

Apple's MacBook Airs — while the Gorilla Glass 3 on the front and back of the display is exceptionally scratch-proof, it does collect fingerprints. And while the keyboard deck is metal, the underside of the UX301 isn't; as on Acer's Aspire S7, it's moulded plastic.

That high-res screen also poses some problems. At this 13-inch size, for example, you need to set Windows graphics-scaling to Large, which expands interface elements and text by 150%. (At the standard size, text is so small that it's almost illegible.) While most of Windows own components and apps deal with that scaling change fine, many third-party programs don't (the Chrome web browser and Steam gaming client being two notable examples), meaning you end up with blurry and fuzzy text and graphics that, we'd argue, looks worse than what you'd get on a lower-res, non-scaled display. And it seems that until Microsoft cracks the whip to get third-party developers to support scaling properly, these are problems that you'll have to put up with if you opt for a display with a very high pixels-per-inch count.

## Venom BlackBook 14 Zero

Significantly more powerful.



**PRICE:** From \$1,899 (\$2,389 as tested)

**WEB:** [www.venomcomputers.com.au](http://www.venomcomputers.com.au)

**CRITICAL SPECS (AS TESTED):** Windows 8.1 Pro, 14-inch 1080p IPS display, Intel Core-i7 4750HQ CPU, 16GB DDR3 RAM, Intel Iris Pro 5200 graphics, 240GB SSD + 1TB hard drive, 1.86kg.

Though its footprint is about the same size as the UX301 — both are fairly compact laptops that offer good portability — that's about the extent of the similarities.

Where the ZenBook is aiming for slick and stylish, the Zero has gone with a sparse utilitarianism to its design. Though the chassis is plastic, it's got a premium feel to it, and is visually appealing. The build quality here is also first rate, with a sturdy keyboard that rivals MacBooks for comfort and stability, nice big trackpad and stereo speakers mounted on either side of the keyboard. There's additionally three USB 3.0 ports, 300Mbps 802.11n and Gigabit Ethernet networking (both using reliable Intel chips), flash card reader and HDMI and mini-DisplayPort video outputs.

Inside the Zero there's likewise some top kit — an uber-fast quad-core Core i7-4750HQ (the ASUS's is only dual-core), 16GB of RAM and a combination of 240GB Crucial SSD for holding your OS and apps, and a Hitachi 1TB

*The BlackBook 14 Zero is a little bigger and thicker than the ASUS, but it shows when it comes to performance.*

hard drive for less-demanding storage needs. And of course, for gaming there's that Iris Pro 5200. To cool it all there's a twin-fan hyperbaric system, designed by Intel, which actively draws in cool air from outside to cool components and then blows the resulting hot air back out. And those fans are thankfully pretty quiet: they only emit a moderately low hum when gaming. Fan noise is something that you'll get from any gaming laptop and the Zero's noise emission is less noticeable than most.

Just like the ASUS, this one's a pleasure to use with lots of attention to fine detail evident — the action on the screen hinge is smooth, the IPS 1080p display gives you nice earthy colours (though with an ever so slightly warm/reddish edge) and the trackpad is nice and smooth to the touch but never overly slippery.

Are there areas the Zero could be better? Certainly. There's some sparkle to the matte screen's antiglare coating, which thankfully is mostly noticeable only against light backgrounds — it's not really an issue when gaming. Another small gripe we have is that the three USB ports are spaced a little too close together for comfort — and we would have perhaps preferred to have one around the left side. There also no doubting that the Zero is the bigger of the two machines we've tested this month, adding an extra 650g to the ASUS's 1.2kg weight — although to be fair, it's still very portable and comes a lot more power and storage space.

### GAMING FACE OFF

So, getting back to that gaming contest, how much do these two differ when it comes to

pumping out frames? Quite drastically, it turns out. That small bump in model number — 5100 to 5200 — actually belies a large performance difference between the two GPUs. Though the two look pretty similar on paper, the 5200 is significantly more powerful thanks to one element: an additional 128MB internal cache of eDRAM. Basically, what that eDRAM means is better bandwidth: data can be fed to the 5200 a lot quicker than its 5100, where the lack of eDRAM arguably results in a bottleneck... the poor 5100 could do better, but it's basically being held back.

To test performance, we ran a series of benchmarks using games released over the last year, with tests performed at 720p and 1080p. You can see the 720p results in the charts — at 1080p, the Iris Pro 5100 didn't have enough chop to produce playable framerates. What's most remarkable to us, then, is the level of difference that the 5200's eDRAM makes. Barring that one component, both Iris Pro chips are near identical parts, yet that added component is enough to allow the 5200 to drive modern games at up to twice the speed — sometimes more — of its slower sibling. And that's enough to mean the difference between a game being playable or not.

The long and short of it? Iris Pro is definitely capable of powering a relatively slim gaming laptop at playable speeds (above 30fps) in many games at 720p... provided you've got the better 5200 part.

The Iris Pro 5100? It's not a bad chip, but if you're serious about using a laptop as more than just a casual gaming machine, it doesn't have the guts to really get you there. **7**



*The UX301 includes two USB 3.0 ports (one on either side) as well as mini-DisplayPort and micro-HDMI video outs.*