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FEATURE AAPL COMPANY

New iPhone to debut with Dual-Band 40nm BCM4334 Broadcom Wi-Fi, significant power savings and Wi-Fi Direct/iOS AirDrop

Seth Weintraub | Jun 2 2012 - 8:40 am PT | [0 Comments](#)

As part of our [meanderings](#) through the output from a debugger from a prototype of the next iPhone, we discovered some of the new chips that are going into these devices. [Lots of them.](#)

One such part that we have not talked about is the [Broadcom BCM4334](#) that has been found in code dumps. The BCM4334 is a step up from the 65nm [BCM4330](#) used on the “new” iPad and the iPhone 4S, and it is notably built on a smaller, more efficient 40nm process.

From [AnandTech](#):

BCM4334 which is the follow-up part to BCM4330 that we’ve seen in a bunch of devices. BCM4334 changes from a 65nm process to 40nm LP, which itself offers a power profile reduction. The change isn’t a simple die shrink either, Broadcom says it has worked on and refined the existing BCM4330 design and **reduced power a further 40-50% and dramatically reduced standby power by 3 orders of magnitude.** I asked Broadcom to give me a realistic estimate of power consumption – **BCM4330 in full Rx mode consumes around 68mA, BCM4334 consumes 36mA at the same voltage, just to give an example of the reduction.** Air interfaces don’t change between BCM4330 and BCM4334.



So, we are looking at nearly half the power required for Wi-Fi. That should add some power savings to offset the [bigger screen](#) and LTE radios. The power savings will also help Apple to make a [thinner phone with a thinner battery](#).

Along with now-standard stuff like Bluetooth 4.0 and FM radios, this chip also features dual-band Wi-Fi with Wi-Fi Direct. From Broadcom:

The Broadcom BCM4334 single-chip dual-band combo chip provides a complete wireless connectivity system with ultra-low power consumption for mass market smartphone devices. Using advanced design techniques and 40nm process technology to reduce active and idle power, the BCM4334 is designed to address the needs of highly mobile devices that require minimal power consumption and compact size while delivering dual-band Wi-Fi connectivity.

The chip includes IEEE 802.11 a/b/g/n single-stream MAC/baseband/radio, Bluetooth 4.0 + HS, and an integrated FM radio receiver. It is designed to be used with external 2.4 GHz and 5 GHz front-end modules, which include power amplifiers, T/R switches and optional low noise amplifiers. The combo device also features advanced switching techniques that enable concurrent dual-band operation to simultaneously support network connectivity with one band while also allowing content streaming via technologies such as Wi-Fi Display and Wi-Fi Direct.

While Apple is not likely to use Wi-Fi Display over its own AirPlay protocol, Wi-Fi Direct/Adhoc on the second Wi-Fi connection would seem to be directed at something pretty interesting...

Apple requires dual-band Wi-Fi cards when deciding which Macs get to use [AirDrop](#) (any Mac or Hackintosh can be *hacked* to use [AirDrop](#), even over Ethernet). However, Apple limits [AirDrop](#) to [these models and newer](#):

- MacBook Pro (late 2008 or newer)
 - The MacBook Pro (17-inch late 2008) and the white MacBook (Late 2008) do not support AirDrop.
- MacBook Air (late 2010 or newer)
- MacBook (late 2008 or newer)*
- iMac (early 2009 or newer)
- Mac Mini (mid 2010 or newer)
- Mac Pro (early 2009 with AirPort Extreme card, or mid 2010)

All of these Macs have the built-in Wi-Fi Direct on dual-band Wi-Fi cards. The new iPhone will be the first iOS device that meets Apple's standard for AirDrop. Therefore, we could easily see the Lion adhoc file-sharing protocol added to iOS 6.

It certainly gives Apple a reason to bump up the Wi-Fi chip to this more expensive dual-mode version that was just announced in late February. Wi-Fi Direct is used in more and more printers as well, but its main purpose is to make wireless file-sharing extremely easy, just as Google does in its Galaxy Nexus devices.

With Apple's easy-to-understand interface, an iOS AirDrop feature could make sharing between Macs and iOS devices (or dare we say to Android devices?) beyond simple.

