

# COMPUTER GURU

by Don Benjamin

Technology Lab Programs sponsored by: Novi Wealth Partners

## Apple's New M1 Computers

After fifteen years of using Intel processors in its Mac computers, Apple released new versions of its 13" MacBook and Mac Mini desktop computers using its M1 computer processor chip. The result is a MacBook that's two times faster than its predecessors as well as most Windows laptops, with a 50% longer battery life, and, in the case of the MacBook Air, no fan at all. The new MacBooks and Mac Mini are also less expensive than their comparable Intel brethren. During the next two years, Apple will develop more powerful versions of the M1 chip for most of its computer lineup.

I can't recall an advancement in personal computing like this since the IBM PC hit the streets in 1981.

### History of the M1 Chip

The earliest smartphones that Apple, Samsung, and others introduced a decade ago couldn't use Intel's CPU chips because they needed too much power and weren't tailored to mobile devices. Samsung used Qualcomm's much simpler Snapdragon processor for its mobile devices, while Apple developed its own processor, called the "A4," for its iPhone 4 and its iPad. These specialized "systems-on-chips" (SOC) were fast, energy efficient, compact, and designed to the specific needs of mobile devices.



Over the years, Apple's A4 chip evolved into today's "A14 Bionic" chip used in the iPad Air and iPhone 12, making these mobile devices faster at some tasks than MacBook computers! What's more, iPhones and iPads don't need fans to stay cool, are champs at photo and video editing, and render webpages almost instantly. And so, about a year ago, Apple announced that it would replace the Intel processors and related chips in its Mac computers with its own SOC based on the A14. It called these new chips the "M1."

### "Big Sur"

Apple also rewrote its operating system, which it named Big Sur, to work with both existing Intel-based Mac computers and the M1 Mac's, and developed a software "translator" that enables apps designed for Intel chips to run on the M1. Since then, other software developers have created M1-optimized versions of their programs. Microsoft has already updated Office 365, which runs blazingly fast on an M1 MacBook. So does Adobe's Lightroom. Adobe will update other applications in 2021, and I suspect that any software developer who wants to remain competitive will do the same.



### Thoughts

So, should you ditch your Mac or PC and buy a new M1 MacBook or Mac Mini? Maybe. But unless you need to replace your computer right away, I'd wait a few months and watch for a couple of things: First, Apple will be releasing iMacs and larger MacBooks (perhaps with a 16" screen) based on more advanced versions of its M1 chip. Second, Microsoft, which already sells some Surface Pro tablet computers that run on Qualcomm's SQ1 and SQ2 chips, may offer a laptop version that uses the fast SOC's.

If you need help upgrading your Mac or Windows computer, please contact our tech support at [princetonsenior.org/psrc-tech-resources/](https://princetonsenior.org/psrc-tech-resources/).