

Lenovo S20 Workstation Benchmark

		Lenovo S20 workstation (one 2.93GHz Intel Xeon W3540 quad core CPU, NVIDIA Quadro FX 4800, 4GB RAM)		HP Z800 workstation (two 3.2GHz Intel Xeon X5580 quad core CPUs, NVIDIA Quadro FX 4800, 12GB RAM)		HP xw8600 workstation (two 3.4GHz Intel Xeon X5492 quad core CPUs, NVIDIA Quadro FX 4800, 4GB RAM)		Lenovo Thinkstation S10 workstation (2.66GHz Intel Core 2 Q6700 quad core CPU, NVIDIA Quadro FX 4600, 2 GB RAM)		Alienware Area-51 ALX Crossfire workstation (Intel Core 2 Extreme 9650 quad core 3.0GHz CPU overclocked to 4.0 GHz, two ATI Radeon HD 3870, 4GB RAM)		HP xw8600 workstation (two 3.16GHz Intel quad core CPUs, NVIDIA Quadro FX 4600, 4GB RAM)		HP xw6600 workstation (two 3.0GHz Intel quad core CPUs, NVIDIA Quadro FX 1700, 2GB RAM)		HP xw4600 workstation (3.0GHz Intel dual-core CPU, NVIDIA Quadro FX 1700, 2GB RAM)		Appro Xtreme WH 5548 workstation (four 1.9GHz AMD Opteron quad-core CPUs, NVIDIA Quadro FX 5600, 32GB RAM)	
Price as tested		\$3,885		\$10,604		\$9,307		\$2,589		\$6,163		\$6,915		\$4,611		\$2,319		\$9,217	
Date tested		7/29/09		4/24/09		12/22/08		6/30/08		3/24/08		12/24/07		12/21/07		12/20/07		12/27/07	
Operating System		Windows XP	Windows Vista	Windows XP 64	Windows Vista 64	Windows XP	Windows Vista	Windows XP	Windows Vista	Windows XP	Windows Vista	Windows XP	Windows XP	Windows XP	Windows XP	Windows XP	Windows XP	Windows XP	Windows XP
SPECviewperf	higher																		
3dsmax-04		48.43	52.59	50.55	51.51	52.24	54.61	37.88	19.61	35.26	33.16	37.37	19.23						
catia-02		60.40	60.61	62.10	61.66	63.17	62.48	48.25	17.06	46.11	43.01	46.98	25.30						
ensight-03		51.74	55.33	53.99	53.62	54.44	50.82	43.33	24.88	41.89	31.03	30.01	38.74						
maya-02		232.92	207.87	213.80	209.74	234.50	193.15	191.10	32.16	175.60	111.20	111.40	128.50						
proe-04		61.56	64.49	63.59	61.48	52.73	57.15	48.86	13.04	40.46	38.27	43.98	21.82						
SW-01		136.81	139.54	135.24	128.08	109.91	119.29	90.90	28.64	74.28	55.44	62.12	40.32						
tcvis-01		29.17	38.76	28.93	28.29	29.84	27.58	24.46	6.26	23.57	15.34	15.06	24.24						
ugnx-01		33.41	33.19	33.34	32.38	34.17	31.14	27.04	12.75	25.25	14.90	14.29	31.80						
SPECcapc SolidWorks	lower																		
Score	sec-onds	140.42	n/a	145.17	n/a	164.71	n/a	188.01	n/a	174.62	184.36	167.24	282.78						
Graphics	sec-onds	47.33	n/a	41.31	n/a	54.18	n/a	60.13	n/a	57.97	61.52	57.46	89.03						
CPU	sec-onds	31.01	n/a	32.68	n/a	44.36	n/a	41.48	n/a	50.52	50.03	40.40	69.12						
I/O	sec-onds	65.86	n/a	71.94	n/a	69.96	n/a	90.18	n/a	69.96	77.04	73.43	125.34						
SPECcapc SolidWorks	higher																		
Score	ratio	5.91	n/a	6.38	n/a	4.84	n/a	4.56	n/a	4.46	4.28	4.82	2.98						
Graphics	ratio	3.92	n/a	4.85	n/a	3.55	n/a	3.15	n/a	3.33	3.11	3.29	2.15						
CPU	ratio	10.41	n/a	9.87	n/a	7.27	n/a	7.72	n/a	6.39	6.45	7.99	4.67						
I/O	ratio	4.81	n/a	4.40	n/a	4.52	n/a	3.51	n/a	4.52	4.11	4.31	2.53						

Numbers in **blue** indicate best recorded results. Numbers in **orange** indicate worst recorded results. Results are shown separately for portable and desktop workstations.