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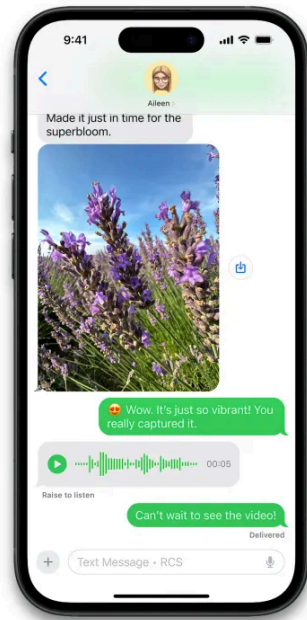
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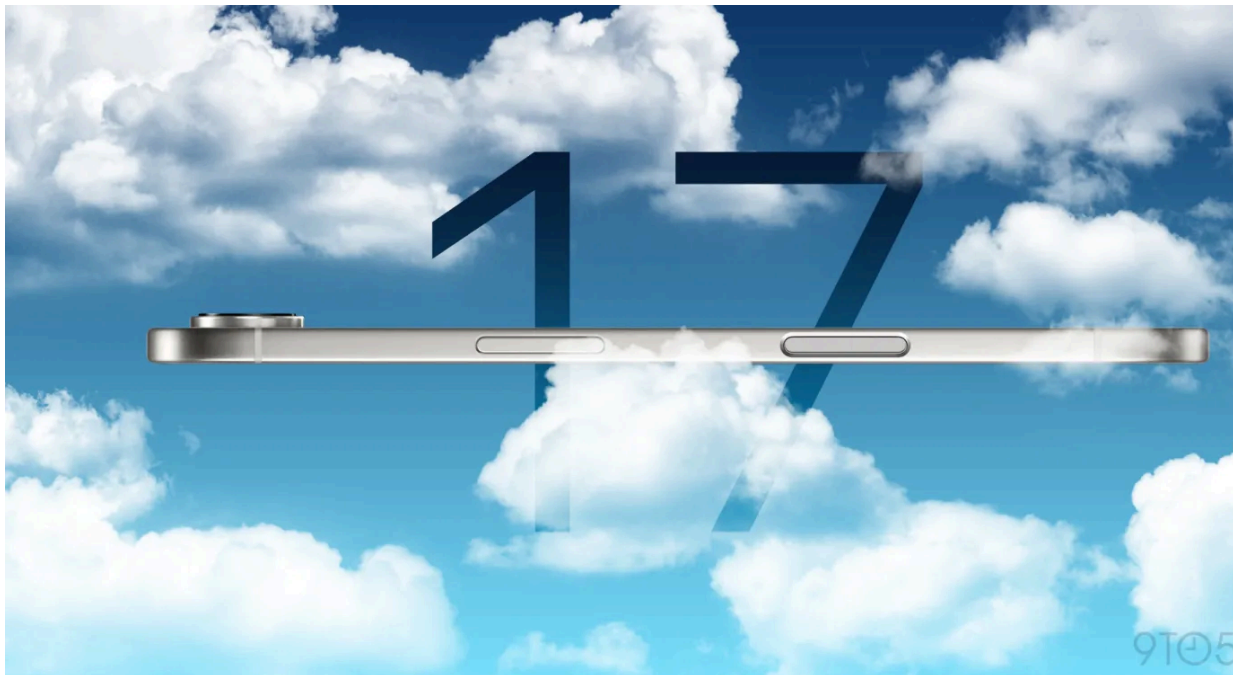


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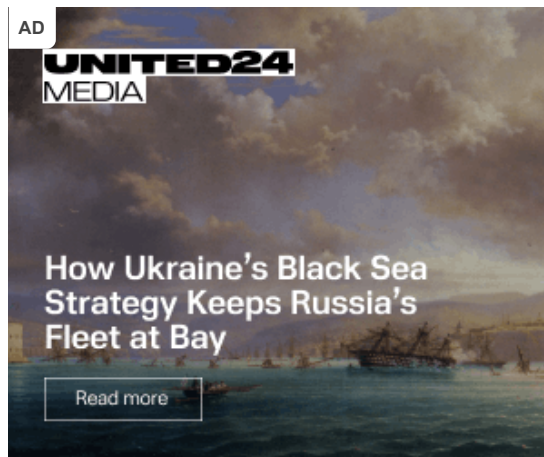


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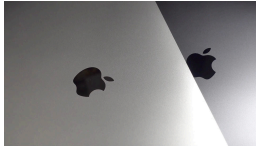


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Seth Weintraub's Favorite Gear



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iOS 18.4

Apple releases iOS 18.4 beta 4 for iPhone and iPad



Zac Hall | 10 hours ago | 4 Comments



Apple is one step closer to releasing iOS 18.4. The fourth developer beta version of the upcoming iPhone and iPad software update is now available for testing. iOS 18.4 brings a lot of new features to both devices.

