

GAMING PC

CyberPower Ultra Threadripper Xtreme / £3,469 inc VAT

SUPPLIER www.cyberpowersystem.co.uk

CyberPower's bombastic-sounding Ultra Threadripper Xtreme marks the first time we've seen an AMD Threadripper CPU in a premade desktop rig, and it's a beast. It uses the 1950X, which is the beefiest Threadripper part, costing just under £1,000 inc VAT on its own. This monster 16-core CPU can also execute 32 concurrent threads, which is a dozen more threads than the similarly priced Intel Core i9-7900X. Intel makes its own 16-core processor, of course, but the Core i9-7960X costs a monstrous £1,700 inc VAT.

The 1950X in this machine runs at its stock speed, which means a base clock of 3.6GHz and a boost pace of 4GHz. The extreme core count means it's designed for creative and power users, and it comes with a new chipset too. The X399 silicon serves up a mighty 64 PCI-E lanes, which means more room in the bandwidth budget for additional M.2 slots and graphics cards.

The X399 chipset also sports a new socket. It's called TR4 and it's huge – around twice as large as a conventional Ryzen CPU. The new chip is chilled by the Corsair Hydro H100i V2, which is a 240mm all-in-one liquid cooler, although its contact plate doesn't cover the whole of the CPU's heatspreader.

The huge CPU slots into MSI's X399 Gaming Pro Carbon AC motherboard, which has two vacant M.2 ports, quad-GPU support, on-board buttons and a mighty count of ten USB 3.1 ports on the backplate. Elsewhere, it's crammed with features: RGB LEDs, boosted audio, eight DIMM sockets and steel-surrounded PCI-E slots. Its backplate also has buttons to update and clear the BIOS. CyberPower has installed 32GB of DDR4 memory in the Threadripper Xtreme, which is about right for high-end productivity tools, and there's a fast PCI-E NVMe 500GB Samsung 960 Evo SSD and a 2TB hard disk.

Meanwhile, the GTX 1080 Ti enables this rig to handle gaming as well as heavily multi-threaded software. It comes from MSI's Sea Hawk range, which means huge cooling: a full-sized heatsink is attached to its own 120mm Corsair Hydro H55 unit and a quiet fan. CyberPower runs the card in its Gaming mode, which means the 1480MHz core is overclocked to 1544MHz, while the OC mode boosts that figure to 1569MHz.

CyberPower has also ensured this machine has more than enough power, deploying a Corsair RM1000x PSU. It's modular and 80 Plus Gold-certified, and it provides more than enough grunt for this machine and any future upgrades, including adding multiple GPUs.

The Corsair Carbide 600C is suitably no-nonsense too. It's a large and sturdy black



unit with little decoration, and there's no extensive lighting – the interior is dark, brooding and undistracting. The interior is unconventional though. The motherboard sits at the bottom of the case, upside-down, which means the graphics card runs across the middle of the chassis, with the PSU and storage bays behind a shroud at the top.

The GPU's 120mm radiator is attached to the exhaust mount, and the longer Corsair cooler for the CPU takes up two 120mm fan mounts at the front. The upside-down motherboard orientation makes it easy to reach the board's free PCI-E slots and M.2 connectors, and the four vacant DIMM sockets are similarly accessible.

The cable routing is a little inconsistent though: it's neat the front, but a mess at the rear. You won't notice unless you take off the rear panel, and it isn't a massive issue, but some other manufacturers make an effort to keep the whole machine tidy.

Finally, CyberPower offers a decent two years of parts and labour coverage, plus a third year of labour only. It's good to see more than a year of parts coverage, but it's a shame the collect and return period only lasts a solitary month.

Performance

Threadripper is designed for intensive, multi-threaded applications, and it delivered in benchmarks. Its video encoding result of 752,636 is miles ahead of the Core i9-7900X in the Chillblast Fusion Halcyon, which scored 646,183. The stellar encoding score helped the CyberPower to a system score of 248,841 – far better than the Core i9 PC.

However, bear in mind that most people don't need this level of multi-threaded power – it's only really necessary if

/ SPECIFICATIONS

CPU 3.6GHz AMD Ryzen Threadripper 1950X

Motherboard MSI X399 Gaming Pro Carbon AC

Memory 32GB Corsair Vengeance RGB 3000MHz DDR4

Graphics MSI GeForce GTX 1080 Ti 11GB

Storage 500GB Samsung 960 Evo SSD, 2TB Seagate Barracuda hard drive

Case Corsair Carbide 600C Black

Cooling CPU: Corsair Hydro H100i V2 with 2 x 120mm fans, GPU: Corsair Hydro H55 with 1 x 120mm fan

PSU Corsair RM1000x 1000W

Ports Front: 2 x USB 3, 2 x USB 2, 2 x audio; rear: 10 x USB 3.1, 2 x USB 2, 1 x PS/2, 1 x Gigabit Ethernet, 1 x optical S/PDIF, 5 x audio

Operating system Microsoft Windows 10 Home 64-bit

Warranty Two years parts and labour, plus one year labour only. First month collect and return, then return to base

- 1 The MSI Sea Hawk GTX 1080 Ti card has its own liquid cooler
- 2 The Threadripper 1950X has 16 cores and can execute 32 concurrent threads
- 3 The motherboard orientation makes it easy to reach the free PCI-E slots

you're running high-end productivity tools such as video editing, CAD or design applications, rather than games and more conventional office software. We also tried AMD's Creator mode, which gave a small boost to the encoding and multi-tasking tests, but it's not a game changer. Meanwhile, the SSD delivered excellent read and write speeds of 3,320MB/sec and 1,730MB/sec.

This PC can handle games fine too. The overclocked GTX 1080 Ti never dropped below 36fps in any of our 4K gaming tests. We also tried AMD's Threadripper Gaming mode, but its impact was inconsistent at lower resolutions and negligible at 4K.

The CyberPower's liquid-cooled components had no thermal issues either. The CPU's peak delta T of 50°C is great, and the GPU delta T was just 9°C warmer – another solid result. The PC was quiet too, with a peak noise level that's quieter than most gaming rigs.

Conclusion

This no-nonsense rig makes the most of new technology, especially if your software can really make use of the Threadripper 1950X's 16 cores.

If you use that level of software, this PC offers much better bang per buck than the Intel equivalent. It's the same situation with the memory, PSU and motherboard – they're all fantastic components, but only the most demanding users need them. If you just want a general-purpose gaming



rig, a Ryzen or Core i7 system will serve you better for less money, but if you want a high-end, well-built, classy-looking machine that does it all, the CyberPower Ultra Threadripper Xtreme is a cracking multithreaded monster.

MIKE JENNINGS

CPC REALBENCH 2015



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| SPEED 24/25 | DESIGN 22/25 | OVERALL SCORE 90% |
| HARDWARE 23/25 | VALUE 21/25 | |

VERDICT
A monster CPU inside a well-made rig makes the CyberPower Ultra Threadripper Xtreme a formidable machine, but only if you can use its 16 cores.

FALLOUT 4



THE WITCHER 3: WILD HUNT



DEUS EX: MANKIND DIVIDED

