GAMING PC

CyberPower Infinity X66 GTX Pro / **£1,299** inc VAT

CyberPower's Infinity X66 GTX Pro is one of the most affordable gaming rigs to land in our lab recently, and it still includes a new Nvidia GPU and an Intel Coffee Lake processor.

Nvidia's GeForce GTX 1070 Ti arrived later than the rest of the Pascal range, and it's basically a GTX 1080 with one of its streaming multiprocessors disabled – its stream processor count of 2,432 is far closer to that of the GTX 1080 than the standard GTX 1070, and its stock clock of 1607MHz is shared with its more expensive stablemate. The model used here is an MSI Armor card, which has beefy fans but no overclocking.

The GeForce GTX 1070 Ti is basically a GTX 1080 with one SM disabled

The new graphics card is supported by a new Intel Core i5-8600K Coffee Lake CPU, and CyberPower has overclocked it from 3.6GHz to an impressive 4.7GHz. Like the flagship Core i7-8700K, the 8600K has six cores, but there's no Hyper-Threading. Even so, it should still be pretty potent in heavily multithreaded software, despite the price.

There's also 16GB of DDR4 memory, but the lower budget means it runs at a middling speed of 2400MHz. The storage is similarly mid-range; the 256GB Samsung 850 Evo is an M.2 model, but it uses the SATA bus, rather than PCI-E, and there's a 2TB hard disk. CyberPower has also fitted a discrete wireless card.

Meanwhile, the Asus Prime Z370-P motherboard is a solid and unspectacular slab of black PCB. It has beefed-up audio circuits, two free M.2 ports and several free fan headers. It ticks every mainstream box, but there aren't any on-board buttons, and the backplate doesn't have USB 3.1 Type-C. There's only three audio jacks too, and no optical S/PDIF. It doesn't have any fancy RGB LEDs either, although that's not really a deal breaker.

The CyberPower's low budget means there's no extra cash for ornamentation, but there aren't major issues with the Thermaltake case. The interior is spacious, with plenty of room to work around the mid-sized graphics card and the Cooler Master Seidon liquid cooler, the radiator for which is installed at the front with two 120mm fans.

There are also two 2.5in bays free on top of the PSU shroud, and the hard disk and SSD are both installed out of sight, at the rear. CyberPower has done a good job with cable tidying, which is handy, as both side panels are made from tempered glass. The PSU isn't modular, though, and while the Cooler Master MasterWatt Lite has a solid 600W output, it only has a basic 80 Plus efficiency rating.

Indeed, the build issues are mostly cosmetic. The PSU's cables aren't braided, and the memory and graphics card don't have extra LEDs. The case also exhibits inconsistent build quality: its side panels and roof are sturdy, but the front and rear panels are flimsier. None of those issues impacts on everyday use, though, and these criticisms are very minor at this price .

Finally, the Infinity is protected by CyberPower's usual warranty, which offers a solid two years of parts and labour coverage, with a third year labour only, although you only get a month of collect and return cover before it reverts to a return to base deal.

Performance

The GTX 1070 Ti nailed our game tests at 2,560 x 1,440, with a great Fallout 4 minimum of 54fps, and a solid 47fps minimum in Deus Ex: Mankind Divided. What's more, its 76fps minimum in The Witcher 3 was actually better than the result from the last GTX 1080 system we reviewed. Its 1080p results are fantastic too, never dropping below 60fps, and with average frame rates soaring into the 100s in two of our tests. The CyberPower even ran our Witcher 3 benchmark at 4K without dropping below 40fps, but it dropped to a barely playable 25fps in Fallout 4 and Deus Ex at the same resolution.

The Core i5 processor remains capable too. Its image editing score of 66,564 is excellent, thanks to the lofty overclock, and its Handbrake video encoding score of 389,612 shows it has plenty of multithreading power too, thanks to its six cores. Comparatively, Intel's last-generation Core i7-7700K only scored 352,931 in this test when overclocked. The Core i5-8600K is will clearly handle any games and many tougher productivity tools. You'll only want to look for more cores and multi-threading performance if you're using the toughest heavily multi-threaded software.

This performance is slightly undermined by the SSD. The Samsung 850 Evo's read and write speeds of 549MB/sec and 526MB/sec are fine for a SATA SSD, but they're miles behind NVMe drives.

