New Apple Hardware February – March 2025

New iPhone 16E, iPad 11th Gen, iPad Air M3, Macbook Air M4 and Mac Studio M4/ M3 Ultra

Introduction

- Apple did not hold a traditional online event for the new Apple hardware products.
- Instead, on February 19th they announced the iPhone 16E, on March 4th they announced the iPad 11th generation and iPad Air, and on March 5th they announced the M4 Macbook air and updated Studio with either M4 or M3 ultra processors.
- I'm not seeing videos (except for the iPhone 16e) but there is interactive web pages on Apples website, full tech specs.
 - The Buy button will let you custom configure the new products, and show you the cost of each upgrade. No, you are not forced to buy at the end.

New iPhone 16e

- ► Everyone expected that Apple would announce a iPhone 16SE 4th generation in the same physical form factor as the previous 3rd generation
- ► The 16e becomes Apples lowest cost iPhone starting at \$599. The previous iPhone SE 3rd generation started at \$399. iPhone 14 is dropped from the lineup.



New iPhone 16e

	iPhone SE 1st	iPhone SE 2nd	iPhone SE 3rd	iPhone 16e	iPhone 16
Introduced	March 2016	April 2020	March 2022	Feb 2025	Sept 2024
Screen Size diag	4	4.7	4.7	6.1	6.1
SIZE HWD	4.87x2.31x0.3	5.45x2.65x0.29	5.45x2.65x0.29	5.78x2.82x0.31	5.81x2.82x0.31
CHIP	Α9	A13	A15	A18 4 core GPU	A18 5 core GPU
Unlock	Touch ID	Touch ID	Touch ID	Face ID	Face ID
Camera	12MP	12MP	12MP	2 in 1 48MP fusion	48MP fusion, 12MP Wide
Wireless Charge	None	Qi (7.5W)	Qi (7.5W)	Qi (7.5W)	Qi, Qi2, Magsafe (25W)
Connector	Lightning	Lightning	Lightning	USB-C	USB-C
Capacity	32/128GB	64/128GB	64/128/256GB	128/256/512GB	128/256/512GB

New iPhone 16e

- Note the iPhone 16e has one less GPU core on the A18, no Magsafe charger, Single Camera instead of dual, no dynamic island, no camera control, compared to the iPhone 16
- Size wise yes, the iPhone 16e is larger than the SE models. But note only iPhone SE 1st gen was really small, the 16e is not that much bigger than the 2nd/3rd Gen SE's.
 - Compare to the iPhone 16 Pro Max with the 6.9 inch diagonal screen its 6.42 inchs high, by 3.06 inches wide, and 0.32 inches deep, a much larger phone.
- ▶ iPhone 16e has the 512GB capacity option
- ► The iPhone 16e can run Apple Intelligence. Low end model runs Apple intelligence, quite a change from the iPhone 15 were only the Pro and Promax could run it.

New iPad base model

- ► AKA iPad 11th Gen, iPad A16, new entry level model etc
- Updated from the previous 10th Generation
 - ▶ A16 processor from previous A14. A16 has 6 GB memory
 - Storage now starts with 128 GB, 256 and 512GB options. Default storage was 64 GB on previous generation.
 - ► Cellular model has eSim only, no more physical nanosim
- No Apple Intelligence, a bit surprising since Apple seemed to move most other devices to support it.

New iPad Air M3

- Apple made a big deal on this one but with the exception of the M3 chip not much has changed
 - ▶ M3 is more powerful and uses less power
- Has 11 and 13 inch Display options. WiFi or WiFi and cellular
 - ▶ 128 GB default storage remains the same as M2 version
 - Optional 256MB, 512MB, 1 TB storage
 - Same cameras, Same apple pencil USB-C and Apple pencil pro support
 - Same displays
- New Magic Keyboard \$269 11/\$319 13, still compatible with older model for M2 air
- Many reviews say this may be the iPad for users that want an iPad with more power than the base Ipad, and that iPad Pro may not be needed for those not needing its additional power and somewhat better display

Macbook Air M4

- Well, the rumors were true, the M4 Macbook air has arrived.
- ► 13- or 15-inch Displays
 - ▶ 16GB memory standard, upgrade to 24 or 32 GB
 - ▶ 256 GB storage, upgrade to 512 MB, 1 TB, 2 TB
 - Top end M4 Pro has three Thunderbolt 5 ports. These can handle USB 4 and Display port functionality also
- Can support up to two up to 6K external displays.
 - Major upgrade, and ends argument for the last Intel MacBook airs
- ▶ 12 MP Center Stage camera upgrade
- Starts at \$999
- Quite a powerhouse as entry level laptop. Macbook Pro buys you a 16 inch display if you choose that model, Nano Texture display, brighter display, up to 128 GB memory, up to 8 TB storage, and fan. Note the maxed out Macbook Pro 16 inch is \$7350!
 - Note Macbook Pro fan would prevent throttling of the processor on minutes long sustained maximum use. This could occur on the Macbook air without a fan.



New Mac Studio

- Biggest changes is a new Processor upgrades M4 Max or M3 ultra
 - ▶ M4 Max replaces M2 on previous model
 - ▶ M3 Ultra is a new chip- Available in the higher end model
- Shouldn't the M4 be faster or is it the M3 Ultra?
 - Yes, to both, on single core tasks the M4 is faster. If you are going to need more than 40 GPU cores simultaneously then M3 ultra will be faster. To quote from Bart Busschots, "people who need a M3 ultra, know that they need a M3 ultra"
- New model now has 4 Thunderbolt 5 usb c connector ports rather than previous Thunderbolt 4
- M3 Ultra model has 96 GB memory upgradeable to 256GB or 512GB
- Storage on the M4 ultra now has a 16 TB option



Final Thoughts

- ► The Apple WWDC is coming up in June. Rarely will new hardware be introduced in this Software conference.
- Since last October, much of the Apple hardware product line has been upgraded.
- I would not expect new Hardware announcements until fall
 - Maybe something earlier on the Vision Pro. It has not been a runaway seller.