-hour H/W, 5 x 9 2-hour O/S (NT & NetWare), Three Years (6-3 Part Number for U.S.)     | 155323-002  |
| 5 x 9 4-hour H/W, 5 x 9 2-hour O/S (NT & NetWare), Three Years (6-3 Part Number for Canada)   | 155323-122  |

#### **Business Solutions Priority Service Plan – Priority 24 Level**

|   |             |
|---|-------------|
| 7 x 24 4-hour H/W, 7 x 24 2-hour O/S (NT & NetWare), Three years (2-5-2 Part Number for U.S.) | FP-CX201-36 |
| 7 x 24 4-hour H/W, 7 x 24 2-hour O/S (NT & NetWare), Three years (6-3 Part Number for U.S.)   | 155327-002  |

#### **Business Solutions Priority Service Plan – Priority Plus Level**

|   |             |
|---|-------------|
| 7 x 24 4-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS account review, Three Years (2-5-2 Part Number for U.S.)   | FP-CX301-36 |
| 7 x 24 4-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS account review, Three Years (2-5-2 Part Number for Canada) | FP-CZ301-36 |
| 7 x 24 4-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS account review, Three Years (6-3 Part Number for U.S.)     | 155331-002  |
| 7 x 24 4-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS account review, Three Years (6-3 Part Number for Canada)   | 155331-122  |

#### **Business Solutions Priority Service Plan – Priority Premier Level**

|   |             |
|---|-------------|
| 7 x 24 2-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (2-5-2 Part Number for U.S.)   | FP-CX501-36 |
| 7 x 24 2-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (2-5-2 Part Number for Canada) | FP-CZ501-36 |
| 7 x 24 2-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (6-3 Part Number for U.S.)     | 155335-002  |
| 7 x 24 2-hour H/W, 7 x 24 1-hour O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (6-3 Part Number for Canada)   | 155335-122  |

#### **Business Solutions Priority Service Plan – Priority Executive Premier Level**

|  |             |
|--|-------------|
| 7 x 24 2-hour H/W, 7 x 24 30-minute O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (2-5-2 Part Number for U.S.)   | FP-CX701-36 |
| 7 x 24 2-hour H/W, 7 x 24 30-minute O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (2-5-2 Part Number for Canada) | FP-CZ701-36 |
| 7 x 24 2-hour H/W, 7 x 24 30-minute O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (6-3 Part Number for U.S.)     | 155339-002  |
| 7 x 24 2-hour H/W, 7 x 24 30-minute O/S (NT & NetWare), SPS Account Review, Proactive Management Review, named S/w rep, Three Years (6-3 Part Number for Canada)   | 155339-122  |

**Note:** For more information, customer/resellers can contact [www.Compaq.com/services](http://www.Compaq.com/services). This web site available in English only.

## Memory

**Compaq ProLiant ML350  
All Models**

### STANDARD MEMORY

128-MB PC133-MHz Registered ECC SDRAM DIMM installed (1 x 128-MB SDRAM DIMM)

| Standard | Slot   |       |       |       |
|----------|--------|-------|-------|-------|
|          | 1      | 2     | 3     | 4     |
| 128 MB   | 128 MB | Empty | Empty | Empty |

### STANDARD MEMORY PLUS

#### OPTIONAL MEMORY

Up to 1664-MB memory is available with the optional installation of PC133-MHz Registered ECC SDRAM DIMM memory kits.

| Up to   | Slot   |        |        |        |
|---------|--------|--------|--------|--------|
|         | 1      | 2      | 3      | 4      |
| 1664 MB | 128 MB | 512 MB | 512 MB | 512 MB |

### STANDARD MEMORY REPLACED

#### WITH OPTIONAL MEMORY

Up to 2048 MB of memory is available with the removal of the standard 128-MB of memory and the optional installation of PC133-MHz Registered ECC SDRAM DIMM memory kits.

| Up to   | Slot   |        |        |        |
|---------|--------|--------|--------|--------|
|         | 1      | 2      | 3      | 4      |
| 2048 MB | 512 MB | 512 MB | 512 MB | 512 MB |

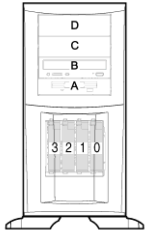
**Note:** Charts do not represent all possible memory configurations.

Following are memory options available from Compaq:

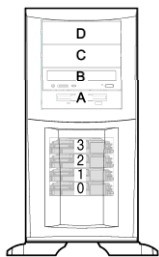
- 512-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 128279-B21
- 256-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 128278-B21
- 128-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 128277-B21
- 64-MB PC133-MHz Registered ECC SDRAM DIMM Memory Option Kit 128276-B21