We had no thermal issues either. The CPU and GPU delta Ts of 55°C and 50°C are fine, and the machine remained quiet in every benchmark and stress test – there's a low rumble, but you won't notice it if you're gaming or listening to music.

Conclusion

CyberPower's Infinity X66 GTX Pro has no flashy extras, but it hardly matters. The GTX 1070 Ti is capable of playing games fine at 2,560 x 1,440, and the Core i5 processor is a reliable, rapid chip for work and play.

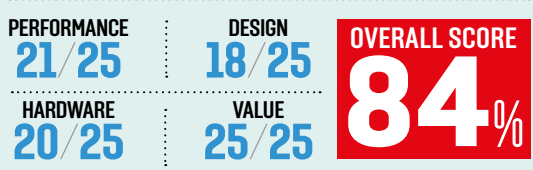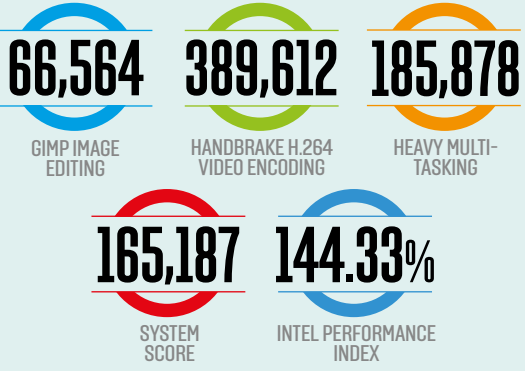On the downside, the memory is mid-speed and the SSD is a little slow, the motherboard is basic and the case doesn't have much decoration, but CyberPower has focused on the right aspects to meet this price, concentrating on CPU and GPU firepower.

The Infinity X66 GTX Pro isn't loud or extravagant, but it's easily fast enough for single-monitor gaming and has an aggressive, affordable price. It's unfussy, but it's very capable.
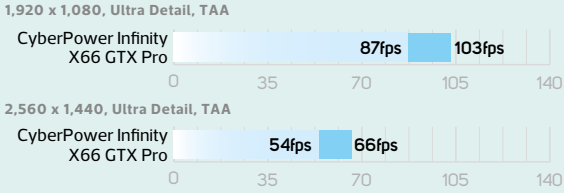
MIKE JENNINGS

CPC REALBENCH 2015

66,564
GIMP IMAGE EDITING

389,612
HANDBRAKE H.264 VIDEO ENCODING

185,878
HEAVY MULTI-TASKING

165,187
SYSTEM SCORE

144.33%
INTEL PERFORMANCE INDEX

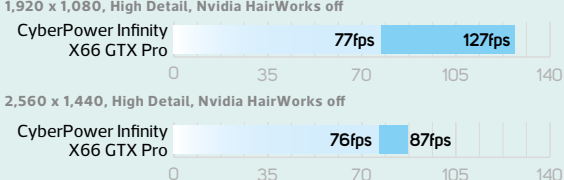| PERFORMANCE	DESIGN	
21/25	**18**/25	**OVERALL SCORE 84%**
HARDWARE	VALUE	
20/25	**25**/25	

VERDICT

A great value machine that concentrates on core components rather than frills, and offers a surprising amount of performance for the cash.

FALLOUT 4
1,920 x 1,080, Ultra Detail, TAA
CyberPower Infinity X66 GTX Pro — 87fps / 103fps

2,560 x 1,440, Ultra Detail, TAA
CyberPower Infinity X66 GTX Pro — 54fps / 66fps

THE WITCHER 3: WILD HUNT
1,920 x 1,080, High Detail, Nvidia HairWorks off
CyberPower Infinity X66 GTX Pro — 77fps / 127fps

2,560 x 1,440, High Detail, Nvidia HairWorks off
CyberPower Infinity X66 GTX Pro — 76fps / 87fps

DEUS EX: MANKIND DIVIDED
1,920 x 1,080, Very High Detail, DX11
CyberPower Infinity X66 GTX Pro — 67fps / 84fps

2,560 x 1,440, Very High Detail, DX11
CyberPower Infinity X66 GTX Pro — 47fps / 57fps

Minimum / Average