

CES 2020: Powerful PC or responsive tablet? New laptops increasingly offer best of both



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by Mike Feibus

Once again, PC makers at CES are spotlighting a new generation of laptops designed to persuade you to leave your iPad at home. But this time, they just might succeed.

Ever since Steve Jobs introduced the iPad a decade ago, PC makers have been searching frantically for ways to convince you that you don't need one. Much of the focus has been on improving the aesthetics, packing the power of laptops into slimmer, sleeker, tablet-like frames.

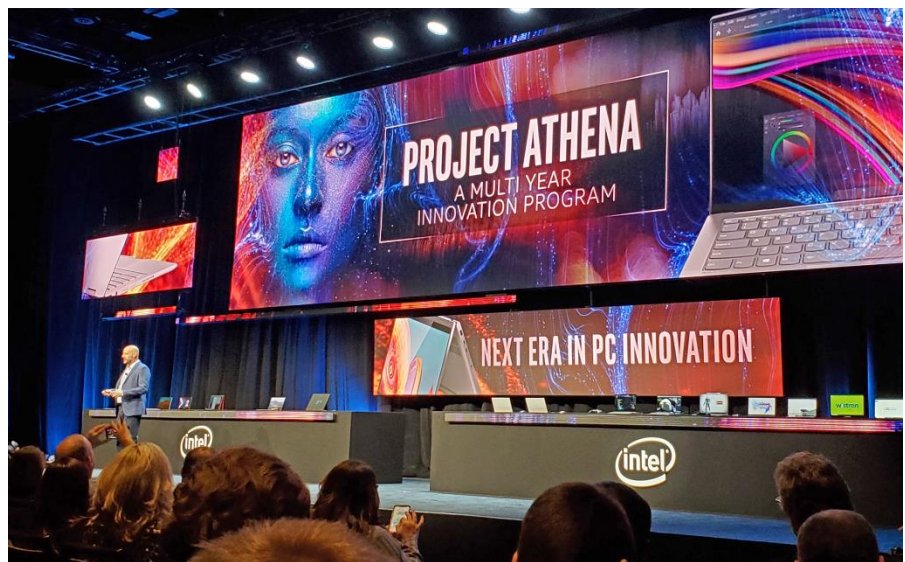
Now, with a new generation of laptops on display this week at CES, they're finally starting to make a case for offering what only our tablets have been able to deliver thus far, like all-day battery life, quick availability and rapid response.

I've been evaluating the newest \$1,050 HP Spectre x360, a 13-inch convertible that is one of dozens of Windows laptops – along with two Chromebooks – from PC suppliers like HP, Dell, Lenovo, Acer, Asus and Samsung that are inspired by the coming-out party for Project Athena, Intel's multi-year campaign to persuade you to leave your tablet behind.

Powerful or perky?

PCs have always been more capable than tablets for demanding jobs, like editing video, creating presentations and crunching numbers. But like a powerlifter squatting into position just to snatch 5-pound dumbbells, PCs' approach to tackling performance-heavy tasks can make them seem downright unresponsive for quick, simple stuff like waking up or booting "Candy Crush."

PC makers hope to fix all that with Project Athena. For this first year,



Intel EVP Gregory Bryant updates CES 2020 keynote audience on Project Athena progress (Mike Feibus)

Intel says it is “verifying” Project Athena-level capability with three metrics designed to approximate real-world use. They are:

- **Fast wake-up:** Resume operation within three seconds (four seconds with fingerprint or facial recognition) of opening the lid, hitting the enter key or tapping the touchpad at least 80% of the time.
- **Fast response time:** Quick action from a bunch of different applications and websites, like opening a file in PowerPoint or loading a Netflix video in Chrome, all while on battery power and with multiple apps running in the background.
- **Battery life:** At least nine hours of active time, with multiple windows open, including the browser with multiple tabs – and with the display bright enough to actually use.

Refreshing change

As with EPA fuel-efficiency estimates, your actual mileage may vary. But as anyone who’s bought a laptop boasting 17 hours of performance only to find it won’t even power through a cross-country flight knows firsthand, today’s benchmarks have drifted so far from real-world performance that they’re practically useless. So credit the industry for trying to set things right.



Intel showed off 25 Project Athena-certified laptops at CES 2020 (Mike Feibus photo)

Athena specification. And if you’re lucky enough to connect to a Wi-Fi 6 router – as I have – then you’re in for a real treat.

The display is one of the laptop’s most power-hungry components, which is why power-saving modes historically have dimmed the screen to the point it’s barely readable. So I was impressed the spec is set to 250 nits, which is roughly 70% or 80% brightness on the Spectre. That was plenty bright for me just about everywhere but outside in the Arizona sun.

In my experience with the Spectre, the quick response times were largely as advertised. I didn’t actually keep track of how often apps and websites loaded quickly, but 80% of the time feels about right. For wake-up times, it seemed like the rapid-to-slow ratio was even higher. Invariably, though, the laptop occasionally would hang for some unexplained reason. Technology, right?

Windows Hello identified me reliably and quickly – even with the fingerprint reader, which I seldom see. The laptop also has built-in Wi-Fi 6, as is called for in the Project

All-day performance?

Even so, battery life was the one area that's fallen short of the spec in my testing. It's been good – and noticeably better than my go-to laptop – but lower than the purported nine hours.

I've been getting seven-and-a-half to eight hours of activity between charges. That was enough to get me into my hotel room in Manhattan after working on the flight from Phoenix, as well as in the back of Ubers on each end of the trip.

In fairness, I loaded more applications than PC makers have optimized for with the first-year spec, like Quicken, NordVPN and PhotoShop. Most likely, though, the biggest culprits were cloud services like Adobe's Document Cloud and Synology's Cloud Station. I'd be surprised if cloud services aren't a prime target for improvement in the second-year spec.

So, yes, it's still true that when it comes to battery life, your actual mileage still may vary. But eight hours instead of the nine claimed is much more meaningful and, given the services I added, far more explainable than existing benchmarks. Regardless, it seems, we're in for a slew of zippy, responsive and power-sipping new laptops that make a better case for losing the tablet than we've ever seen.



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