

# Dell<sup>®</sup> Latitude<sup>®</sup> LM Documentation Update



**T**his document updates information contained in the online *Dell Latitude LM User's Guide* and the *Dell Latitude LM Reference and Troubleshooting Guide*.

## ***New Microprocessor Options***

The Dell Latitude LM is now available with a 166-megahertz (MHz) or 133-MHz Intel<sup>®</sup> Pentium<sup>®</sup> microprocessor with MMX<sup>™</sup> technology.

Current application programs not designed specifically for MMX technology should have a small improvement in performance when run on a system with a Pentium microprocessor with MMX technology. Software written specifically to take advantage of MMX technology (which will be labeled "Designed for Intel MMX") will have a greater improvement in performance, depending on the type of application program.

The Pentium microprocessor with MMX technology has twice the internal cache memory (32 kilobytes [KB]) as the standard Pentium microprocessor.

To see the technical specifications of the new microprocessors, search on "microprocessor specifications" in the online *System User's Guide*. The online guide is in the Dell Accessories folder or program group.

## ***New Memory Module Support***

The Dell Latitude LM now supports 32-megabyte (MB) memory modules. With the 8 MB of standard non-removable memory on the system board and two 4-MB memory modules standard with every Latitude LM, the computer now supports a maximum of 72 MB of system memory. The following memory module combinations are possible:

- 24 MB — Install two 8-MB memory modules.
- 40 MB — Install two 16-MB memory modules.
- 72 MB — Install two 32-MB memory modules.

## ***New Memory Specifications***

The Dell Latitude LM now supports extended-data out (EDO) memory. EDO memory technology improves performance over fast-page-mode technology by using a shorter page-mode cycle time while accessing data within a single page of memory. See the following table for the updated memory specifications.

## New Video Controller

The Dell Latitude LM's standard video subsystem now includes 1.1 MB of video memory. For more information about new video modes and resolutions, see "Using the Display," or search on "text modes" and "graphics modes" in the online *System User's Guide*.

To see the technical specifications of the new video subsystem, search for "video specifications" in the *System User's Guide*. The online guide is in the Dell Accessories folder or program group.

## Setup Program Changes

The following information updates Chapter 2, "Customizing System Features," in the *Reference and Troubleshooting Guide*:

- The default setting for the **AC POWER SAVE** option in the Power menu is **OFF**.
- The **ALARM RESUME TIME** option in the Power menu tells the computer an exact time to resume normal operation when it is in suspend mode.

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	Memory
Architecture . . . . .	EDO
Memory module capacities . . . . .	4, 8, 16, and 32 MB; must be installed in matched pairs (two 4-MB modules, two 8-MB modules, two 16-MB modules, or two 32-MB modules). Both EDO and fast-page-mode modules are supported in matched pairs.
Standard RAM . . . .	16 MB; 8 MB on system board and two 4-MB EDO memory modules installed
Maximum RAM . . .	72 MB
Memory access time:	
tRAC . . . . .	60 ns
tCAC . . . . .	15 ns
BIOS address . . . . .	F000:0000

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*NOTE: For the full name of an abbreviation or acronym used in this table, see the Glossary in the online System User's Guide.*

Dell Computer Corporation  
Dell Latitude LM Diagnostics Version X.XX

Available Test Groups	System Configuration																																
<p><span style="border: 1px solid black; padding: 2px;">RAM</span></p> <p>System Set Video Keyboard Mouse Diskette Drives Hard-Disk Drives (Non-SCSI) IDE CD ROM Drives Serial/Infrared Ports Parallel Ports SCSI Devices Network Interface Audio</p>	<table style="width: 100%;"><tr><td>Processor(s)</td><td>Pentium MMX</td></tr><tr><td>Memory</td><td>16 MB</td></tr><tr><td>Secondary Cache</td><td>256</td></tr><tr><td>Video</td><td>SVGA,1.1 MB</td></tr><tr><td>Keyboard</td><td>101 Key</td></tr><tr><td>Diskette Drive(s)</td><td>A:1.4MB,B:NONE</td></tr><tr><td>Pointing Device</td><td>Integrated</td></tr><tr><td>Parallel Ports</td><td>1</td></tr><tr><td>Mouse</td><td>Integrated</td></tr><tr><td>Modems</td><td>None</td></tr><tr><td>SCSI Devices</td><td>None</td></tr><tr><td>Network Interface</td><td>None</td></tr><tr><td>Serial/IR Ports</td><td>Integrated</td></tr><tr><td>IDE(0)</td><td>809MB, 1571 Cyl, 16 Hd, 63 Sec</td></tr><tr><td>IDE(1)*</td><td>None</td></tr><tr><td>USB(0)</td><td>None</td></tr></table>	Processor(s)	Pentium MMX	Memory	16 MB	Secondary Cache	256	Video	SVGA,1.1 MB	Keyboard	101 Key	Diskette Drive(s)	A:1.4MB,B:NONE	Pointing Device	Integrated	Parallel Ports	1	Mouse	Integrated	Modems	None	SCSI Devices	None	Network Interface	None	Serial/IR Ports	Integrated	IDE(0)	809MB, 1571 Cyl, 16 Hd, 63 Sec	IDE(1)*	None	USB(0)	None
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USB(0)	None																																
<p>Main: <span style="border: 1px solid black; padding: 2px;">Run</span> seLect Subtest Options Test_limits About Key_help Quit Display the Run Menu. <span style="float: right;">Press Q to Quit</span></p>																																	

\* On the Dell Latitude LM, a CD-ROM drive installed in the options bay is recognized as IDE Drive 1.

**Figure 1. Main Screen of the Dell Diagnostics**

## Dell Diagnostics Changes

This section updates Chapter 4, “Running the Dell Diagnostics,” in the *Reference and Troubleshooting Guide*.

### Main Screen

The main screen of the diagnostics (see Figure 1) has been revised to show more detail in the System Configuration area.

### Test Limits Under Main Menu Options

In the Test Limits option, press the <PAGE DOWN> key to select the next menu or submenu in the Test Limits category. Press the <ESC> key to return to the main Test Limits menu.

## ***USB Subtests Added***

The following subtests have been added to the System Set Test Group. These subtests run only if the computer has a Universal Serial Bus (USB) connector.

- The USB Register Test checks the onboard registers of the USB interface. This subtest does not test USB peripherals.
- The USB Memory Structure Test monitors the ability of a USB controller to process a simple set of memory-resident instructions.

## ***Getting Help***

Many of the telephone numbers in Chapter 5, “Getting Help,” of the *Reference and Troubleshooting Guide* have changed.

Use the most up-to-date numbers, which are in the “Calling Dell” section of the online *System User’s Guide*. The *System User’s Guide* is in the Dell Accessories folder or program group.

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