BATTLECARD

AMD RYZEN 7 1800X EIGHT-CORE

VS

INTEL I7-6900K EIGHT-CORE

WORLD'S FASTEST 8 CORE DESKTOP CPU[1] – ENGINEERED TO UNLOCK YOUR FULL POTENTIAL.

BETTER PERFORMANCE.[2] COMPETITIVE GAMING.[3] HALF THE PRICE.[4]

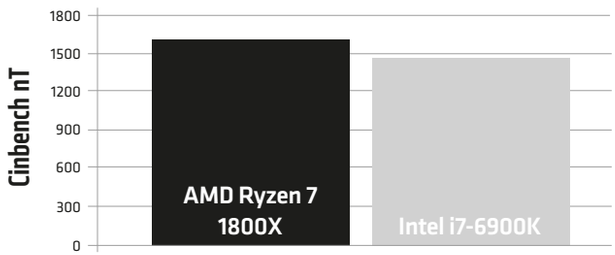
THE NEW AMD RYZEN 7 CPU DELIVERS THE EXPERIENCE YOU WANT:

- Up to 16 threads to accelerate demanding gameplay and workloads
- Perfect for high-end gaming, 4K and VR
- Server-class multitasking
- Optimized for all high-performance graphics cards

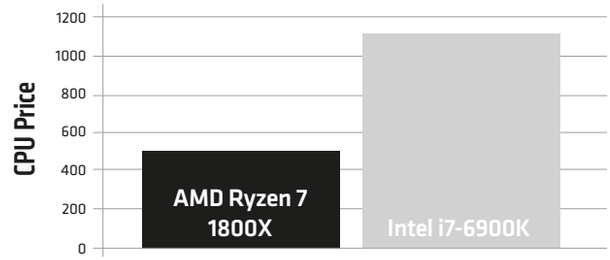
GREAT FOR:

PHOTO EDITING | MOVIES | GAMING | MUSIC | WEB | VIDEO EDITING

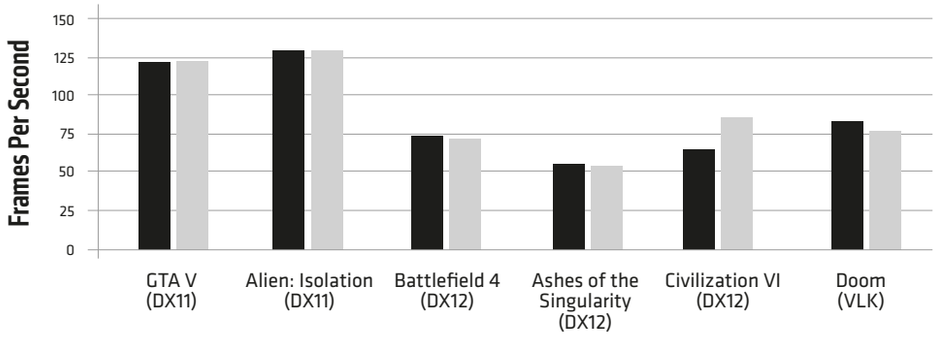
UP TO **9%** **BETTER CPU PERFORMANCE**
Compared to Intel i7-6900K[2]



LESS THAN **1/2** **THE PRICE**
Compared to Intel i7-6900K[4]



4K GAMING PERFORMANCE
Higher is better[3]



AMD Ryzen 7 1800X Intel i7-6900K

AMD ADVANTAGE

AMD SENSEMI TECHNOLOGY IS CLEVER MACHINE INTELLIGENCE IN YOUR AMD RYZEN™ PROCESSOR– A SERIES OF SMART "SENSES" THAT WORK TOGETHER TO LEARN ABOUT YOUR APPLICATIONS AND TUNE PERFORMANCE FASTER THAN THE BLINK OF AN EYE.

PRECISION BOOST

Adjusts clockspeed on the fly without pausing work, to optimize performance to the demands of your game or app.

PURE POWER

Optimizes power draw for any workload to minimize power consumption, reduce system heat, and decrease noise.

EXTENDED FREQUENCY RANGE

When paired with a premium cooling solution, get extra performance boosts that are fully automated with no user input required.

NEURAL NET PREDICTION

Increased efficiency from a true AI that evaluates current application and predicts the next steps before they are needed.

SMART PREFETCH

Learns how your applications access their own data and prepares it in advance to enable peak performance.