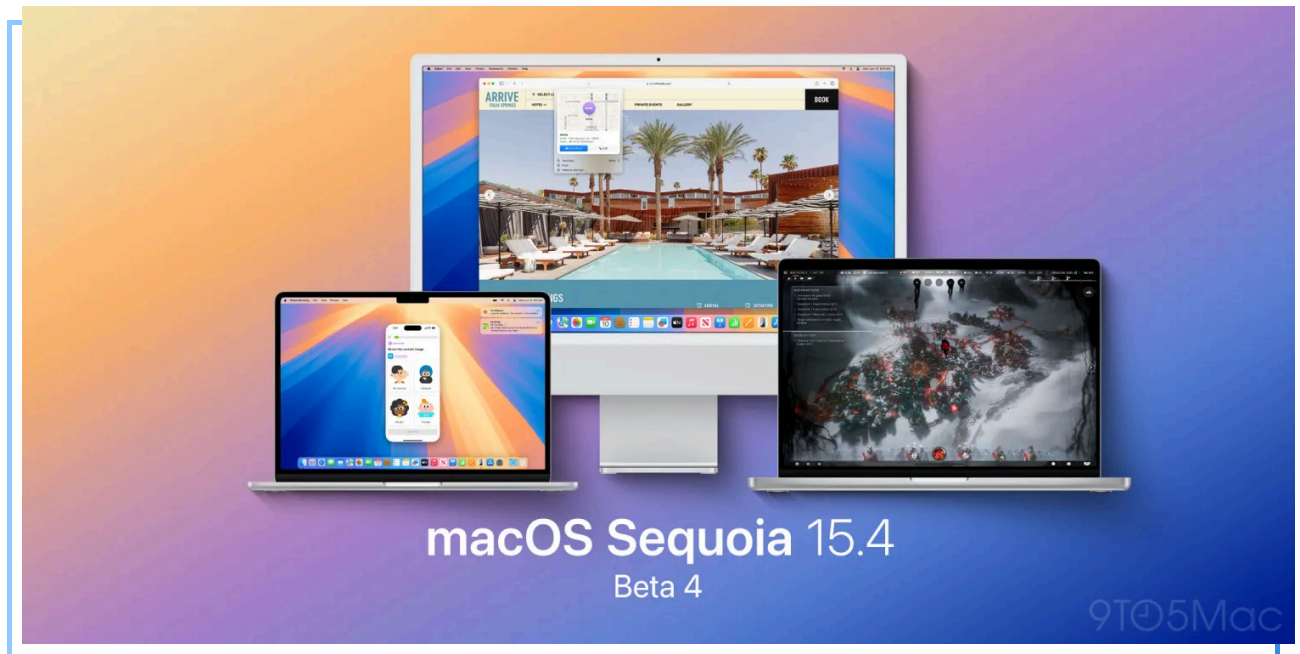
Update 4:20 p.m. ET: Public betas are now also available for iOS 18.4 and iPadOS 18.4 betas.



MACOS SEQUOIA 15.4

macOS 15.4 beta 4 now available as public launch nears [U]

 **Ryan Christoffel** | 10 hours ago |  **0 Comments**



Apple has just released macOS Sequoia 15.4 beta 4 for developers. This latest beta version arrives one week after the last beta, here's what to expect.

Update 4:20 p.m. ET: Public beta 4 for macOS 15.4 is now available too, just hours after the developer beta released.



AIRPODS 4

Apple teases new short film with Pedro Pascal to promote AirPods 4



Filipe Espósito | 11 hours ago | 1 Comment



Apple is about to release a new short movie this week – not for Apple TV+, but to promote the company's AirPods 4 with Active Noise Cancellation. Starring Chilean actor Pedro Pascal, the new ad is directed by renowned filmmaker Spike Jonze.



