We bought Walmart’s $140 laptop so you wouldn’t have to

Enlarge / The cheerful purple chassis is by far the best thing about Walmart’s cheapest laptop.
Jim Salter

reader comments

318 with 193 posters participating, including story author

Share this story

One glance at the specs on Walmart’s cheapest laptop—the EVOO EV-C-116-5—makes it clear to any technical enthusiast that the device is not exactly going to be a powerhouse. But the little laptop only costs $139, and its stats appear to stack up well with $200-$250 Chromebooks. So recently, I ponied up my credit card and ordered one. In purple.

Amongst us Arsians, it’s obvious that the EVOO is not going to be a good choice for a Windows laptop. With only 2GiB of RAM, the EVOO won’t be able to run anything without hammering virtual memory (swapping data from RAM to disk and back again). Beyond that, a 32GB SSD simply is not enough room for Windows itself, let alone any applications. The first time the EVOO tries to upgrade to a new build of Windows 10 (for example, Windows 10 build 2004, which just released last month), it will fail due to lack of space.

That doesn’t necessarily mean the laptop is entirely useless, though. Perhaps it could be reloaded with Linux—even “heavyweight” distributions like Ubuntu are considerably

easier on both RAM and storage than Windows is. Heck, maybe even the assumption that a 2GiB RAM, 32GB SSD laptop can’t run Windows 10 well isn’t quite right. There was only one way to find out.

Specifications

Specs at a glance: EVOO EV-C-116-5	
OS	Windows 10 Home (S mode)
CPU	dual-core AMD A4-9120
RAM	2GB DDR4
GPU	integrated Radeon R3
Wi-Fi	Realtek RTL873B—2.4GHz only, 802.11n + Bluetooth
SSD	Foresee 32GB (29.8GiB) eMMC
Battery	4500 mAH @ 7.6V (34.2WH)
Display	11.6″ 1080p

Connectivity	**left side:** • Barrel DC jack • USB3 type A • HDMI out **right side:** • 3.5mm headset jack USB2 type A • MicroSD slot
Price as tested	$139 at Walmart

The first thing any prospective shopper should know about cheap laptop designs like this one is that 32GB is absolutely *not* enough to sustainably run Windows 10. The second thing shoppers should know is that 32GB doesn't, unfortunately, mean what they think it means—when the specification says GB, it *means* GB.

Windows measures storage in GiB, not GB—and 32GB is only 29.8GiB, of which another 1GiB is consumed in restoration directory, 3GiB is consumed by the Windows pagefile, and a few hundred MiB more are devoted to the hibernation file and swapfile.

If you're wondering why there's both a pagefile and a swapfile, it's because of Windows UWP apps. They (and only they) use the "swapfile" rather than the "pagefile" in order to cache themselves for rapid opening on system reboot, among other things.

The 2GiB of RAM specified is also criminally low: even in S mode and on first boot, the system had only 300MiB of headroom in RAM. That means there's effectively no memory to devote to operating-system caching, and the system is continuously hitting the pagefile hard enough to seem criminal.

The one part of this system that looks legitimately suited for purpose—the AMD A4-9120 CPU—*also* turns out to be a problem. Normally, the A4-9120 would be an excellent choice for a budget laptop or netbook, and it would compete strongly with Intel's Celeron counterparts. The EV-C-116-5, unfortunately, is anything but "normal"—and the A4-9120 can't perform up to its normal specifications.

First impressions

- This is the 11.6″ EVOO, freshly booted into Windows 10 Home, sitting atop my Moft Z folding laptop stand.
  Jim Salter
- On the left side, we have a DC barrel jack, a USB3 type A port, and an HDMI out. There's no silk-screen label for these, and you need *very* good lighting to read the bas-relief icons.
  Jim Salter
- The rear view of the EVOO is easily its best angle. I like its cheerfully colored, simple facade and relatively stylish logo in one corner.
  Jim Salter
- On the EVOO's right side, we have a 3.5mm headphone jack—precisely the same diameter as its DC barrel jack—a USB2 type A port, and a microSD card reader.
  Jim Salter
- The EVOO's keyboard is surprisingly nice on such a small, cheap system. EXCEPT for the inexplicable random relocation of the backslash, which will deplete the sanity of Windows and Linux power users alike.
  Jim Salter

I knew better than to have high hopes for the under-specced EVOO as a Windows machine, but I really wanted to like the little laptop. Its brightly colored plastic case is appealing but unassuming, and I had high hopes that it might still make

a solid Chromebook alternative for Linux users.

The display on the EVOO is FHD 1080p, not the 1366×768 typical of many cheap laptops. This is a major plus for power users who need more screen real estate. Unfortunately, those same power users will want to defenestrate the little laptop, due to its strange rehoming of the backslash key. EVOO decided that the backslash, normally located directly above Enter, would be better off sandwiched between right-Alt and right-Ctrl.

Relocating this key is a problem on Windows, because the backslash is the directory separator when typing out paths on the command line or in the Explorer address bar. It's also a problem on Linux command lines, where the backslash is the "escape" operator used to nullify special use-cases of characters. For example, one might cp \!folder /tmp/ to copy a folder named !folder, since otherwise Bash would interpret the bang as an event.

The lack of silk-screening on the laptop's side-mounted ports is yet another problem—the gray-on-gray bas-relief labeling is almost impossible to make out in normal lighting. When I first set this laptop up, I naively plugged the charger into the headphone jack, and it felt perfectly fine there. I didn't realize my mistake until checking the battery and wondering why it wasn't charging.

The USB ports on the laptop were very tight. I needed both hands and some determination to get a USB thumbdrive or wireless mouse radio inserted on either side of the laptop. I needed both hands and plenty of determination to get them out again, as well.

The plastic used for the EVOO's chassis is unusually soft. The plastic is fairly thick and the laptop is small and light, so it doesn't feel flimsy. But the soft plastic doesn't bode well for scratch resistance, and it makes dealing with the stubborn

USB plugs even more annoying.

https://arstechnica.com/?p=1683910