	HP Z2 Mini G9	Lenovo ThinkStation P360 Ultra	Scan 3XS GWP-ME A132C	Scan 3XS GWP-ME A132R	Boxx Apexx S4.04	Armari Magnetar M64TP-RW1300G3	Dell Precision 5470
CPU	Intel Core i7-12700K	Intel Core i9-12900K	Intel Core i9-13900K	AMD Ryzen 9 5950X	Intel Core i9-13900K	AMD Ryzen Threadripper Pro 5995WX	Intel Core i7-12800H
GPU	Nvidia T1000 (4 GB)	Nvidia T400 (4 GB)	Nvidia RTX A2000 (12 GB)	Nvidia RTX A4500	Nvidia RTX A4000	AMD Radeon Pro W6800	Nvidia RTX A1000 (4 GB)
Memory	32 GB DDR5-4800	64 GB DDR5-4800	64 GB DDR5 5600	64 GB DDR5 5600	128 GB DDR5-4800	128 GB DDR4-3200	32 GB DDR5 5,200
Primary storage	1 TB NVMe SSD	1 TB NVMe SSD	2 TB Samsung 980 Pro NVMe SSD	2 TB Samsung 980 Pro NVMe SSD	1 TB Seagate 530 Firecuda SSD	2 TB Western Digital SN850 NVMe SSD	1 TB NVMe SSD
OS	Windows 11 Pro	Windows 10 Pro	Windows 11 Pro	Windows 11 Pro	Windows 11 Pro	Windows 11 Pro	Windows 11 Pro
Price (Ex VAT)	Approx £1,499 (page WS26)	£POA	£2,583	£3,583	£5,400	£10,799	£3,119
Benchmarks (score) (bigger is better)							
Autodesk Inventor Professional 2023 (Invmark)							
Modelling	1,912	2,023	2,307	2,141	2,319	1,941	1,602
Drawing	1,745	1,777	2,166	1,959	2,138	1,394	1,384
Assemblies	2,172	2,394	2,615	2,487	2,578	1,674	2,053
Assembly Pattern	1,975	2,107	2,327	2,080	2,261	1,424	1,887
Assembly Build	2,163	2,421	2,652	2,545	2,625	1,701	2,010
Ray Tracing	2,707	3,634	5,706	5,593	5,680	11,744	2,041
Data Translation	1,440	1,550	1,743	1,544	1,689	1,124	1,252
Opening files	2,171	2,643	2,807	2,757	2,790	1,971	2,152
Saving to disk	1,262	1,386	1,240	1,364	1,671	1,134	1,262
Dynamic Sim	2,171	2,454	2,611	2,509	2,521	1,449	2,091
FEA	1,328	1,380	1,473	1,434	1,470	1,132	1,210
Graphics (4K)	3,389	2,288	5,068	4,874	4,797	2,966	3,582 (FHD)
Solidworks Professional 2022 (SPECapc)							
CPU ray trace	3.30	4.29	7.25	6.78	7.35	13.28	2.44
CPU rebuild	2.07	2.15	2.41	2.32	2.49	1.59	1.74
CPU convert	1.95	2.01	2.28	2.17	2.37	1.5	1.67
CPU simulate	1.75	1.32	2.18	1.99	2.08	1.6	1.62
CPU mass properties	2.09	2.20	2.41	2.57	2.39	1.68	1.65
CPU Boolean	1.86	1.78	2.26	2.06	2.21	1.44	1.58
Graphics (AA, shaded, edges) (4K)	0.50	0.28	1.12	2.4	2.52	1.19	2.01 (FHD)
Graphics (AA, shaded, edges, RealView) (4K)	0.59	0.32	1.23	2.79	2.68	2.03	2.48 (FHD)
V-Ray 5.0							
CPU benchmark	13,288	16,427	26,952	29,458	26,548	66,461	7,556
Cinebench R23							
Multi-core	16,943	22,691	37,862	37,601	39,978	73,520	12,396
KeyShot 11.3.1 benchmark							
CPU test	2.67	2.75	5.65	5.70	5.48	13.06	1.82
Benchmarks (frames per second) (FPS) (bigger is better)							
Enscape 3.1							
Enscape 3.1 architectural project (FHD / 4K)	36.7 / 14.05	21.15 / 6.05	72.20 / 26.55	152.7 / 56.35	131.47 / 48.67	40.43 / 23.4	50.25 (FHD only)
Unreal Engine 4.26							
Car Configurator model (FHD / 4K)	13.13	3.44 / N/A	43.34 / 12.59	109.94 / 34.45	84.54 / 25.89	101.37 / 29.12	23.23 (FHD only)
Car Configurator model (Ray Tracing) (FHD / 4K)	N/A	N/A	25.62 / 6.63	62.91 / 17.36	50.23 / 14.05	39.81 / 10.53	N/A
Autodesk VRED Professional 2023							
Automotive test model (no AA) (FHD / 4K)	30.7 / 10.85	15.4 / N/A	68.2 / 25.7	150.1 / 62.6	129.2 / 52.2	44.25 / 34.05	40.5 (FHD only)
Automotive test model (medium AA) (FHD / 4K)	16.4 / 7.00	8.75 / N/A	38.22 / 16.25	90.1 / 40.3	70.9 / 32.15	38.85 / 26.48	23.2 (FHD only)
Automotive test model (ultra-high AA) (FHD / 4K)	7.80 / N/A	4.0 / N/A	18.7 / 6.35	45.5 / 15.9	36.18 / 12.75	28.95 / 14.1	10.8 (FHD only)
Benchmarks (time - seconds) (smaller is better)							
Autodesk Revit 2021							
RFO 3.1 benchmark - Model Creation	72.7	62.93	61.5	68.9	59.8	94.1	76.1
RFO 3.1 benchmark - Export	222.1	202.9	189.6	211.4	182.1	292.7	247.9
RFO 3.1 benchmark - Rendering	30.6	26.2	18.8	19.8	19.7	19.1	43.5
RFO 3.1 benchmark - Graphics (4K)	37.9	60.94	16.9	18.2	16.6	29.2	20.1 (FHD)
Leica Cyclone Register 360							
Point cloud registration (large dataset)	3,327 (runs on 2 threads)	1,145 (runs on 5 threads)	1,106 (runs on 5 threads)	1,194 (runs on 5 threads)	1,386 (runs on 6 threads)	1,794 (runs on 6 threads)	4,295 (runs on 2 threads)
Unreal Engine 4.26							
Recompile Shaders (Car Configurator model)	383.3	308.23	194.4	189.7	256.0	84.9	594.4