Apple refreshes MacBook Pro with updated keyboard, 8-core 9th-gen Intel CPUs

Enlarge / The 2017 and 2018 15-inch MacBook Pros side by side. Each has a butterfly keyboard.
Samuel Axon

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In the second update to the current crop of MacBook Pros since they were released in July 2018, Apple this week has expanded the available CPU options for both the 13-inch and 15-inch models. The 15-inch MacBook Pro has moved to Intel's 9th generation CPUs and offers 8-core options for the first time in the product line's history. The 13-inch saw a more modest CPU specifications bump. The MacBook Pro's price points remain the same.

Just as importantly, Apple has made another update to its butterfly keyboards in the MacBook Pro. This marks the fourth generation of the butterfly keyboard that has divided users and seen some widely publicized hardware failures that resulted in an ongoing repair program from Apple. Apple claimed significant improvements to reliability in the third generation that shipped with laptops introduced in 2018, but users continued to report issues.

Apple says it has changed the material it is using in the new, fourth-generation keyboards, and the company expects the

change to substantially reduce the prevalence of issues with keys double-typing without user input or failing to type at all with user input. The company hasn’t yet gotten more specific than that, so we’ll have to wait on teardowns and testing to learn more.

That said, Apple has made another welcome change regarding the keyboards: it has extended its repair program to cover butterfly keyboard-equipped machines introduced in 2018. Previously, the repair program only covered the previous two generations.

The program offers users repair or replacement for their failed butterfly keyboards at no cost throughout its duration, and Apple claims it has made improvements to its repair processes to reduce the time it takes to complete the repairs.

Faster CPUs in the MacBook Pro

The main focus of this hardware refresh is the CPU, though. As noted, the 15-inch model saw the biggest bump. The $2,399 configuration now comes with a 2.6Ghz, 6-core, 9th-generation Intel Core i7 CPU with turbo boost up to 4.5GHz. That turbo boost figure is 400Mhz higher than what we saw previously, which was a 2.2GHz, 6-core, 8th-generation Intel Core i7 with up to 4.1GHz turbo boost.

Things get even more ambitious at the $2,799 price point. It comes standard with a 9th-generation 2.3GHz, 8-core Intel Core i9 processor with turbo boost speeds up to 4.8GHz. That’s compared to an 8th-generation, 6-core, 2.8GHz Intel Core i7 CPU with turbo boost up to 4.3GHz previously.

Additionally, the highest-end, optional CPU spec for the 15-inch MacBook Pro—an 8th-generation 2.9GHz, 6-core Intel Core i9 with 4.8GHz turbo boost—has been replaced with a 9th-generation 2.4GHz, 8-core Intel Core i9 with turbo of 5.0GHz. It has slower base clock speeds, yes, but the device comes

with more cores. Multithreaded workflows should see big performance improvements, thermals allowing.

Below: Photos and their accompanying captions from our 2018 MacBook Pro review. The internals have changed today, but the design remains the same.

- The 2018 MacBook Pro still has a static, non-glowing Apple logo, unlike the pre-Touch Bar models. That's probably for the best, if we're being honest.
  Samuel Axon
- The 2018 MacBook Pro from the front.
- It also still has the gigantic touch pad. It took me some getting used to when I first started using a MacBook Pro with this basic design, but I like it now.
  Samuel Axon
- The keyboard doesn't look any different, but it *feels* subtly different.
  Samuel Axon
- Sorry, still no full-size USB. Thunderbolt 3/USB-C is here to stay.
- This is the 2018 MacBook Pro next to the 2017 MacBook Pro. Can you tell the difference? Didn't think so.
  Samuel Axon
- Again, the two models side by side, this time with the lid closed.
  Samuel Axon

In general, Apple claims that the new 8-core models offer up to 40% greater performance than their recent 6-core predecessors and up to 100% faster performance than previous 4-core configurations. Apple's blog post announcing the new machines focuses on the same sort of professional audiences Apple always addresses when talking about the MacBook Pro: video editors, software engineers, 3D designers, photographers, music producers, and scientific researchers.

For example, Apple says that Maya Arnold render speeds in the fastest 8-core MacBook Pro should as much as double compared to the fastest quad-core MacBook Pro, and developers should be able to compile code up to 65% faster in Xcode.

Last year, reviewers and testers encountered some thermal management problems with the 6-core Core i9 CPU option in the 15-inch MacBook Pro. Our own early tests revealed heavy throttling, and onlookers speculated that the thermal management system and chassis couldn’t glean optimal performance out of that CPU. However, Apple quickly released a firmware update that resolved the issue. We’re eager to see how these even beefier configurations fare in future tests.

Finally, there are slightly updated CPUs for the Touch Bar 13-inch MacBook Pro models. They still top out at four cores and are still 8th generation CPUs. But these models now offer turbo boost speeds up to 300MHz faster. Touch Bar-free 13-inch MacBook Pros remain the same.

At both the $1,799 and $1,999 price points, the 13-inch MacBook Pro now offers the following CPU options:

- 2.4 GHz quad-core 8th generation Intel Core i5 with turbo boost up to 4.1GHz (standard)
- 2.8GHz quad-core 8th generation Intel Core i7 with turbo boost up to 4.7GHz (+$300)

The refreshed models are available to order on Apple’s online store today.

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