



Personal Systems Reference Lenovo® 3000 Desktops

January 2009 - Version 350



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Part number	Slot x bay	Processor	GHz	L2 cache	Cores	Memory ⁸	Media reader	SATA disk	SATA optical	Graphics	Modem	Monitor	Camera	Vista preload	Avail date
57091128	1x4	Atom 230	1.60	512KB	1	1GB	16-in-1	160GB ²	DVD±RW	GMA 950	None	L195 HD	None	Home Basic	Jan 09

- **Lenovo Rescue System provides OneKey recovery and OneKey Antivirus without booting into Windows**


Processor	Intel® Atom™ Processor N230 with single-core, Hyper-Threading technology, Intel 64 Technology, Execute Disable Bit, 533MHz system bus, and 512KB L2 cache	Tower <ul style="list-style-type: none"> • Black bezel with glossy finish • 6.9" W X 16.1" D X 14.2" H • 175mm W X 409mm D X 360mm H • 20.1 lb (9.1 kg) in max configuration
Implementation	Processor in Micro-FCBGA package in BGA437 socket	
Memory	1GB std, 2GB max⁸, PC2-5300 667MHz DDR2 , non-parity, dual-channel capable, one 240-pin DIMM socket	Bay ① 5.25", 1.6" high, access, standard optical Bay ② 3.0", 1" high, access, 16-in-1 media reader Bay ③ 3.5", 1" high, no access, standard disk Bay ④ 3.5", 1" high, no access, optional disk Slot 1: half-length, full-height, 32-bit PCI Ver 2.3
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) , integrated graphics in 945GC, uses main memory, one 15-pin analog VGA DB-15 connector	
SATA disk	160GB , SATA 3.0Gb/s, 7200 rpm	
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH7	
SATA DVD±RW	Multi-Burner DL DVD±RW SATA 3.0Gb/s Drive	
SATA cables	Two SATA cables (each 1-drop to device), two SATA connectors	
EIDE controller	None	
EIDE cables	None	
Diskette drive	None	
Media reader	16-in-1 media reader	
Chipset	Intel 945GC Express Chipset , I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, ethernet MAC, PCI 2.3, USB, LPC bus), ITE Tech® IT8718 Super I/O	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 2.0, one serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15)	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
Audio	High Definition (HD) audio, ALC662 codec	
External speakers	None	
Internal speaker	None	
Ethernet	10/100 ethernet on planar, Realtek® RTL8102E	
Modem	None	
Security chip	None	
TV tuner	None	
Camera	None	
Keyboard	104-key standard keyboard (PS/2 connector)	
Mouse	Optical Wheel Mouse (USB connector), 400 dpi	
Power supply	280 watts, universal, manual switch	
Preloaded operating system²⁰	<ul style="list-style-type: none"> - Microsoft® Windows® Vista® Home Basic Edition (32-bit) ↔ Vista Basic logo 	
Preloaded applications⁵	<ul style="list-style-type: none"> • Lenovo™ Rescue System • Driver and Application Installation • Trend Micro™ PC-cillin™ Internet Security 2008 • Windows Live™ Toolbar • Microsoft Office 2007 Trial (60-day) • Corel® WinDVD® (DVD±RW) • CyberLink Power2Go (DVD±RW) 	
		Available at these retailers <ul style="list-style-type: none"> • Newegg® • TigerDirect
		Limited Warranty¹ <ul style="list-style-type: none"> ↔ 1-year parts and labor ↔ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time) ↔ Service upgrade options (in eligible locations):⁹ <ul style="list-style-type: none"> • 3-year Lenovo Onsite Repair 9x5 Next Business Day (43R8882) ↔ 24x7¹⁴ toll-free support for warranty issues during the warranty period¹ via 877-453-6686



See footnotes for important warranty information
 US model announced Jan 13, 2009

Type-model	Slot x bay	Processor	GHz	L2 cache	Cores	Memory ⁸	Media reader	SATA disk	SATA optical	Graphics	Modem	Camera	Vista preload	Avail date
5357-1FU	1x4	Atom 230	1.60	512KB	1	1GB	16-in-1	160GB ²	DVD	GMA 950	None	None	Home Basic	Jan 09
5357-1GU	1x4	Atom 230	1.60	512KB	1	2GB	16-in-1	320GB	DVD±RW	GMA 950	None	None	Home Basic	Jan 09