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Deals: iPad mini 7 \$100 off, new lows on M3 iPad Air, Apple Studio Display \$300 off, Alpine Loop, more

 **Justin Kahn** | 12 hours ago

 **0 Comments**

Alongside the ongoing straight up cash deals on the [new M4 MacBook Air lineup](#), today we are turning our attention over to the iPads. Amazon has now dropped the prices even lower across most of the new [M3 iPad Air configurations](#) while marking the return of all-time low pricing across the [iPad mini 7 lineup](#) – just about all models are now **\$100 off** starting from **\$399 shipped**. From there we have Apple Studio Display at \$300 off, a new low on [Apple's latest Tan Alpine Loop](#), and [AirPods Max \(USB-C\)](#) discounts. All of that and more awaits below in today's *9to5Toys Lunch Break*.



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APPLE TV

Here's what Apple TV+ has coming this spring

 **Ryan Christoffel** | 12 hours ago |  **0 Comments**



Apple TV+ is having a big moment thanks to the viral success of **Severance season two**. Wondering what's coming next? Apple has already laid out much of its spring lineup for TV+, and there may be returning shows that will debut soon too. But here's everything Apple TV+ has announced is coming in the spring months ahead.



AMAZON AMAZON ALEXA

Amazon's new hardware strategy sounds an awful lot like Apple's

 **Ryan Christoffel** | 13 hours ago |  **5 Comments**



Amazon recently **introduced Alexa+**, its big AI upgrade to the popular assistant. But there's a hardware transformation in the works too, per **a new report**, and it sounds a lot like Amazon's upcoming devices will follow the Apple playbook.



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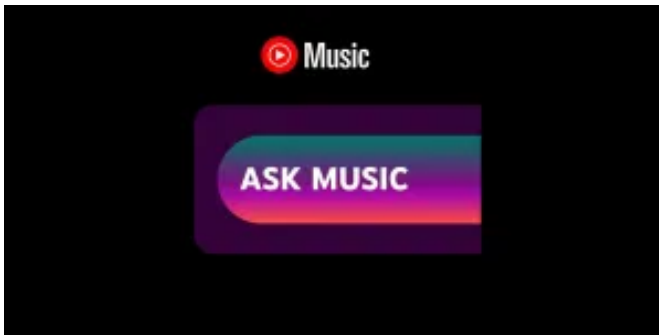
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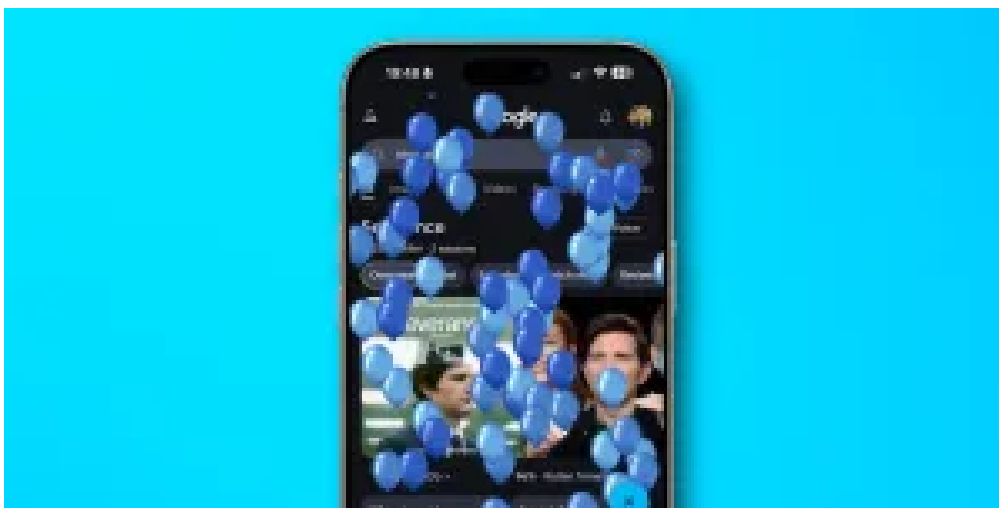
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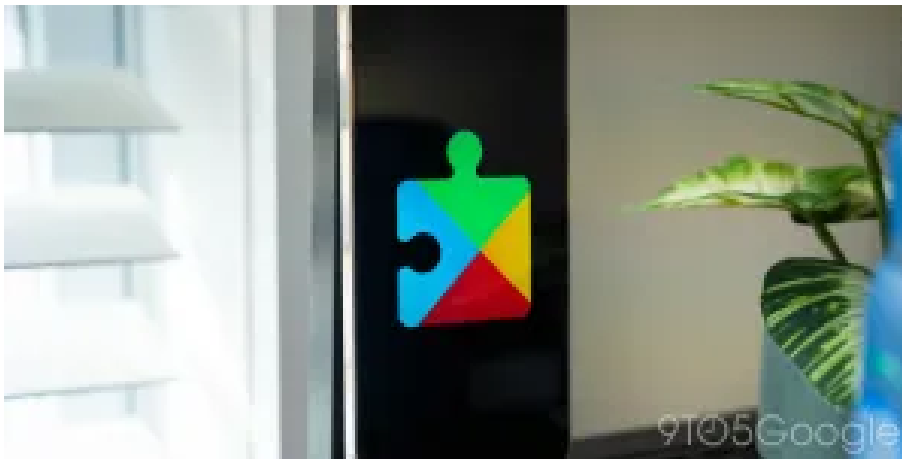
Google adds fun 'Severance' easter egg ahead of season two finale this week