## Storage

### DRIVE SUPPORT



Non-Hot Plug Drive Cage



Hot Plug Drive Cage

- 0, 1, 2, 3 Bays 4 x 1" SCSI Hard Drive
- A 3.5 in. Diskette Drive
- B High Speed IDE CD-ROM
- C, D Available half-height bay

|   | Quantity Supported                               | Position Supported | Controller   |
|---|--|--------------------|--|
| <b>Removable Media</b>  |  |                    |  |
| 1.44-MB Diskette Drive  | Up to 1  | A                  | Integrated   |
| IDE CD-ROM Drive  | Up to 2  | B,C                | Integrated IDE                                       |
| DVD-ROM Drive Option Kit  | Up to 2  | B,C                | Integrated IDE                                       |
| <b>Hard Drives</b>  |  |                    |  |
| <i>Wide Ultra2 Hot Pluggable Drives</i>   |  |                    |  |
| <b>1-inch</b>   | Up to 4  | 0-3                | Integrated Dual Channel Wide Ultra2 SCSI Adapter     |
| 18.2-GB 10,000 rpm  |  |                    | Smart Array 221 Controller                           |
| 18.2-GB   |  |                    | Smart Array 431 Controller                           |
| 9.1-GB 10,000 rpm   |  |                    | Smart Array 3200 Controller                          |
| 9.1-GB  |  |                    | 64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter   |
|   |  |                    | 64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter |
| <i>Wide Ultra2 SCSI – Non-Hot Plug</i>  |  |                    |  |
| <b>1-inch</b>   | Up to 4  | 0-3                | Integrated Dual Channel Wide Ultra2 SCSI Adapter     |
| 18.2-GB   | Up to 6  | 0-3 & C, D         | Smart Array 221 Controller                           |
| 9.1-GB  |  |                    | Smart Array 431 Controller                           |
|   |  |                    | Smart Array 3200 Controller                          |
|   |  |                    | 64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter   |
|   |  |                    | 64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter |
| <i>Wide Ultra3 Hot Pluggable Drives</i>   |  |                    |  |
| <b>1-inch</b>   | Up to 4  | 0-3                | Integrated Dual Channel Wide Ultra2 SCSI Adapter     |
| 18.2-GB 10,000 rpm  |  |                    | Smart Array 221 Controller                           |
| 9.1-GB 10,000 rpm   |  |                    | Smart Array 431 Controller                           |
|   |  |                    | Smart Array 3200 Controller                          |
|   |  |                    | 64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter   |
|   |  |                    | 64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter |
| <i>Wide Ultra3 SCSI – Non-Hot Plug</i>  |  |                    |  |
| <b>1-inch</b>   | Up to 4  | 0-3                | Integrated Dual Channel Wide Ultra2 SCSI Adapter     |
| 18.2-GB 10,000 rpm  | Up to 6  | 0-3 & C, D         | Smart Array 221 Controller                           |
| 9.1-GB 10,000 rpm   |  |                    | Smart Array 431 Controller                           |
|   |  |                    | Smart Array 3200 Controller                          |
|   |  |                    | 64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter   |
|   |  |                    | 64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter |
| <b>External Storage</b>   |  |                    |  |
| StorageWorks Enclosure 4200 Family (supports Wide Ultra2/Ultra3 1" drives)                              | Up to 7  | External           | Smart Array 221 Controller                           |
|   |  |                    | Smart Array 431 Controller                           |
|   |  |                    | 64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter   |
|   |  |                    | 64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter |
| ProLiant Storage System Models U2 ProLiant Storage System Models UE (supports Wide-Ultra SCSI-3 drives) | Up to 7  | External           | Integrated Wide Ultra2 SCSI Adapter                  |
|   |  |                    | Wide-Ultra SCSI-3 Adapter                            |
|   |  |                    | 64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter   |
|   |  |                    | 64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter |
| SCSI Storage Expander II  | Up to 3  | External           | Integrated Wide Ultra2 SCSI Adapter                  |
|   |  |                    | Wide-Ultra SCSI-3 Adapter                            |
|   |  |                    | Smart Array 3200 Controller                          |
|   |  |                    | 64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter   |
|   |  |                    | 64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter |
| <b>Maximum Storage Capacity – (SCSI Attached)</b>   |  |                    |  |
| Internal  | 72.8 GB (4 x 18.2 GB hard drives)                |                    |  |
| External  | 2.038 TB (8 x 36.4 GB) x 7                       |                    |  |
| Total   | 2.111 TB   |                    |  |
| <b>Maximum Storage Capacity – (SCSI Attached)</b>   |  |                    |  |
| Internal  | 109.2 GB (4 x 18.2 GB + 2 x 18.2 GB hard drives) |                    |  |
| External  | 2.038 TB (8 x 36.4 GB) x 7                       |                    |  |
| Total   | 2.147 TB   |                    |  |

