

Single-Socket Workstations Compared

| | | Dell Precision T1600 workstation (one 3.4GHz Intel Xeon E3-1270 quad-core CPU, NVIDIA Quadro 2000, 4GB RAM) | | @XI Computer MTower workstation (one 3.4GHz Intel Core i7 2600K quad-core CPU over-clocked to 4.1GHz, NVIDIA Quadro 5000, 16GB RAM) | | Digital Storm PROTUS 226060 workstation (one 3.33GHz Intel i7-X980 six-core CPU, NVIDIA Quadro FX 3800, 12GB RAM) | | BOXX 3DBOXX 4860 Extreme workstation (one 3.33GHz Intel i7-X980 six-core CPU over-clocked to 4.15GHz, NVIDIA Quadro 5000, 12GB RAM) | | Lenov E20 workstation (one 3.19GHz Intel i5-650 dual core CPUs, NVIDIA Quadro FX 580, 4GB RAM) | | BOXX 3DBOXX 8550XTREME workstation (two 3.33GHz Intel Xeon X5680 six-core CPUs over-clocked to 4.2GHz, NVIDIA Quadro 5000, 24GB RAM) | | Dell T5500 workstation (two 3.33GHz Intel Xeon X5680 six-core CPUs, NVIDIA Quadro 5000, 6GB RAM) | |
|----------------------|---------|--|---------------------|--|---------------------|--|-------------------|--|-------------------|---|--------------------|---|---------------------|---|-------------------|
| Price as tested | | \$1,875 | | \$4,465 | | \$6,545 | | \$6,325 | | \$1,224 | | \$11,396 | | \$9,242 | |
| Date tested | | 9/11/11 | | 4/30/11 | | 12/13/10 | | 11/14/10 | | 9/15/10 | | 3/20/11 | | 1/14/11 | |
| Operating System | | Windows XP | Windows 7 64-bit | 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 64-bit | Windows XP | Windows 7 64-bit |
| SPECviewperf | higher | | | | | | | | | | | | | | |
| 3dsmax-04 | | 83.61 | 81.72 | n/a | 89.36 | 88.15 | 87.07 | n/a | 90.25 | 66.73 | 64.98 | 95.97 | 95.44 ¹ | 75.05 | 78.72 |
| catia-02 | | 96.38 | 93.28 | n/a | 121.7 ¹ | 75.35 | 84.85 | n/a | 115.36 | 68.28 | 63.79 | 120.44 | 121.1 ¹ | 98.48 | 100.25 |
| ensight-03 | | 76.62 | 74.16 | n/a | 131.19 ¹ | 62.22 | 58.33 | n/a | 120.41 | 45.79 | 43.40 | 132.41 | 130.13 ¹ | 118.29 | 121.70 |
| maya-02 | | 297.27 | 270.53 | n/a | 465.88 | 174.45 | 218.33 | n/a | 458.21 | 185.81 | 157.57 | 529.89 | 476.95 ¹ | 490.95 | 435.44 |
| proe-04 | | 89.24 | 85.86 | n/a | 128.25 | 83.16 | 77.29 | n/a | 114.34 | 64.08 | 59.17 | 113.84 | 113.24 | 92.19 | 90.61 |
| SW-01 | | 169.31 | 160.61 ¹ | n/a | 239.78 | 174.74 | 157.70 | n/a | 233.03 | 97.07 | 89.67 | 221.31 | 214.06 | 180.49 | 169.75 |
| tcvis-01 | | 56.76 | 54.24 | n/a | 97.45 | 40.16 | 37.36 | n/a | 95.26 | 23.66 | 23.00 | 98.58 | 94.17 | 93.99 | 90.34 |
| ugnx-01 | | 43.40 | 42.47 | n/a | 88.87 ¹ | 37.46 | 35.49 | n/a | 88.75 | 23.15 | 16.93 | 89.32 | 86.90 | 89.31 | 87.95 |
| SPECcapc SolidWorks | lower | | | | | | | | | | | | | | |
| Score | seconds | 106.63 ¹ | n/a | n/a | n/a | 106.51 ¹ | n/a | n/a | n/a | 153.29 | n/a | 106.56 ¹ | n/a | 146.86 | n/a |
| Graphics | seconds | 34.24 ¹ | n/a | n/a | n/a | 32.17 ¹ | n/a | n/a | n/a | 58.71 | n/a | 35.33 ¹ | n/a | 58.42 | n/a |
| CPU | seconds | 25.05 ¹ | n/a | n/a | 27.48 ¹ | 26.87 ¹ | n/a | n/a | 31.63 | 33.67 | n/a | 25.99 ¹ | n/a | 32.27 | n/a |
| I/O | seconds | 48.26 ¹ | n/a | n/a | 49.48 ¹ | 47.99 ¹ | n/a | n/a | 54.68 | 65.44 | n/a | 46.51 ¹ | n/a | 60.76 | n/a |
| SPECcapc SolidWorks | higher | | | | | | | | | | | | | | |
| Score | ratio | 8.04 ¹ | n/a | n/a | n/a | 8.04 ¹ | n/a | n/a | n/a | 5.21 | n/a | 8.23 ¹ | n/a | 5.32 | n/a |
| Graphics | ratio | 5.74 ¹ | n/a | n/a | n/a | 6.07 ¹ | n/a | n/a | n/a | 3.25 | n/a | 6.08 ¹ | n/a | 3.23 | n/a |
| CPU | ratio | 12.88 ¹ | n/a | n/a | 11.74 ¹ | 12.01 ¹ | n/a | n/a | 10.20 | 9.58 | n/a | 12.61 ¹ | n/a | 10.00 | n/a |
| I/O | ratio | 6.56 ¹ | n/a | n/a | 6.40 ¹ | 6.60 ¹ | n/a | n/a | 5.79 | 4.84 | n/a | 6.81 ¹ | n/a | 5.21 | n/a |
| Autodesk Render Test | lower | | | | | | | | | | | | | | |
| Time | seconds | 82.2 ¹ | 60.5 ¹ | n/a | 49.8 ¹ | 53.5 ¹ | 46.3 ¹ | n/a | 39.6 ¹ | 222.3 ¹ | 203.0 ¹ | 34.0 ¹ | 19.0 ¹ | 42.0 ¹ | 28.0 ¹ |

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