- **Lenovo Rescue System provides OneKey recovery and OneKey Antivirus without booting into Windows**

Processor	Intel® Atom™ Processor N230 with single-core, Hyper-Threading technology, Intel 64 Technology, Execute Disable Bit, 533MHz system bus, and 512KB L2 cache		Tower <ul style="list-style-type: none"> • Black bezel with glossy finish • 6.9" W X 16.1" D X 14.2" H • 175mm W X 409mm D X 360mm H • 20.1 lb (9.1 kg) in max configuration
Implementation	Processor in Micro-FCBGA package in BGA437 socket		
Memory	1GB or 2GB std. , 2GB max ⁸ , PC2-5300 667MHz DDR2 , non-parity, dual-channel capable, one 240-pin DIMM socket		Bay ① 5.25", 1.6" high, access, standard optical Bay ② 3.0", 1" high, access, 16-in-1 media reader Bay ③ 3.5", 1" high, no access, standard disk Bay ④ 3.5", 1" high, no access, optional disk Slot 1: half-length, full-height, 32-bit PCI Ver 2.3
Graphics	Intel Graphics Media Accelerator 950 (GMA 950) , integrated graphics in 945GC, uses main memory, one 15-pin analog VGA DB-15 connector		
SATA disk	160GB or 320GB , SATA 3.0Gb/s, 7200 rpm		
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH7		
SATA DVD	<i>Some:</i> DVD-ROM DL SATA 1.5Gb/s 16X-48X Max		
SATA DVD±RW	<i>Some:</i> Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive		
SATA cables	Two SATA cables (each 1-drop to device), two SATA connectors		
EIDE controller	None		
EIDE cables	None		
Diskette drive	None		
Media reader	16-in-1 media reader		
Chipset	Intel 945GC Express Chipset , I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, ethernet MAC, PCI 2.3, USB, LPC bus), ITE Tech® IT8718 Super I/O		
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)		
Rear ports	Four USB 2.0, one serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (VGA DB-15)		
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)		
Audio	High Definition (HD) audio, ALC662 codec		
External speakers	None		
Internal speaker	None		
Ethernet	10/100 ethernet on planar, Realtek® RTL8102E		
Modem	None		
Security chip	None		
TV tuner	None		
Camera	None		
Keyboard	104-key standard keyboard (PS/2 connector)		
Mouse	Optical Wheel Mouse (USB connector), 400 dpi		
Power supply	280 watts, universal, manual switch		
Preloaded operating system²⁰	<ul style="list-style-type: none"> - Microsoft® Windows® Vista® Home Basic Edition (32-bit) ↔ Vista Basic logo 		Available at these retailers <ul style="list-style-type: none"> • Lenovo.com
Preloaded applications⁵	<ul style="list-style-type: none"> • Lenovo™ Rescue System • Driver and Application Installation • Trend Micro™ PC-cillin™ Internet Security 2008 • Windows Live™ Toolbar • Microsoft Office 2007 Trial (60-day) • Corel® WinDVD® (Combo, DVD±RW) • CyberLink Power2Go (Combo, DVD±RW) 		
			Limited Warranty¹ ↳ 1-year parts and labor ↳ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time) ↳ Service upgrade options (in eligible locations):⁹ <ul style="list-style-type: none"> • 3-year Lenovo Onsite Repair 9x5 Next Business Day (43R8882) ↳ 24x7¹⁴ toll-free support for warranty issues during the warranty period¹ via 877-453-6686

See footnotes for important warranty information
 US models announced Jan 13, 2009

Part number	Slot x bay	Processor	GHz	L2 cache	Cores	Memory ⁸	Media reader	SATA disk	SATA optical	Graphics	Modem	Camera	Vista preload	Avail date
57088764	4x4	Pentium E2200	2.20	1MB	2	2GB		500GB ²	DVD±RW	GMA 3100	None	None	Home Prem	Oct 08
57088788	4x4	Pentium E2200	2.20	1MB	2	4GB	16-in-1	640GB	DVD±RW	GMA 3100	None	None	Home Prem	Oct 08
57094408	4x4	Pentium E2220	2.40	1MB	2	3GB	16-in-1	320GB	DVD±RW	GMA 3100	None	None	Home Prem	Jan 09
57088774	4x4	Core 2 Duo E7200	2.53	3MB	2	4GB	16-in-1	640GB	DVD±RW	GMA 3100	None	None	Home Prem	Oct 08