## Storage

### DRIVE SUPPORT *(continued)*

#### Tape Drives

|   |         |          |  |
|---|---------|----------|--|
| 20/40-GB DAT DDS-4 Tape Drive<br>Internal 12/24-GB DAT Drive<br>Internal 4/8-GB DAT | Up to 2 | C        | Integrated Wide Ultra2 SCSI Adapter<br>Wide-Ultra SCSI-3 Adapter<br>64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter<br>64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter   |
| 20/40-GB DAT DDS-4 8 Cassette Autoloader  | Up to 2 | C        | Integrated Dual Channel Wide-Ultra SCSI-3 Adapter<br>Wide-Ultra SCSI-3 Adapter<br>64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter<br>64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter   |
| Internal 35/70-GB DLT<br>Internal 20/40-GB DLT                                      | Up to 1 | C        | Integrated Dual Channel Wide-Ultra SCSI-3 Adapter<br>Wide-Ultra SCSI-3 Adapter<br>64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter<br>64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter   |
| AIT 50 GB Internal<br>AIT 35 GB Internal  | Up to 1 | C        | Integrated Dual Channel Wide-Ultra SCSI-3 Adapter<br>Wide-Ultra SCSI-3 Adapter<br>64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter<br>64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter   |
| AIT 50 GB External<br>AIT 35 GB External  | 2       | External | Integrated Dual Channel Wide-Ultra SCSI-3 Adapter<br>Wide-Ultra SCSI-3 Adapter<br>64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter<br>64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter<br>64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter<br>64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter |
| External 35/70-GB DLT<br>External 20/40-GB DLT                                      | Up to 3 | External | Integrated Dual Channel Wide-Ultra SCSI-3 Adapter<br>Wide-Ultra SCSI-3 Adapter<br>64-Bit/66MHz Dual Channel Wide Ultra3 SCSI Adapter<br>64-Bit/66MHz Single Channel Wide Ultra3 SCSI Adapter   |

### SUPPORTED TAPE DRIVE OPTIONS

| Tape Drive                               | Operating System                                   | Key   |
|--|--|---|
| Internal 4/8-GB DAT Drive                | Novell NetWare<br>SCO UNIX<br>Microsoft Windows NT | AS, JS, SE<br>Native (Tar & CPIO)<br>AS, NT, SE |
| 20/40-GB DAT DDS-4 8 Cassette autoloader | Novell NetWare<br>Microsoft Windows NT             | AS, JS, SE<br>AS, NT, SE                        |
| Internal 20/40-GB DAT DDS-4 Tape Drive   | Novell NetWare<br>Microsoft Windows NT             | AS, SE<br>AS, NT, SE                            |
| AIT 50-GB Drive                          | Novell NetWare<br>SCO UNIX<br>Microsoft Windows NT | AS, JS, SE<br>Native (Tar & CPIO)<br>AS, NT, SE |
| AIT 35-GB Drive                          | Novell NetWare<br>SCO UNIX<br>Microsoft Windows NT | AS, JS, SE<br>Native (Tar & CPIO)<br>AS, NT, SE |

## Storage

### SUPPORTED TAPE DRIVE OPTIONS *(continued)*

|                    |  |  |
|--------------------|--|--|
| 35/70-GB DLT Drive | Novell NetWare<br>SCO UNIX<br>Microsoft Windows NT | AS, JS, LG, SE<br>AO, UX<br>AS, NT, SE, LG |
| 20/40-GB DLT Drive | Novell NetWare<br>SCO UNIX<br>Microsoft Windows NT | AS, JS, LG, SE<br>AO, UX<br>AS, NT, SE     |

#### Keys to Chart

|    |                                       |    |   |
|----|---------------------------------------|----|---|
| AS | Computer Associates ARCserve          | UX | Device drivers for Compaq tape drives available from SCO in the SCO Compaq Supplement |
| JS | Computer Associates JETserve          | NT | Microsoft Windows NT support for Compaq tape drives included in operating system      |
| AO | Computer Associates ARCserve Open     |    |   |
| LG | Legato Networker Software from Legato |    |   |
| SE | Veritas Software Backup Exec          |    |   |

# QUICK SPECS

Compaq ProLiant ML350

## Technical Specifications

### System Unit

|  |  |                                   |
|--|--|-----------------------------------|
| <b>Dimensions (HxWxD) (with feet/bezel)</b>    | 18.5 x 10.5 x 26 in / 46.99 x 26.67 x 66.04 cm   |                                   |
| <b>Dimensions (HxWxD) (without feet/bezel)</b> | 17.5 x 10.5 x 24 in / 44.45 x 21.59 x 60.96 cm   |                                   |
| <b>Weight (approximate)</b>                    | 60 lbs / 27.24 kg (without hard drives)  |                                   |
| <b>Input Requirements (per power supply)</b>   |  |                                   |
| Range Line Voltage                             | 90 to 132 VAC/180 to 264 VAC   |                                   |
| Nominal Line Voltage                           | 100 to 120 VAC/200 to 240 VAC  |                                   |
| <b>Line Frequency</b>                          | 50 to 60 Hz  |                                   |
| <b>Rated Input Current</b>                     | 6A / 3A  |                                   |
| <b>BTU Rating</b>                              | 1,560 BTU  |                                   |
| <b>SCSI Connectors</b>                         | Two internal HD68 Connectors<br>(Support for either two internal, two external, or a mix of internal/external is available. This is achieved using an internal to external SCSI cable option kit (159547-B21) and either of the two SCSI knockouts.) |                                   |
| <b>Power Supply Output Power</b>               |  |                                   |
| Rated Steady State Power                       | 300W   |                                   |
| Maximum Peak Power                             | 400W   |                                   |
| <b>Temperature Range</b>                       |  |                                   |
| Operating                                      | 10° to 35°C (No direct sustaining sunlight)<br>Altitude range derating: 1°C per 300m up to 3000m   |                                   |
| Storage (up to one year)                       | -20° to 60°C   |                                   |
| Altitudes up to 3000m                          |  |                                   |
| Shipping (up to 72 hours)                      | -40° to 60°C   |                                   |
| Altitudes up to 9100m                          |  |                                   |
| <b>Relative Humidity (non-condensing)</b>      |  |                                   |
| Operating                                      | 20% to 80%   |                                   |
| Non-operating                                  | 5% to 90%  |                                   |
| <b>Acoustic Noise</b>                          | <b><math>L_{wAd}</math> (BELS)</b>   | <b><math>L_{pAm}</math> (dBA)</b> |
| IDLE (Fixed Disk Drives Spinning)              | 6.2  | 45                                |
| OPERATING (Random Seeks to Fixed Disks)        | 6.8  | 49                                |

