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REVIEWS / PC SYSTEMS

INTEL Z690 GAMING PC

CYBERPOWER INFINITY X127 PLUS / £1,999 incvat

SUPPLIER custompc.co.uk/X127Plus

yberPower's Infinity X127 Plus makes a big mid-range impression thanks to its core components – for one penny under £2,000, you get an MSI GeForce RTX

3080 card with a boost speed overclocked to 1755MHz, alongside a Core i7-12700KF with eight Hyper-Threaded P-Cores that peak at 5GHz.

That's impressive silicon, and elsewhere the Infinity's specification ticks the relevant boxes without pushing. There's a 1TB Seagate SSD with a great read speed of 6,338MB/sec and an acceptable write pace of 3,511MB/sec, plus there's a 2TB hard disk for extra data storage alongside 16GB of DDR4 memory running at 3200MHz.

MSI's MPG A850GF is an 80 Plus Gold-certified modular PSU, which is great, and MSI also makes the motherboard. The Pro Z690-P DDR4 has some welcome practical touches – its two M.2 connectors support PCI-E 4, the top PCI-E slot supports

PCI-E5 and the board has spare memory slots, a Thunderbolt header and a superfast USB 3.2 Gen 2x2 Type-C connector at the rear. The board also offers 2.5 Gbps Ethernet, while 802.11ax Wi-Fi is provided by an add-in card.

In many ways, though, the motherboard is the weakest part of this PC. The M.2 connectors don't have heatsinks, there's no DDR5 support and no visual pizzazz, with no large heatsinks or RGB LEDs. Also, while the board does have that fast USB Type-C connection, there are only four other USB 3 ports and two slower USB 2 connections to make up the numbers. It's a reasonable board, but there's little in the way of frills for enthusiasts.

Happily, the rest of the build makes up for the motherboard's lack of RGB LEDs. The three intake fans, the sole exhaust and the spinners on the MSI MAG CoreLiquid radiator, all glow brightly, and there's a band of synchronised lighting across the graphics card.

The CyberPower Bifrost case is a capable mid-tower too, with a tempered glass side panel, magnetic dust filters and a PSU shroud on the inside. CyberPower



has done a great job of keeping the interior tidy as well, and the main areas of the build are accessible. The chassis supports 360mm radiators as well, and it can accept another hard disk and two 2.5in drives, but it also misses some finesse – it has no tool-free storage bays, no USB Type–C connector and no button to alter the lighting.

Indeed, CyberPower's own-brand enclosure isn't as classy as the Lian Li Lancool II used by the CCL Horizon 5, which is our favourite mid-range gaming system. That chassis had hinged doors, a USB Type-C port and more storage space.

That PC also had an Asus TUF Gaming Z690-Plus WiFi D4 motherboard with a better range of connections and more M.2 ports. CCL's PC also used an overclocked RTX 3080, and offered an excellent on-site warranty. At its current price of £1,972 inc VAT, it's also cheaper than the CyberPower – the CCL's biggest weakness is its Core i5–12600K processor, with the CyberPower offering up a substantial upgrade in this respect.

Finally, the Infinity X127 Plus is protected by CyberPower's Gold warranty, which includes five years of labour coverage and two years of parts protection, including two years of collect and return cover. It's a decent deal, and while Chillblast's Fnatic Pioneer warranty is superior (see p34), the CyberPower has a much more competitive price for the spec on offer.

Performance

The CyberPower gets lots of pace out of the aging RTX 3080. It's virtually flawless at 2,560 \times 1,440 – its 99th percentile results of 66fps and 68fps in Assassin's Creed Valhalla and Cyberpunk 2077 respectively are among the best we've seen from that GPU, and it still ran beyond 60fps in the latter game with Medium ray tracing and DLSS enabled. A vast 371fps average in Doom Eternal means esports games will run without complaint.

SPEC

CPU

3.6GHz Intel Core i7-12700KF

Motherboard

MSI Pro Z690-P DDR4

Memory

16GB Corsair Vengeance LPX 3200MHz DDR4

Graphics

MSI GeForce RTX 3080 10GB

Storage

1TB WD Blue SN570 M.2 SSD, 2TB Seagate Barracuda hard disk

Networking

2.5Gbps Ethernet, dual-band 802.11ax Wi-Fi, Bluetooth 5

Case

CyberPower Bifrost

Cooling

CPU: MSI MAG CoreLiquid 240R with 2 x 120mm fans; GPU: 3 x 90mm fans; front: 3 x 120mm fans; rear: 1 x 120mm fan

Ports

Front: 2 x USB 3.2 Gen 1,1x audio; rear: 1 x USB 3.2 Gen 2x2 Type-C, 4 x USB 3, 2 x USB 2,5 x audio, 1x optical S/PDIF

Operating system

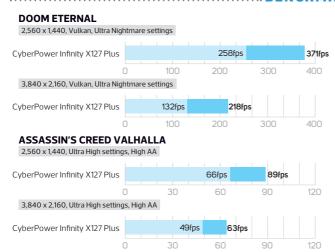
Windows 11 Home 64-bit

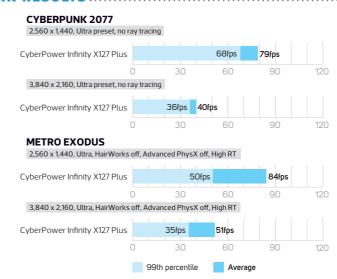
Warranty

Five years labour with two years parts. Two years collect and return, then return to base



BENCHMARK RESULTS





INFINITE LIVES

- + Great 2,560 x 1,440 gaming pace
- + Powerful processor
- + Good storage setup

INFINTE LOOP

- Can't quite tackle 4K gaming
- Basic motherboard
- Underwhelming case

GIMP IMAGE







EDITING

HANDBRAKE H.264

You'll only struggle if you want to play the trickiest games at 4K and beyond. At this tougher resolution, its 36fps minimum in Cyberpunk is clunky. Still, plenty of less demanding titles will run smoothly at 4K on this machine, and the CyberPower is consistently several frames faster than the CCL.

The Core i7-12700KF is quicker than the Chillblast Fnatic Pioneer's Core i7-12700F and the CCL's Core i5-12600K in application benchmarks too. The Infinity's Handbrake score of 898,448 is more than 100,000 points faster than the CCL, and CyberPower's PC returned an overall score of 330,231 – while the Core i5-based CCL languished with 295,722.



When you're playing tough game titles, the CyberPower will only produce middling noise levels – they're not enough to prove irritating or distracting. The Infinity was no louder in application tests too, and clock speeds were consistently fine. The GPU's delta T of 51°C is great too. The CyberPower's only thermal issue came in our multi-threaded stress test, where the CPU's delta Thit a toasty 77°C before settling at around 72°C. Those high temperatures don't cause throttling or instability, but the CCL is cooler (and quieter) too.

Conclusion

The high CPU temperature, modest motherboard and frill-free enclosure are the CyberPower's biggest weaknesses, but they're not necessarily dealbreakers. Many people won't see those lofty processing temperatures, the motherboard is fine for most people's needs, and the chassis is compact, tidy and has enough room for mainstream upgrades.

Its GPU and CPU are faster than the components in the CCL and the Chillblast, the warranty is lengthy and the Infinity has a competitive price. The CCL's better motherboard and case mean it's better balanced, but the CyberPower's extra CPU power makes it a worthy alternative if performance is a priority. MIKEJENNINGS

It lacks high-end frills, but this rig delivers pacey performance at a great price.



37