FOR MORE INFORMATION, VISIT WWW.AMD.COM

1. Testing by AMD Performance labs as of February 10, 2017. PC manufacturers may vary configurations yielding different results. Cinebench R15 nT is used to simulate multi-threaded CPU performance; the AMD Ryzen™ 7 1800X scored 1601.43, while the Intel Core i7-6900K Extreme scored 1473.79 for a benchmark score comparison of 1601.43/1473.79 = 1.09× or 9% more. RZN-9. System Configurations: AMD Ryzen™ 7 1800X: Myrtle AM4, Ryzen™ 7 1800X processor, with NVIDIA TITAN X (Pascal) 12GB graphics adapter, 16GB (2 x 8GB) DDR4-2400 RAM, Windows 10 RS2operating system, Graphics driver 21.21.13.7633 :: 12/11/2016
2. Testing by AMD Performance labs. PC manufacturers may vary configurations yielding different results. Cinebench nT Score: 1601.4 (AMD Ryzen 7 1800X) vs. 1473.8 (Core i7-6900K), resulting in a 9% advantage for the Ryzen 7 1800X. Handbrake render time: 560 sec (AMD Ryzen 7 1800X) vs. 619 sec (Core i7-7700K), resulting in a 10% advantage for the Ryzen 7 1800X. SPECViewperf: the Ryzen 7 1800X achieved a weighted geometric mean 2.6% disadvantage compared to the Core i7-6900K. PCMark 8 Home score: 4564 points (AMD Ryzen 7 1800X) vs. 4694.0 points (Core i7-6900K), resulting in a 3% disadvantage for the Ryzen 7 1800X. PCMark 8 Creative Score: 8688 points (AMD Ryzen 7 1800X) vs. 8740 points (Core i7-6900K), resulting in a <1% disadvantage for the Ryzen 7 1800X. RZN-19. AMD Ryzen™ 7 1800X: Myrtle AM4, Ryzen™ 7 1800X processor, with NVIDIA TITAN X (Pascal) 12GB graphics adapter, 16GB (2 x 8GB) DDR4-2400 RAM, Windows 10 RS2operating system, Graphics driver 21.21.13.7633 :: 12/11/2016. Core i7-6900K Extreme: STRIX X99 GAMING, Core i7-6900K Extreme processor, with NVIDIA TITAN X (Pascal) 12GB graphics adapter, 16GB (2 x 8GB) DDR4-2400 RAM, Windows 10 RS2operating system, Graphics driver 21.21.13.7633 :: 12/11/2016
3. The Ryzen 7 1800X achieved the following average FPS frame rates when playing at maximum in-game detail settings at 4K resolution: 122 in GTA V, 128 in Alien: Isolation, 72 in Battlefield 4, 54 in Ashes of the Singularity, 69 in Civilization VI, and 81 in DOOM. The Core i7-6900K achieved the following average FPS frame rates: 123 in GTA V, 128 in Alien: Isolation, 70 in Battlefield 4, 53 in Ashes of the Singularity, 80 in Civilization VI, and 76 in DOOM. PC manufacturers may vary configurations yielding different results. RZN-35. Testing by AMD Performance labs as of March 27, 2017 on the following systems: AMD Ryzen™ 7 1800X: Myrtle AM4, Ryzen™ 7 1800X processor, with NVIDIA TITAN X (Pascal) 12GB graphics adapter, 16GB (2 x 8GB) DDR4-2400 RAM, Windows 10 RS2operating system, Graphics driver 21.21.13.7633 :: 12/11/2016. Core i7-6900K Extreme: STRIX X99 GAMING, Core i7-6900K Extreme processor, with NVIDIA TITAN X (Pascal) 12GB graphics adapter, 16GB (2 x 8GB) DDR4-2400 RAM, Windows 10 RS2operating system, Graphics driver 21.21.13.7633 :: 12/11/2016. RZN-35.
4. Testing by AMD Performance labs as of February 20, 2017. PC manufacturers may vary configurations yielding different results. CInebench R15 multi-threaded performance used to represent multi-threaded performance. The Ryzen 7 1800X (8c/16t, $499 SEP) achieved a score of 162.0 in the single-thread test; The Core i7-6900K (8c/16t, $1089 SEP) achieved a score of 162.8 in the single-thread test; resulting in a 0% single-threaded performance advantage. The Ryzen 7 1700X (8c/16t, $399 SEP) achieved a score of 151.1 in the single-thread test; The Core i7-6800K (6c/12t, $441 SEP) achieved a score of 156.4 in the single-thread test; resulting in a 3% single-threaded performance advantage. The Ryzen 7 1700 (8c/16t, $339 SEP) achieved a score of 147.0 in the single-thread test; The Core i7-7700K (4c/8t, $349 SEP) achieved a score of 189.8 in the single-thread test; resulting in a 23% single-threaded performance advantage (and a 14.6% single-threaded performance advantage compared to the Ryzen 7 1800X). RZN-14

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