### 1.44-MB Diskette Drive

|  |                |
|--|----------------|
| <b>Diskette Size</b>                                       | 3.5 in         |
| <b>LED Indicators (front panel)</b>                        | Green          |
| <b>Read/Write Capacity per Diskette (high/low density)</b> | 1.44 MB/720 KB |
| <b>Drive Supported</b>                                     | One            |
| <b>Drive Height</b>  | One-third      |
| <b>Drive Rotation</b>                                      | 300 rpm        |
| <b>Transfer Rate (high/low)</b>                            | 500/250 Kb/s   |
| <b>Bytes/Sector</b>  | 512            |
| <b>Sectors/Track (high/low)</b>                            | 18/9           |
| <b>Tracks/Side (high/low)</b>                              | 80/80          |
| <b>Access Times</b>  |                |
| Track-to-Track (high/low)                                  | 3/6 ms         |
| Average (high/low)   | 169/94 ms      |
| Settling Time  | 15 ms          |
| Latency Average  | 100 ms         |
| <b>Cylinders (high/low)</b>                                | 80/80          |
| <b>Read/Write Heads</b>                                    | Two            |

# QUICKSPECS

Compaq ProLiant ML350

## Technical Specifications

Hot Plug  
Wide Ultra2 SCSI  
Hard Drives

|                |                          |                  |  |                         |
|----------------|--------------------------|------------------|--|-------------------------|
| 18.2 GB<br>10K | <b>Capacity</b>          | 18209.3 MB       | <b>Seek Time</b> (typical reads, including settling) |                         |
|                | <b>Height</b>            | 1 in/25.4 mm     | Single Track   | 0.8 ms                  |
|                | <b>Width</b>             | 3.5 in/88.9 mm   | Average  | 5.2 ms                  |
|                | <b>Interface</b>         | Wide Ultra2 SCSI | Full-Stroke  | 12 ms                   |
|                | <b>Transfer Rate</b>     |                  | Rotational Speed                                     | 10,000 rpm              |
|                | Synchronous<br>(Maximum) | 80 MB/s          | <b>Physical Configuration</b>                        |                         |
|                |                          |                  | Bytes/Sector   | 512                     |
|                |                          |                  | Logical Blocks                                       | 35,565,080              |
|                |                          |                  | <b>Operating Temperature</b>                         | 50° to 95°F/10° to 35°C |
|                |                          |                  |  |                         |
| 18.2 GB        | <b>Capacity</b>          | 18209.3 MB       | <b>Seek Time</b> (typical reads, including settling) |                         |
|                | <b>Height</b>            | 1 in/25.4 mm     | Single Track   | 0.8 ms                  |
|                | <b>Width</b>             | 3.5 in/88.9 mm   | Average  | 7.0 ms                  |
|                | <b>Interface</b>         | Wide Ultra2 SCSI | Full-Stroke  | 15 ms                   |
|                | <b>Transfer Rate</b>     |                  | Rotational Speed                                     | 7200 rpm                |
|                | Synchronous<br>(Maximum) | 80 MB/s          | <b>Physical Configuration</b>                        |                         |
|                |                          |                  | Bytes/Sector   | 512                     |
|                |                          |                  | Logical Blocks                                       | 35,565,080              |
|                |                          |                  | <b>Operating Temperature</b>                         | 50° to 95°F/10° to 35°C |
|                |                          |                  |  |                         |
| 9.1 GB<br>10K  | <b>Capacity</b>          | 9100.0 MB        | <b>Seek Time</b> (typical reads, including settling) |                         |
|                | <b>Height</b>            | 1 in/25.4 mm     | Single Track   | 0.8 ms                  |
|                | <b>Width</b>             | 3.5 in/88.9 mm   | Average  | 5.2 ms                  |
|                | <b>Interface</b>         | Wide Ultra2 SCSI | Full-Stroke  | 12 ms                   |
|                | <b>Transfer Rate</b>     |                  | Rotational Speed                                     | 10,000 rpm              |
|                | Synchronous<br>(Maximum) | 80 MB/s          | <b>Physical Configuration</b>                        |                         |
|                |                          |                  | Bytes/Sector   | 512                     |
|                |                          |                  | Logical Blocks                                       | 17,773,524              |
|                |                          |                  | <b>Operating Temperature</b>                         | 50° to 95°F/10° to 35°C |
|                |                          |                  |  |                         |
| 9.1 GB         | <b>Capacity</b>          | 9100.0 MB        | <b>Seek Time</b> (typical reads, including settling) |                         |
|                | <b>Height</b>            | 1 in/25.4 mm     | Single Track   | 0.8 ms                  |
|                | <b>Width</b>             | 3.5 in/88.9 mm   | Average  | 7.0 ms                  |
|                | <b>Interface</b>         | Wide Ultra2 SCSI | Full-Stroke  | 15 ms                   |
|                | <b>Transfer Rate</b>     |                  | Rotational Speed                                     | 7200 rpm                |
|                | Synchronous<br>(Maximum) | 80 MB/s          | <b>Physical Configuration</b>                        |                         |
|                |                          |                  | Bytes/Sector   | 512                     |
|                |                          |                  | Logical Blocks                                       | 17,773,524              |
|                |                          |                  | <b>Operating Temperature</b>                         | 50° to 95°F/10° to 35°C |
|                |                          |                  |  |                         |

