ThinkStation

THINKSTATION S10 & D10:
A WORKSTATION AS PROFESSIONAL AS YOU ARE.

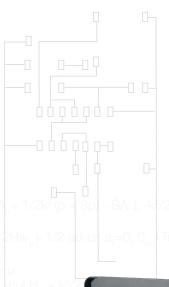# lenovo™

NEW WORLD. NEW THINKING.™

Lenovo recommends Windows Vista® Business.

THINKSTATION S10 & D10:
THE WORLD'S BEST ENGINEERING IN ACTION.

The ThinkStation, the newest member of the Think legacy, is engineered exclusively for specialized professionals. Its ground-breaking design ramps up simultaneous or parallel workflows, enabling professional users to innovate faster and reduces the time between an idea and a product.

Equipped with the latest technology from Intel®, the ThinkStation delivers performance well beyond a standard desktop PC. It is based on the upcoming Quad-Core Intel® Xeon® Processor 5400 series and Intel® Core™2 Extreme Processors—the first processors that use the new 45-nanometer technology. These processors nearly double the density of transistors on the chips to offer new levels of energy-efficient performance.

In addition, the ThinkStation is equipped with ThinkVantage® technologies such as Rescue and Recovery™ and Client Security Solution to provide the best of data security. From the world's best engineers come the world's best-engineered PCs.

QUIET AND RELIABLE
- The ThinkStation is designed to offer you a quieter computing experience: Its rock-solid engineering gives you workstation-class performance at reduced noise levels
- Even when the ThinkStation is under load, it has an acoustic profile similar to a standard PC

ENVIRONMENTALLY RESPONSIBLE
- The ThinkStation S10 and ThinkStation D10 contain over 50% recycled plastics, setting the standard for the industry
- All ThinkStation models are RoHS compliant
- Many ThinkStation models are Energy Star 4.0 compliant

DESIGNED TO PERFORM
The ThinkStation's chassis is designed to be user-friendly:
- The ThinkStation's premium cover latch makes the cover easily removable, assisting users to conveniently make upgrades
- The ThinkStation's illuminated front panel and icons make ports easily locatable, thereby improving connectivity
- The ThinkStation's ergonomically designed removable handle makes it easy to carry, move and manage
- Rack implementation is possible both in the ThinkStation S10 and ThinkStation D10

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PERFORMANCE YOU NEED

The ThinkStation is a high performance, high quality workstation designed to run graphically and computationally intensive applications for professional users who require a level of performance unattainable with a standard desktop PC.
- Lenovo has partnered with workstation graphics leader NVIDIA® to offer the QUADRO line of workstation graphics adapters
- The ThinkStation's superior engineering allows simultaneous design and analysis [(Run CAD (design) + CAE (analysis)] parallely
- The ThinkStation S10 and ThinkStation D10 both support RAID configurations without requiring an additional adapter card
- The ThinkStation supports both Windows Vista® and Windows® XP, giving you the flexibility you need

ISV CERTIFIED

Lenovo is working closely with leading software partners to ensure optimum performance and stability in the demanding applications you use everyday. Independent Software Vendors (ISVs) test system and application compatibility, providing you the assurance of a robust and reliable platform.

LEADING INTEL® TECHNOLOGIES

The new performance-driven Intel® Core microarchitecture combines six key technologies to provide unparalleled efficiency.
- Intel® Wide Dynamic Execution delivers more instructions per clock cycle, enhancing the efficiency of instruction execution
- Intel® Advanced Digital Media Boost enables 128-bit SSE instructions to be completed at a rate of one per clock cycle, effectively doubling the instructions' execution speed as compared to previous generations
- Intel® Advanced Smart Cache is a multi-core optimized cache which increases the probability of each execution core of a multi-core processor accessing data
- Intel® Smart Memory Access contains an important new built-in intelligence to process out-of-order instructions more efficiently
- Intel® Intelligent Power Capability improves energy-efficient performance and reduces noise and energy consumption
- Macro Fusion combines instructions into a single instruction for execution, delivering more efficient processing and faster throughput