- **Lenovo Rescue System provides OneKey recovery and OneKey Antivirus without booting into Windows**

Processor	Intel® Pentium® Dual-Core Processor E2200 or E2220 with dual-core , Intel 64 Technology, Execute Disable Bit, EIST, 800MHz system bus, and 1MB L2 cache or Intel Core™ 2 Duo Processor E7200 with dual-core , Intel 64 Technology, Execute Disable Bit, EIST, and 1066MHz system bus with 3MB L2 cache	Tower <ul style="list-style-type: none"> • Black bezel with glossy finish • 6.9" W X 16.1" D X 14.2" H • 175mm W X 409mm D X 360mm H • 20.1 lb (9.1 kg) in max configuration
Implementation	Processor in FC-LGA6 or FC-LGA8 package in LGA775 socket	
Memory	2GB, 3GB, or 4GB std. 4GB max ⁸ , PC2-5300 667MHz DDR2 , non-parity, dual-channel capable, two 240-pin DIMM sockets <i>Italics:</i> standard memory in both sockets; no sockets available;	Bay ① 5.25", 1.6" high, access, standard optical Bay ② 3.0", 1" high, access, media reader * Bay ③ 3.5", 1" high, no access, standard disk Bay ④ 3.5", 1" high, no access, optional disk * 16-in-1 media reader in some models
Graphics	Intel Graphics Media Accelerator 3100 (GMA 3100) , integrated graphics in G31, uses main memory, one 15-pin analog D-sub connector	Slot 1: half-length, full-height, PCI Express x16 Ver 1.1 Slot 2: half-length, full-height, PCI Express x1 Ver 1.1 Slot 3: half-length, full-height, PCI Express x1 Ver 1.1 Slot 4: half-length, full-height, 32-bit PCI Ver 2.3
SATA disk	320GB, 500GB, or 640GB , SATA 3.0Gb/s, 7200 rpm	
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH7	
SATA DVD±RW	Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA cables	Two SATA cables (each 1-drop to device), four SATA connectors	
EIDE controller	None	
EIDE cables	None	
Diskette drive	None	
Media reader	<i>Some:</i> 16-in-1 media reader	
Chipset	Intel G31 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), Winbond® W83627DHG or ITE Tech® IT8718F Super I/O	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 2.0, one serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (DB-15)	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
Audio	High Definition (HD) audio, ALC662 codec	
External speakers	None	
Internal speaker	None	
Ethernet	10/100 ethernet on planar, Intel 82562GZ (PHY/MAC)	
Modem	None	
Security chip	None	
TV tuner	None	
Camera	None	
Keyboard	104-key standard keyboard (PS/2 connector)	Available at these retailers <ul style="list-style-type: none"> • Newegg® • TigerDirect
Mouse	Optical Wheel Mouse (USB connector), 400 dpi	
Power supply	280 watts, universal, manual switch	Limited Warranty¹ <ul style="list-style-type: none"> ↪ 1-year parts and labor ↪ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time) ↪ Service upgrade options (in eligible locations):⁹ <ul style="list-style-type: none"> • 3-year Lenovo Onsite Repair 9x5 Next Business Day (43R8882) ↪ 24x7¹⁴ toll-free support for warranty issues during the warranty period¹ via 877-453-6686
Preloaded operating system²⁰	<ul style="list-style-type: none"> - Microsoft® Windows® Vista® Home Premium Edition (32-bit) ↔ Vista Basic logo 	