# QUICK SPECS

Compaq ProLiant ML350

## Technical Specifications

Non-Hot Plug  
Wide Ultra2 SCSI  
Hard Drives

|                |                       |                  |  |                         |
|----------------|-----------------------|------------------|--|-------------------------|
| <b>18.2 GB</b> | <b>Capacity</b>       | 18209.3 MB       | <b>Seek Time</b> (typical reads, including settling) |                         |
|                | <b>Height</b>         | 1 in/25.4 mm     | Single Track   | 0.8 ms                  |
|                | <b>Width</b>          | 3.5 in/88.9 mm   | Average  | 7.0 ms                  |
|                | <b>Interface</b>      | Wide Ultra2 SCSI | Full-Stroke  | 15 ms                   |
|                | <b>Transfer Rate</b>  |                  | Rotational Speed                                     | 7200 rpm                |
|                | Synchronous (Maximum) | 80 MB/s          | <b>Physical Configuration</b>                        |                         |
|                |                       |                  | Bytes/Sector   | 512                     |
|                |                       |                  | Logical Blocks                                       | 35,565,080              |
|                |                       |                  | <b>Operating Temperature</b>                         | 50° to 95°F/10° to 35°C |

|               |                       |                  |  |                         |
|---------------|-----------------------|------------------|--|-------------------------|
| <b>9.1 GB</b> | <b>Capacity</b>       | 9100.0 MB        | <b>Seek Time</b> (typical reads, including settling) |                         |
|               | <b>Height</b>         | 1 in/25.4 mm     | Single Track   | 0.8 ms                  |
|               | <b>Width</b>          | 3.5 in/88.9 mm   | Average  | 7.1 ms                  |
|               | <b>Interface</b>      | Wide Ultra2 SCSI | Full-Stroke  | 16 ms                   |
|               | <b>Transfer Rate</b>  |                  | Rotational Speed                                     | 7200 rpm                |
|               | Synchronous (Maximum) | 80 MB/s          | <b>Physical Configuration</b>                        |                         |
|               |                       |                  | Bytes/Sector   | 512                     |
|               |                       |                  | Logical Blocks                                       | 17,773,524              |
|               |                       |                  | <b>Operating Temperature</b>                         | 50° to 95°F/10° to 35°C |

Hot Plug  
Wide Ultra3 SCSI  
Hard Drives

|                |                       |                  |  |                         |
|----------------|-----------------------|------------------|--|-------------------------|
| <b>18.2 GB</b> | <b>Capacity</b>       | 18209.3 MB       | <b>Seek Time</b> (typical reads, including settling) |                         |
|                | <b>Height</b>         | 1 in/25.4 mm     | Single Track   | 0.8 ms                  |
| <b>10K</b>     | <b>Width</b>          | 3.5 in/88.9 mm   | Average  | 5.2 ms                  |
|                | <b>Interface</b>      | Wide Ultra3 SCSI | Full-Stroke  | 12 ms                   |
|                | <b>Transfer Rate</b>  |                  | Rotational Speed                                     | 10,000 rpm              |
|                | Synchronous (Maximum) | 160 MB/s         | <b>Physical Configuration</b>                        |                         |
|                |                       |                  | Bytes/Sector   | 512                     |
|                |                       |                  | Logical Blocks                                       | 35,565,080              |
|                |                       |                  | <b>Operating Temperature</b>                         | 50° to 95°F/10° to 35°C |

|               |                       |                  |  |                         |
|---------------|-----------------------|------------------|--|-------------------------|
| <b>9.1 GB</b> | <b>Capacity</b>       | 9100.0 MB        | <b>Seek Time</b> (typical reads, including settling) |                         |
|               | <b>Height</b>         | 1 in/25.4 mm     | Single Track   | 0.8 ms                  |
| <b>10K</b>    | <b>Width</b>          | 3.5 in/88.9 mm   | Average  | 5.0 ms                  |
|               | <b>Interface</b>      | Wide Ultra3 SCSI | Full-Stroke  | 12 ms                   |
|               | <b>Transfer Rate</b>  |                  | Rotational Speed                                     | 10,000 rpm              |
|               | Synchronous (Maximum) | 160 MB/s         | <b>Physical Configuration</b>                        |                         |
|               |                       |                  | Bytes/Sector   | 512                     |
|               |                       |                  | Logical Blocks                                       | 17,773,524              |
|               |                       |                  | <b>Operating Temperature</b>                         | 50° to 95°F/10° to 35°C |

