# **Gaming Desktop**

Performance for the gamer.



### 13th Gen Intel<sup>®</sup> Core<sup>™</sup> desktop processors—125 W

Ultimate gaming experience

Delivering next level performance for serious gamers



Incredible multitasking for Microsoft Office, web browsing, and photo editing

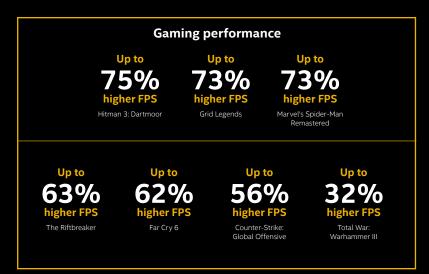


Breakthrough 3D content-creation performance

Immersive 3D modeling and game development

13th Gen Intel Core desktop processor	Processor cores	Processor threads	Number of Performance- cores (P-cores)	Number of Efficient- cores (E-cores)	Intel® Smart Cache	Maximum turbo frequency (GHz)		Base frequency (GHz)		Processor graphics
						P-cores	E-cores	P-cores	E-cores	
i9-13900K	24	32	8	16	36 MB	5.8	4.3	3.0	2.2	770
i9-13900KF	24	32	8	16	36 MB	5.8	4.3	3.0	2.2	N/A
i7-13700K	16	24	8	8	30 MB	5.4	4.2	3.4	2.5	770
i7-13700KF	16	24	8	8	30 MB	5.4	4.2	3.4	2.5	N/A
i5-13600K	14	20	6	8	24 MB	5.1	3.9	3.5	2.6	770
i3-13600KF	14	20	6	8	24 MB	5.1	3.9	3.5	2.6	N/A

### Intel Core i7-13700K processor versus Intel Core i7-10700K processor



Office productivity performance

> 58% better

Productivity performance CrossMark Overall

3D rendering performance

124% faster Blender Secret Deer Render Photo editing performance

65% better

Adobe Photoshop PugetBench Photoshop

Video editing performance

48% faster

Adobe Premiere Pro PugetBench Adobe Premiere

Performance varies by use, configuration and other factors. See second page for workloads and configurations. Performance results are based on testing as of dates shown in configurations and may not reflect all publicly available updates. See backup for configuration details. No product or component can be absolutely secure. Your costs and results may vary. Intel technologies may require enabled hardware, software or service activation. © Intel Corporation. Intel, the Intel logo, and other Intel marks are trademarks of Intel Corporation or its subsidiaries. Other names and brands may be claimed as the property of others.

## Configurations

#### Testing as of October 6, 2022

Processor: 13th Gen Intel<sup>®</sup> Core<sup>™</sup> i7-13700K processor (RPL-S) PL1 set to 125W TDP, 16C/24T (8P + 8E); Motherboard: Intel Internal Validation board; Memory: G.Skill DDR5 CL 28-34-34-89, 2X 16GB DDR5-5600MT/s; Storage: Samsung 980 Pro 1TB; Display Resolution: 1920x1080; OS: Microsoft Windows 11 Pro 22621.160; Graphics card: NVIDIA RTX 3090 (FTW3), Graphics driver: 516.59; Motherboard BIOS version: N/A

Processor: 10th Gen Intel® Core™ i7-10700K processor (CML) PL1 set to 125W, 8C/16T, Motherboard: ASUS Z590 ROG Maximus XIII Hero; Memory: G. Skill DDR4 CL 14-14-14-34, 2X 16GB DDR4-2933 MHz; Storage: Samsung 980 Pro 1TB; Display Resolution: 1920x1080; OS: Microsoft Windows 11 Pro 22621.160; Graphics card: NVIDIA RTX 3090 (FTW3), Graphics driver: 516.59; Motherboard BIOS version: 1402

### Workloads

Crossmark is a benchmark from the BAPCo\* consortium that is an easy to run native cross-platform benchmark that measures the overall syste performance and system responsiveness using models of real-world applications. CrossMark® supports devices running Windows, iOS and mac platforms. CrossMark® is available for download in the Windows Store, iTunes and Mac App Store. See https://bapco.com/products/crossmark/more info.

Far Cry 6- 1080p High- Avg FPS Hitman 3: Dartmoor- 1080p High- Avg FPS Counter-Strike: Global Offensive- 1080p High- Avg FPS The Riftbreaker – 1080p High – Avg FPS Marvel's Spider-Man Remastered– 1080p High – Avg FPS Total War: Warhammer III- Battle- 1080P High – Avg FPS Grid Legends – 1080P High – Avg FPS

Blender CPU Secret Deer- Measures 3D rendering performance run on CPU using Blender, a free and open-source 3D Creation software PugetBench for Photoshop: Benchmark which tests the performance of Adobe Photoshop on systems made by PugetSystems. PugetBench for Premiere Pro: Benchmark which tests the performance of Adobe Premiere Pro on systems made by PugetSystems.