See footnotes for important warranty information

Ⓢ US model announced Jan 13, 2009; previous models on October 22, 2008

Type-model	Slot x bay	Processor	GHz	L2 cache	Cores	Memory ³	Media reader	SATA disk	SATA optical	Graphics	Modem	Camera	Vista preload	Avail date
5355-1EU	4x4	Pentium E2200	2.20	1MB	2	2GB		500GB ²	DVD±RW	GMA 3100	None	None	Home Prem	Oct 08
5355-1FU	4x4	Pentium E2200	2.20	1MB	2	3GB	16-in-1	320GB	DVD±RW	GMA 3100	None	None	Home Prem	Nov 08
5355-ADU	4x4	Pentium E2220	2.40	1MB	2	2GB	16-in-1	250GB	DVD±RW	GMA 3100	None	None	Home Prem	Jan 09
5355-1VU	4x4	Pentium E2220	2.40	1MB	2	3GB		320GB	DVD±RW	GMA 3100	None	None	Home Prem	Jan 09
5355-AEU	4x4	Pentium E2220	2.40	1MB	2	3GB	16-in-1	320GB	DVD±RW	GMA 3100	None	None	Home Prem	Jan 09
5355-AFU	4x4	Pentium E2220	2.60	1MB	2	3GB	16-in-1	500GB	DVD±RW	GMA 3100	None	None	Home Prem	Jan 09
5355-2JU	4x4	Pentium E5200	2.50	2MB	2	3GB	16-in-1	500GB	DVD±RW	GMA 3100	None	None	Home Prem	Jan 09
5355-2DU	4x4	Pentium E5200	2.50	2MB	2	4GB	16-in-1	500GB	DVD±RW	GMA 3100	None	None	Home Prem	Nov 08

• **Lenovo Rescue System provides OneKey recovery and OneKey Antivirus without booting into Windows**

Processor	Intel® Pentium® Dual-Core Processor E2200, E2220, or E5200 with dual-core , Intel 64 Technology, Execute Disable Bit, EIST, 800MHz system bus, <i>E2200/E2220</i> : 1MB L2 cache; <i>E5200</i> : 2MB L2 cache Processor in FC-LGA6 package in LGA775 socket	<p>Tower</p> <ul style="list-style-type: none"> • Black bezel with glossy finish • 6.9" W X 16.1" D X 14.2" H • 175mm W X 409mm D X 360mm H • 20.1 lb (9.1 kg) in max configuration <p>Bay ① 5.25", 1.6" high, access, standard optical Bay ② 3.0", 1" high, access, media reader * Bay ③ 3.5", 1" high, no access, standard disk Bay ④ 3.5", 1" high, no access, optional disk * 16-in-1 media reader in some models</p> <p>Slot 1: half-length, full-height, PCI Express x16 Ver 1.1 Slot 2: half-length, full-height, PCI Express x1 Ver 1.1 Slot 3: half-length, full-height, PCI Express x1 Ver 1.1 Slot 4: half-length, full-height, 32-bit PCI Ver 2.3</p>
Implementation		
Memory	2GB, 3GB, or 4GB std , 4GB max ⁸ , PC2-5300 667MHz DDR2 , non-parity, dual-channel capable, two 240-pin DIMM sockets <i>Italics</i> : standard memory in both sockets; no sockets available; <i>Non-italics</i> : standard memory in one socket; one socket available	
Graphics	Intel Graphics Media Accelerator 3100 (GMA 3100) , integrated graphics in G31, uses main memory, one 15-pin analog D-sub connector	
SATA disk	250GB, 320GB, or 500GB , SATA 3.0Gb/s, 7200 rpm	
SATA controller	Serial ATA, SATA 3.0Gb/s, integrated in ICH7	
SATA DVD±RW	Multi-Burner DL DVD±RW SATA 1.5Gb/s Drive	
SATA cables	Two SATA cables (each 1-drop to device), four SATA connectors	
EIDE controller	None	
EIDE cables	None	
Diskette drive	None	
Media reader	<i>Some</i> : 16-in-1 media reader	
Chipset	Intel G31 Express Chipset (PCI Express® x16), I/O Controller Hub 7 [ICH7] (SATA 3.0Gb/s, PCI Express x1, ethernet MAC, PCI 2.3, USB, LPC bus), Winbond® W83627DHG or ITE Tech® IT8718F Super I/O	
Front ports	Two USB 2.0, microphone (stereo, 3.5mm), headphone (stereo, 3.5mm)	
Rear ports	Four USB 2.0, one serial (9-pin), keyboard (PS/2), mouse (PS/2), ethernet (RJ-45), monitor (DB-15)	
Rear audio ports	Line-in (stereo, 3.5mm), line-out (stereo, 3.5mm), microphone-in (stereo, 3.5mm)	
Audio	High Definition (HD) audio, ALC662 codec	
External speakers	None	
Internal speaker	None	
Ethernet	10/100 ethernet on planar, Intel 82562GZ (PHY/MAC)	
Modem	None	
Security chip	None	
TV tuner	None	
Camera	None	
Keyboard	104-key standard keyboard (PS/2 connector)	
Mouse	Optical Wheel Mouse (USB connector), 400 dpi	
Power supply	280 watts, universal, manual switch	
Preloaded operating system²⁰	Preloaded applications⁵	
- Microsoft® Windows® Vista® Home Premium Edition (32-bit) ↔ Vista Basic logo	<ul style="list-style-type: none"> • Lenovo™ Rescue System • Lenovo Healthcare Software • Driver and Application Installation • Trend Micro™ PC-cillin™ Internet Security 2007 • Windows Live™ Toolbar • Microsoft Office 2007 Trial (60-day) • VeriFace™ Facial Recognition™ • Corel® WinDVD® (DVD±RW) • CyberLink Power2Go (DVD±RW) 	
<p>Available at these retailers</p> <ul style="list-style-type: none"> • lenovo.com • Fry's • Circuit City® 		
<p>Limited Warranty¹</p> <ul style="list-style-type: none"> ↔ 1-year parts and labor ↔ Customer Replaceable Unit (CRU) parts only (with limited onsite service for selected parts³, 8 am - 5 pm, Mon - Fri coverage excluding holidays, next business day response time) ↔ Service upgrade options (in eligible locations):⁹ <ul style="list-style-type: none"> • 3-year Lenovo Onsite Repair 9x5 Next Business Day (43R8882) ↔ 24x7¹⁴ toll-free support for warranty issues during the warranty period¹ via 877-453-6686 		