# QUICKSPECS

Compaq ProLiant ML350

## Technical Specifications

Non-Hot Plug  
Wide Ultra3 SCSI  
Hard Drives

|                |                          |                  |  |            |
|----------------|--------------------------|------------------|--|------------|
| 18.2 GB<br>10K | <b>Capacity</b>          | 18209.3 MB       | <b>Seek Time</b> (typical reads, including settling) |            |
|                | <b>Height</b>            | 1 in/25.4 mm     | Single Track   | 0.8 ms     |
|                | <b>Width</b>             | 3.5 in/88.9 mm   | Average  | 5.5 ms     |
|                | <b>Interface</b>         | Wide Ultra3 SCSI | Full-Stroke  | 12 ms      |
|                | <b>Transfer Rate</b>     |                  | Rotational Speed                                     | 10,000 rpm |
|                | Synchronous<br>(Maximum) | 160 MB/s         | <b>Physical Configuration</b>                        |            |
|                |                          |                  | Bytes/Sector   | 512        |
|                |                          |                  | Logical Blocks                                       | 35,565,080 |
|                |                          |                  | <b>Operating Temperature</b> 50° to 95°F/10° to 35°C |            |
|                |                          |                  |  |            |
| 9.1 GB<br>10K  | <b>Capacity</b>          | 9100.0 MB        | <b>Seek Time</b> (typical reads, including settling) |            |
|                | <b>Height</b>            | 1 in/25.4 mm     | Single Track   | 0.8 ms     |
|                | <b>Width</b>             | 3.5 in/88.9 mm   | Average  | 5.0 ms     |
|                | <b>Interface</b>         | Wide Ultra3 SCSI | Full-Stroke  | 12 ms      |
|                | <b>Transfer Rate</b>     |                  | Rotational Speed                                     | 10,000 rpm |
|                | Synchronous<br>(Maximum) | 160 MB/s         | <b>Physical Configuration</b>                        |            |
|                |                          |                  | Bytes/Sector   | 512        |
|                |                          |                  | Logical Blocks                                       | 17,773,524 |
|                |                          |                  | <b>Operating Temperature</b> 50° to 95°F/10° to 35°C |            |
|                |                          |                  |  |            |

# QUICK SPECS

Compaq ProLiant ML350

## Technical Specifications

### 32X Max IDE CD-ROM Drive

|                                |  |
|--------------------------------|--|
| <b>Disk</b>                    |  |
| Applicable Disk                | CD-ROM (Mode 1 and 2), CD-DA, CD-XA (Mode 2, Form 1 and 2), CD-I ready, Photo CD (Single and Multi-session), Mixed Mode (Audio and Data combined), CD-WO |
| Capacity                       | 650 MB   |
| Block Size                     | 2,048, 1,024 bytes (Mode 1), 2,340, 2,336, 1,024 bytes (Mode 2), 2,352 bytes (CD-DA), 2,328 bytes (CD-XA)  |
| Rotational Speed               | 5,200 rpm  |
| Diameter                       | 4.7 in, 3.15 in/12 cm, 8 cm  |
| Center Hole                    | 0.6 in/15 mm diameter  |
| Thickness                      | 1.2 mm   |
| Track Pitch                    | 1.6 $\mu$ m  |
| <b>Interface</b>               | IDE (ATAPI)  |
| <b>Access Times (typical)</b>  |  |
| Random                         | < 100 ms   |
| Full-Stroke                    | < 150 ms   |
| <b>Audio Output Level</b>      |  |
| Line-Out                       | 0.7 VRMS at 47 kOhms   |
| Headphone                      | 0.6 VRMS at 32 Ohms (maximum volume)   |
| <b>Data Transfer Rate</b>      |  |
| <b>Sustained</b>               | 150 KB/s (single)  |
| Burst                          | 150 to 4800 KB/s   |
| <b>Cache Buffer</b>            | 128 KB   |
| <b>Start-up Time (typical)</b> | < 7 seconds  |
| <b>Stop Time</b>               | < 4 seconds  |
| <b>Laser Parameters</b>        |  |
| Type                           | Semiconductor Laser GaAlAs   |
| Wave Length                    | 780 $\pm$ 25 nm  |
| Divergence Angle               | 53.5 $^{\circ}$ $\pm$ 1.5 $^{\circ}$   |
| Output Power                   | 0.14mW   |
| <b>Operating Conditions</b>    |  |
| Temperature                    | 41 $^{\circ}$ to 113 $^{\circ}$ F/5 $^{\circ}$ to 45 $^{\circ}$ C  |
| Humidity                       | 10% to 80%   |
| <b>Dimensions</b>              |  |
| (HxWxD, maximum)               | 1.69 x 5.91 x 8.2 in/4.29 x 15.01 x 20.8 cm  |
| <b>Weight</b>                  | 2.09 lbs/0.95 kg   |

