

Design Engineering Workstations Compared

		Dell T5500 workstation (two 3.33GHz Intel Xeon X5680 six-core CPUs, NVIDIA Quadro 5000, 6GB RAM)		Digital Storm PROTUS 226060 workstation (one 3.33GHz Intel i7-X980 six-core CPU, NVIDIA Quadro FX 3800, 12GB RAM)		BOX3 3DBOXX 4860 Extreme workstation (one 3.33GHz Intel i7-X980 six-core CPU (over-clocked to 4.15GHz), NVIDIA Quadro 5000, 12GB RAM)		Lenovo E20 workstation (one 3.19GHz Intel i5650 dual core CPUs, NVIDIA Quadro FX 580 4GB RAM)		HP Z200 workstation (one 3.47GHz Intel i5-670 dual core CPUs, NVIDIA Quadro FX 1800, 4GB RAM)		Lenovo D20 workstation (two 2.66GHz Intel Xeon X5550 quad core CPUs, NVIDIA Quadro FX 4800, 8GB RAM)	
Price as tested		\$9,240		\$6,545		\$6,325		\$1,224		\$2,089		\$5,943	
Date tested		1/14/11		12/13/10		11/14/10		9/15/10		8/7/10		1/11/10	
Operating System		Windows XP	Windows 7 64-bit	Windows XP	Windows 7 64-bit	Windows XP	Windows 7 64-bit	Windows XP	Windows 7	Windows XP	Windows 7	Windows XP	Windows Vista
SPECviewperf	higher												
3dsmax-04		76.05	78.72	88.15	87.07	n/a	90.25	66.73	64.98	60.87	60.65	50.38	51.21
catia-02		98.48	100.25	74.35	84.85	n/a	115.36	68.28	63.79	68.13	66.87	61.79	62.01
ensight-03		118.29	121.70	62.22	58.33	n/a	120.41	45.79	43.40	53.85	53.06	55.26	53.51
maya-02		490.95	435.44	174.45	218.33	n/a	458.21	185.81	157.57	238.59	208.40	250.41	223.73
proe-04		92.19	90.61	83.16	77.29	n/a	114.34	64.08	59.17	68.03	65.74	64.83	63.66
SW-01		180.49	169.75	174.74	157.70	n/a	233.03	97.07	89.67	138.22	137.48	144.17	145.19
tcvis-01		93.99	90.34	40.16	37.36	n/a	95.26	23.66	23.00	35.60	34.81	40.55	39.51
ugnx-01		89.31	87.95	37.46	35.49	n/a	88.75	23.15	16.93	30.91	31.23	34.93	34.52
SPECapc SolidWorks	lower												
Score	seconds	146.86	n/a	106.51 ¹	n/a	n/a	n/a	153.29	n/a	148.72	n/a	141.59	n/a
Graphics	seconds	58.42	n/a	32.17 ¹	n/a	n/a	n/a	58.71	n/a	56.83	n/a	41.48	n/a
CPU	seconds	32.27	n/a	25.87 ¹	n/a	n/a	31.63	33.67	n/a	32.81	n/a	33.00	n/a
I/O	seconds	60.76	n/a	47.99 ¹	n/a	n/a	54.68	65.44	n/a	63.10	n/a	67.73	n/a
SPECapc SolidWorks	higher												
Score	ratio	5.32	n/a	8.04 ¹	n/a	n/a	n/a	5.21	n/a	5.27	n/a	6.28	n/a
Graphics	ratio	3.23	n/a	6.07 ¹	n/a	n/a	n/a	3.25	n/a	3.23	n/a	4.68	n/a
CPU	ratio	10.00	n/a	12.01 ¹	n/a	n/a	10.20	9.58	n/a	9.83	n/a	9.78	n/a
I/O	ratio	5.21	n/a	6.60 ¹	n/a	n/a	5.79	4.84	n/a	5.02	n/a	4.67	n/a
Autodesk Render Test	lower												
Time	seconds	0:42 ¹	0:28 ¹	53.5 ¹	46.3 ¹	n/a	39.6 ¹	222.3 ¹	203.0 ¹	137.4 ¹	135.2 ¹	64.00 ¹	63.60 ¹

Numbers in **blue** indicate best recorded results. Numbers in **red** indicate worst recorded results. 1. Hyper-threading enabled.