See footnotes for important warranty information

US model announced Jan 13, 2009; previous models on October 22, 2008

Availability: All offers subject to availability. Lenovo reserves the right to alter product offerings and specifications at any time, without notice. Lenovo is not responsible for photographic or typographic errors.

Warranty: For a copy of applicable product warranties, write to: Warranty Information, P.O. Box 12195, RTP, NC, 27709, Attn: Dept ZPYA/B676. Lenovo makes no representation or warranty regarding third party products or services.

- ¹ **Limited warranty:** Support unrelated to a warranty issue may be subject to additional charges.
- ² **Hard disk drive:** GB = billion bytes, TB = trillion bytes. Accessible capacity is less; up to 4GB is service partition.
- ³ **Customer Replacement Units (CRUs)** are designed to be replaced by customers during the applicable warranty period. Lenovo will send a technician onsite to perform a repair if remote telephone diagnosis does not isolate the problem, if customer replaceable parts are unable to resolve the problem, or at the request of the customer. For a list of customer replaceable parts, contact Lenovo. Support unrelated to a warranty issue may be subject to additional charges.
- ⁵ **Included software** may differ from its retail version (if available), and may not include user manuals or all program functionality. License agreements may apply.
- ⁶ **Post-warranty annual maintenance agreement:** Service begins at the end of the base warranty or the end of any other applied warranty and maintenance option, whichever occurs last. Service delivery is not available the same day the maintenance agreement is purchased. Maintenance agreements must be purchased and the registration successfully completed prior to the service being available.

⁷ **Lenovo Care Services:** Not all machine types and models are covered. Service period begins with the equipment date of purchase. Service must be purchased during the original limited product warranty period. Service levels are response time objectives and are not guarantees. If the machine problem turns out to be a Customer Replaceable Unit (CRU), a part at your discretion, will be express shipped to you for quick replacement. See Lenovo Care terms and conditions for complete details and restrictions.

⁸ **Memory:** For PCs without a separate video card, memory supports both system and video. Accessible system memory is up to 64MB less than the amount stated, depending on video mode.

⁹ **International Warranty Service** is available for most models in any country in which this product is sold and serviced. Service delivery methods and parts availability vary by country, may be different from that in the country of purchase, and are subject to change without notice. Fees and restrictions may apply in some countries.

¹⁰ **Modem speeds:** Public network download speeds are limited to 53Kbps. Upload speeds are limited to 48Kbps for V.92 modems. Actual speeds depend on many factors and are often less than the maximum possible. V.92 functions and speeds require compatible phone line and server equipment. Check with your telephone and ISP service providers for availability.

¹⁴ **Response times may vary.** May exclude some holidays. Telephone support may be subject to additional charges.

²⁰ **Operating System:** Level of support varies by operating system. Operating systems not preloaded on the system may not provide full feature functionality. Refer to lenovo.com/pc/support and enter your machine type and model number for more information.



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