## Technical Specifications

### Integrated Dual Channel Wide Ultra2 SCSI Adapter

|   |  |
|---|--|
| <b>Drives Supported</b>                         | Up to 28 SCSI devices (14 per channel)               |
| <b>Data Transfer Method</b>                     | 64-bit PCI bus-master                                |
| <b>SCSI Channel Transfer Rate</b>               | 80 MB/s per channel                                  |
| <b>Maximum Transfer Rate per PCI Bus (peak)</b> | 133 MB/s   |
| <b>SCSI Protocols</b>                           | Wide Ultra2 SCSI<br>Wide-Ultra SCSI-3<br>Fast SCSI-2 |
| <b>Electrical Protocol</b>                      | Low Voltage Differential (LVD)                       |
| <b>SCSI Termination</b>                         | Active Termination                                   |
| <b>External SCSI Connectors</b>                 | Two 80-Pin VHDCI connectors                          |
| <b>Internal SCSI Connectors</b>                 | Two 68-Pin Wide Ultra SCSI-3 connectors              |

### 64-bit/66-MHz Single Channel Wide Ultra3 SCSI Adapter

|   |   |
|---|---|
| <b>Drives Supported</b>                         | Up to 14 SCSI devices   |
| <b>Storage Capacity</b>                         | 254.8 GB  |
| <b>Data Transfer Method</b>                     | 64-bit/66-MHz PCI bus-master  |
| <b>Maximum SCSI Channel Transfer Rate</b>       | 160 MB/s per channel  |
| <b>Maximum Transfer Rate per PCI Bus (peak)</b> | 532 MB/s per channel  |
| <b>SCSI Protocols</b>                           | Wide Ultra3 SCSI<br>Wide Ultra2 SCSI<br>Wide-Ultra SCSI-3<br>Fast-Wide SCSI-2<br>Fast SCSI-2      |
| <b>Electrical Protocol</b>                      | Low Voltage Differential (LVD)  |
| <b>SCSI Termination</b>                         | Active Termination  |
| <b>External SCSI Connectors</b>                 | One 68-Pin Wide Ultra SCSI-3 connector  |
| <b>Internal SCSI Connectors</b>                 | Two 68-Pin Wide Ultra SCSI-3 connectors (one LVD and one SE)<br>One 50-Pin Narrow Ultra connector |

### 64-bit/66-MHz Dual Channel Wide Ultra3 SCSI Adapter

|   |  |
|---|--|
| <b>Drives Supported</b>                         | Up to 28 SCSI devices (14 per channel)                                       |
| <b>Storage Capacity</b>                         | 509.6 GB   |
| <b>Data Transfer Method</b>                     | 64-bit/66-MHz PCI bus-master   |
| <b>Maximum SCSI Channel Transfer Rate</b>       | 160 MB/s per channel   |
| <b>Maximum Transfer Rate per PCI Bus (peak)</b> | 532 MB/s per channel   |
| <b>SCSI Protocols</b>                           | Wide Ultra3 SCSI<br>Wide Ultra2 SCSI<br>Wide-Ultra SCSI-3<br>Fast SCSI-2     |
| <b>Electrical Protocol</b>                      | Low Voltage Differential (LVD)   |
| <b>SCSI Termination</b>                         | Active Termination   |
| <b>External SCSI Connectors</b>                 | Two 68-Pin VHDCI connectors  |
| <b>Internal SCSI Connectors</b>                 | Two 68-Pin Wide Ultra SCSI-3 connectors<br>One 50-Pin Narrow Ultra connector |

## Technical Specifications

### Smart Array 3200 Controller

|  |                                     |
|--|-------------------------------------|
| Data Compatible with all Smart Array Controllers   | Yes                                 |
| Instant Upgrades to other Smart Array Controllers  | Yes                                 |
| Consistent Software Manageability Tools  | Yes                                 |
| PCI Bus  | 32-bit, 33 MHz                      |
| PCI Peak Data Transfer Rate  | 133 MB/s                            |
| SCSI Protocols Supported   | Ultra2, Wide-Ultra                  |
| SCSI Peak Data Transfer Rate   | 160 MB/s total, 80 MB/s per channel |
| Channels   | 2                                   |
| SCSI Ports (external/internal)   | 2/2                                 |
| Drives Supported (maximum)   | 28                                  |
| <b>Note:</b> Drives Supported (maximum) is based on use of Compaq StorageWorks Enclosure 4200 family (14 hard disk drive enclosure). |                                     |
| Cache  | 64-MB battery backed read-write     |
| RAID Support   | 0, 1, 0+1, 4, 5                     |
| Logical Drives (maximum)   | 32                                  |
| Online Configuration   | Yes                                 |
| Online Capacity Expansion  | Yes                                 |
| Logical Drive Capacity Extension   | Yes                                 |
| Online Stripe Size Migration   | Yes                                 |
| Online RAID Level Migration  | Yes                                 |
| Online Spare Support   | Yes                                 |
| Automatic Data Recovery  | Yes                                 |
| Drive Roaming  | Yes                                 |
| Redundant Controllers  | No                                  |

