# Mobile Workstations Compared

| | MSI WS65 8SK 15.6-inch 2.90GHz Intel Core i9-8950HJ 6-core CPU, NVIDIA Quadro P3200, 32GB RAM, 512GB NVMe PCIe SSD | Eurocom Tornado F7W 17.3-inch 3.60GHz Intel Core i9-9900K 8-core CPU, NVIDIA Quadro P5200, 64GB RAM, 500GB NVMe PCIe SSD, 2TB HD | Lenovo ThinkPad P1 15.6-inch mobile 2.70GHz Intel Xeon E-2176M 6-core CPU, NVIDIA Quadro P2000, 32GB RAM, 2TB NVMe PCIe SSD | Dell Precision 3530 15.6-inch 2.7GHz Intel Xeon E-2176M 6-core CPU, NVIDIA Quadro P600, 32GB RAM, 512GB NVMe PCIe SSD | @Xi PowerGo XT 2018 17.3-inch 4.0GHz Intel Core i7-8086K 6-core CPU, NVIDIA Quadro P4200, 32GB RAM, 500GB NVMe PCIe SSD | Lenovo ThinkPad P52s 15.6-inch 1.9GHz Intel Core i7-8650U quad-core CPU, NVIDIA Quadro P500, 16GB RAM, 1TB NVMe PCIe SSD |
|---|---|---|---|---|---|---|
| Price as tested | $3,249 | $7,346 | $3,788 | $2,738 | $4,558 | $2,196 |
| Date tested | 12/12/18 | 12/12/18 | 10/24/18 | 8/28/18 | 8/7/18 | 6/12/18 |
| Operating System | Windows 10 | Windows 10 | Windows 10 | Windows 10 | Windows 10 | Windows 10 |
| SPECviewperf 12 (higher is better) | | | | | | |
| catia-04 | 115.38 | 183.15 | 64.58 | 38.67 | 165.95 | 28.64 |
| creo-01 | 97.82 | 151.79 | 52.95 | 42.99 | 138.65 | 33.26 |
| energy-01 | 12.46 | 20.03 | 6.50 | 3.12 | 14.87 | 0.55 |
| maya-04 | 91.69 | 139.69 | 41.74 | 38.42 | 128.84 | 20.96 |
| medical-01 | 60.10 | 94.74 | 27.81 | 12.61 | 63.65 | 9.41 |
| showcase-01 | 61.83 | 80.91 | 29.91 | 19.70 | 73.41 | 12.55 |
| snx-02 | 137.83 | 214.49 | 61.50 | 37.25 | 172.95 | 43.91 |
| sw-03 | 123.80 | 201.96 | 76.73 | 70.59 | 181.61 | 50.01 |
| SPECapc SOLIDWORKS 2015 (higher is better) | | | | | | |
| Graphics Composite | 4.67 | 5.84 | 2.58 | 4.77 | 5.32 | 1.94 |
| Shaded Graphics Sub-Composite | 2.98 | 4.03 | 1.33 | 3.17 | 3.48 | 1.17 |
| Shaded w/Edges Graphics Sub-Composite | 3.88 | 4.99 | 1.91 | 4.06 | 4.38 | 1.64 |
| Shaded using RealView Sub-Composite | 3.37 | 4.49 | 1.76 | 3.59 | 3.87 | 1.48 |
| Shaded w/Edges using RealView Sub-Composite | 3.89 | 5.08 | 2.29 | 4.07 | 4.36 | 1.98 |
| Shaded using RealView and Shadows Sub-Composite | 3.87 | 5.11 | 2.05 | 4.10 | 4.46 | 1.69 |
| Shaded with Edges using RealView and Shadows Graphics Sub-Composite | 4.11 | 5.28 | 2.45 | 4.26 | 4.61 | 2.00 |
| Shaded using RealView and Shadows and Ambient Occlusion Graphics Sub-Composite | 12.97 | 13.83 | 6.35 | 11.20 | 14.75 | 3.01 |
| Shaded with Edges using RealView and Shadows and Ambient Occlusion Graphics Sub-Composite | 12.14 | 13.68 | 6.87 | 11.01 | 13.51 | 3.54 |
| Wireframe Graphics Sub-Composite | 3.69 | 4.45 | 3.06 | 3.85 | 4.15 | 2.43 |
| CPU Composite | 4.58 | 3.86 | 2.85 | 4.55 | 5.40 | 1.72 |
| SPECwpc v2.0 (higher is better) | | | | | | |
| Media and Entertainment | 3.22 | 5.15 | 3.13 | 2.23 | 4.14 | 1.71 |
| Product Development | 3.22 | 4.95 | 2.94 | 2.29 | 2.70 | 1.82 |
| Life Sciences | 3.60 | 6.19 | 3.66 | 2.26 | 4.40 | 1.83 |
| Financial Services | 4.11 | 6.16 | 4.20 | 3.34 | 5.37 | 1.91 |
| Energy | 3.56 | 5.62 | 5.02 | 2.28 | 4.08 | 1.42 |
| General Operations | 1.38 | 1.96 | 1.67 | 1.30 | 1.55 | 1.20 |
| Time | | | | | | |
| Autodesk Render Test (in seconds, (lower is better) | 35.50 | 34.10 | 46.40 | 63.10 | 29.30 | 89.70 |
| Battery Life (in hours:minutes, higher is better) | 9:01 | 4:40 | 7:08 | 9:26 | 3:56 | 5:33 |

Numbers in blue indicate best recorded results. Numbers in red indicate worst recorded results.