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Intel® Core™2 Quad inside™

Intel® Xeon® inside™

		S10	D10
Operating Systems	Preloaded	Genuine Windows Vista® Business 32-bit	Genuine Windows Vista® Business 32-bit
		Genuine Windows Vista® Business 64-bit	Genuine Windows Vista® Business 64-bit
	Supported	Genuine Windows Vista® downgrade to Genuine Windows® XP (32 and 64 bit)	Genuine Windows Vista® downgrade to Genuine Windows® XP (32 and 64 bit)
		Red Hat® Enterprise Linux WS 64-bit	Red Hat® Enterprise Linux WS 64-bit
Graphics		NVIDIA® Quadro NV290 (256MB)	NVIDIA® Quadro NV290 (256MB)
		NVIDIA® Quadro FX370 (256MB)	NVIDIA® Quadro FX370 (256MB)
		NVIDIA® Quadro FX1700 (512MB)	NVIDIA® Quadro FX1700 (512MB)
		NVIDIA® Quadro FX4600 (768MB)	NVIDIA® Quadro FX4600 (768MB)
	Any two of the above Cards are supported.		
Hard Drives		SATA 7200 rpm 160, 250, 500, 750GB	SATA 7200 rpm 160, 250, 500, 750GB
		SAS 15K rpm 73, 146, 300GB	SAS 15K rpm 73, 146, 300GB
	* SAS requires adapter card on S10		
Optical Drives		DVD-ROM	DVD-ROM
		DVD +/- RW Dual Layer	DVD +/- RW Dual Layer
		BLU-RAY DVD Burner	BLU-RAY DVD Burner
Physical	Chassis Form Factor	Mid-Tower	Tower
	Dimensions (HxWxD) (without handle)	426x175x483mm	434x210x602mm
	Weight (typical)	~32 lbs	~55 lbs
	Internal Speaker	Standard	Standard
	Rack mounting	Via shelf only	Via shelf or optional rail kit
Slots / Bays	Gen2 PCIe x16 Slots	2	2
	PCIe x8 Slots	0	0
	PCIe x4 Slots	1 (x16 mechanical)	2 (x 8 mechanical)
	PCI-X Slots	0	2
	PCI Slots	2	1
	3.5" Internal Bays	3	5
	3.5" External Bays	1	1
	5.25" External Bays	2	3
Motherboard¹	Form Factor	Full ATX	Extended ATX
	Chipset	Intel® X38 (Express)	Intel® 5400A
	Ethernet	Broadcom 5755/5754	Intel® 82563EB
	SATA / SAS Connectors	6/0	5/5
	PATA Connectors	None	None
	Memory Type	DDR3 ECC	DDR2 Fully Buffered
	Memory Speed	PC2-8500 (1067MHz)	PC2-5300 (667MHz)
	DIMM Slots	4	8
	Maximum Memory	8GB	64GB*
Power Supply	Wattage	650W	1000W
	Efficiency	80%+	80%+
	Rating	100-127/200-240V 8/4A	100-127/200-240V 12/6A
Environmental	Energy Star 4.0	Select models	Select models
	RoHS Compliant	Yes	Yes
	Recycled Plastic Content	50⁺%	50⁺%
Rear I/O	PS/2	2 (Mouse/Keyboard)	2 (Mouse/Keyboard)
	Parallel	None	None
	Serial	1 (second optional)	1 (second optional)
	Ethernet	Dual Gigabit (RJ45)	Dual Gigabit (RJ45)
	USB	8	4
	Analog Audio	5 ports	6 ports
	Digital Audio	Optical	Coaxial
Front I/O	USB	2	2
	IEEE 1394	1 (6-pin)	1 (6-pin)
	Analog Audio	Headphone, Mic in	Headphone, Mic in

S10

Dual-Core
Intel® Core™2 Duo Processor E6550 - 2.33GHz, 2MB x2 L2, 1333MHz FSB
Intel® Core™2 Duo Processor E6750 - 2.66GHz, 2MB x2 L2, 1333MHz FSB
Intel® Core™2 Duo Processor E6850 - 3.00GHz, 2MB x2 L2, 1333MHz FSB

Quad-Core
Intel® Core™2 Quad Processor Q6600 - 2.40GH z, 4MB x2 L2, 1066MHz FSB
Intel® Core™2 Quad Processor Q6700 - 2.66GHz, 4MB x2 L2, 1066MHz FSB

Extreme
Intel® Core™2 Extreme Processor QX6800 - 2.93GHz, 4MBx2 L2, 1066MHz FSB
Intel® Core™2 Extreme Processor QX6850 - 3.00GHz, 4MBx2 L2, 1333MHz FSB

D10

Dual-Core
Intel® Xeon® Processor E5205 - 1.86GHz, 6MB L2, 1066MHz FSB
Intel® Xeon® Processor E5260 - 3.33GHz, 6MB L2, 1333MHz FSB

Quad-Core
Intel® Xeon® Processor E5405 - 2.00GHz, 12MB L2, 1333MHz FSB
Intel® Xeon® Processor E5410 - 2.33GHz, 12MB L2, 1333MHz FSB
Intel® Xeon® Processor E5420 - 2.50GHz, 12MB L2, 1333MHz FSB
Intel® Xeon® Processor E5430 - 2.66GHz, 12MB L2, 1333MHz FSB
Intel® Xeon® Processor E5440 - 2.83GHz, 12MB L2, 1333MHz FSB
Intel® Xeon® Processor E5450 - 2.83GHz, 12MB L2, 1333MHz FSB

Extreme
Intel® Xeon® Processor X5450 - 3.00GHz, 12MB, 1333MHz FSB
Intel® Xeon® Processor X5460 - 3.16GHz, 12MB, 1333MHz FSB

1.866.426.1316
lenovo.com/thinkstation

lenovo™

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Visit *lenovo.com/safecomputing* periodically for the latest information on safe and effective computing.

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