## Technical Specifications

### Smart Array 431 Controller

|  |                            |
|--|----------------------------|
| Data Compatible with all Smart Array Controllers   | Yes                        |
| Instant Upgrades to other Smart Array Controllers  | Yes                        |
| Consistent Software Manageability Tools  | Yes                        |
| PCI Bus  | 64-bit, 66MHz              |
| PCI Peak Data Transfer Rate  | 533 MB/s                   |
| SCSI Protocols Supported   | Ultra3, Ultra2, Wide-Ultra |
| SCSI Peak Data Transfer Rate   | 160 MB/s                   |
| Channels   | 1                          |
| SCSI Ports (external/internal)   | 1/1                        |
| Drives Supported (maximum)   | 14                         |
| <b>Note:</b> Drives Supported (maximum) is based on use of Compaq StorageWorks Enclosure 4200 family (14 hard disk drive enclosure). |                            |
| Cache  | 16-MB cache engine         |
| RAID Support   | 0, 1, 0+1 5                |
| Logical Drives (maximum)   | 32                         |
| Online Configuration   | Yes                        |
| Online Capacity Expansion  | Yes                        |
| Logical Drive Capacity Extension   | Yes                        |
| Online Stripe Size Migration   | Yes                        |
| Online RAID Level Migration  | Yes                        |
| Online Spare Support   | Yes                        |
| Automatic Data Recovery  | Yes                        |
| Drive Roaming  | Yes                        |
| Redundant Controllers  | No                         |

## Technical Specifications

### Smart Array 221 Controller

|   |   |
|---|---|
| <b>Drives Supported</b>                         | Up to 14 drives (The ProLiant ML350 will support up to six internal hard drives or 12 external hard drives using the ProLiant Storage System Model UE storage enclosure.) |
| <b>Data Transfer Method</b>                     | 32-bit PCI bus-master   |
| <b>Maximum Transfer Rate per PCI Bus (peak)</b> | 133 MB/s  |
| <b>Simultaneous Drive Transfer Channels</b>     | One   |
| <b>Total Transfer Rate</b>                      | 80 MB/s per channel   |
| <b>Software Upgradable Firmware</b>             | Yes   |
| <b>Cache</b>                                    | 6-MB of ECC protected read cache  |
| <b>Reliability Features</b>                     |   |
| Distributed Data Guarding (RAID 5)              | Yes   |
| Drive Mirroring (RAID 1)                        | Yes   |
| Drive Stripping (RAID 0, 0 + 1)                 | Yes   |
| Automatic Data Recovery                         | Yes   |

### Video Controller

|                             |                         |
|-----------------------------|-------------------------|
| <b>Controller Chip</b>      | ATI RAGE IIC PCI        |
| <b>Video DRAM</b>           | 4 MB Video SGRAM        |
| <b>Data Transfer Method</b> | 32-bit PCI              |
| <b>Support Resolution</b>   | Supported Color Depths: |
| 640 x 480                   | 16.7M, 64K, 256, 16     |
| 800 x 600                   | 16.7M, 64K, 256, 16     |
| 1024 x 768                  | 16.7M, 64K, 256, 16     |
| 1152 x 864                  | 16.7M, 64K, 256, 16     |
| 1280 x 1024                 | 16.7M, 64K, 256, 16     |
| 1600 x 1200                 | 64K, 256, 16            |
| <b>Connector</b>            | VGA                     |

### OS Driver Support

| Operating Systems  | Current Drivers                                   | Driver Location<br>(Punch-out diskettes only.)                       |
|--|---|--|
| Microsoft Windows NT Server 4.0  | NTSSD 2.17a                                       | SmartStart CD and <a href="http://www.compaq.com">www.compaq.com</a> |
| Microsoft Windows NT Server 4.0,<br>Terminal Server Edition  | NTSSD 2.17a                                       | SmartStart CD and <a href="http://www.compaq.com">www.compaq.com</a> |
| Microsoft BackOffice Small Business Server 4.5   | NTSSD 2.17a                                       | SmartStart CD and <a href="http://www.compaq.com">www.compaq.com</a> |
| Microsoft Windows 2000   | Support Software Bundle<br>for Windows 2000 5.02a | SmartStart CD and <a href="http://www.compaq.com">www.compaq.com</a> |
| Novell NetWare 3.2   | NSSD 5.50a  | SmartStart CD and <a href="http://www.compaq.com">www.compaq.com</a> |
| Novell NetWare 4.2   | NSSD 5.50a  | SmartStart CD and <a href="http://www.compaq.com">www.compaq.com</a> |
| Novell NetWare 5.x   | NSSD 5.50a  | SmartStart CD and <a href="http://www.compaq.com">www.compaq.com</a> |
| Novell NetWare for Small Business Suite 4.2  | NSSD 5.50a  | SmartStart CD and <a href="http://www.compaq.com">www.compaq.com</a> |
| Novell NetWare for Small Business Suite 5  | NSSD 5.50a  | SmartStart CD and <a href="http://www.compaq.com">www.compaq.com</a> |
| SCO UnixWare 7.1, 7.1.1  | EFS 7.34  | SmartStart CD and <a href="http://www.compaq.com">www.compaq.com</a> |
| SCO OpenServer 5.05  | EFS 5.34  | SmartStart CD and <a href="http://www.compaq.com">www.compaq.com</a> |
| RedHat Linux version 6.1   |   |  |
| Basic manageability support via <a href="#">Compaq Insight</a><br>(Manager provided by late 2nd quarter 2000.) |   |  |