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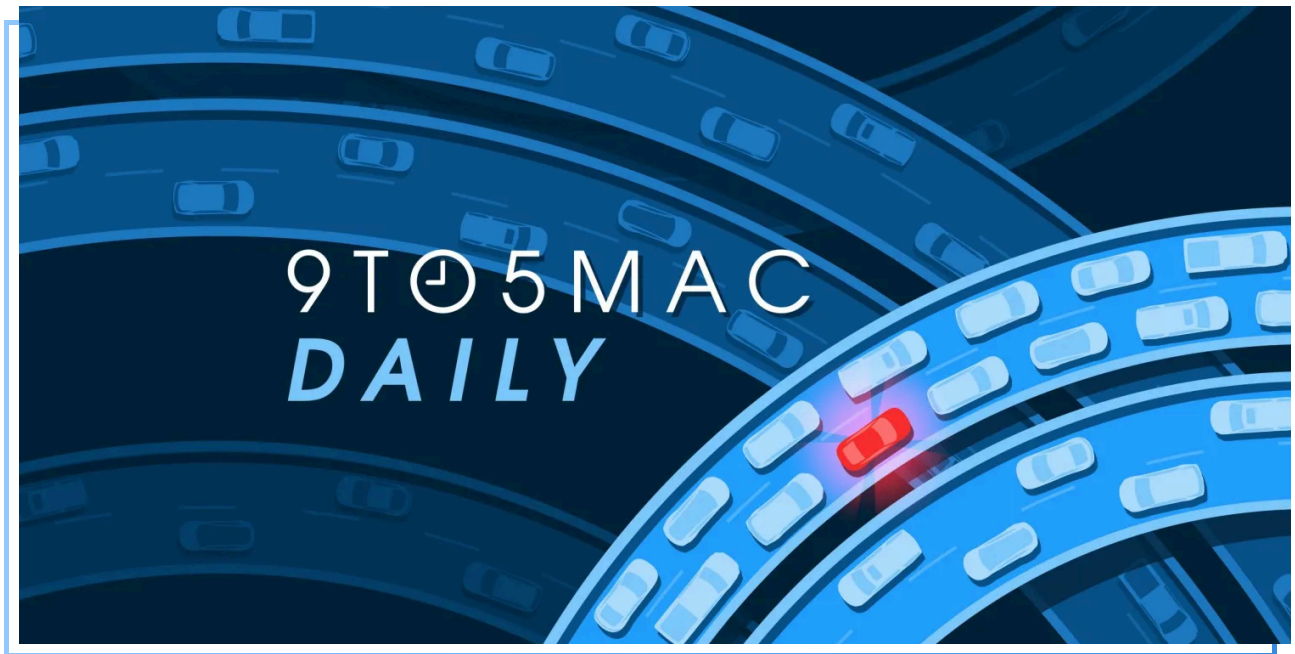
What's new in Android's March 2025 Google System Updates [U: 3/17]

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 **Seth Kurkowski** | 13 hours ago |  0 Comments



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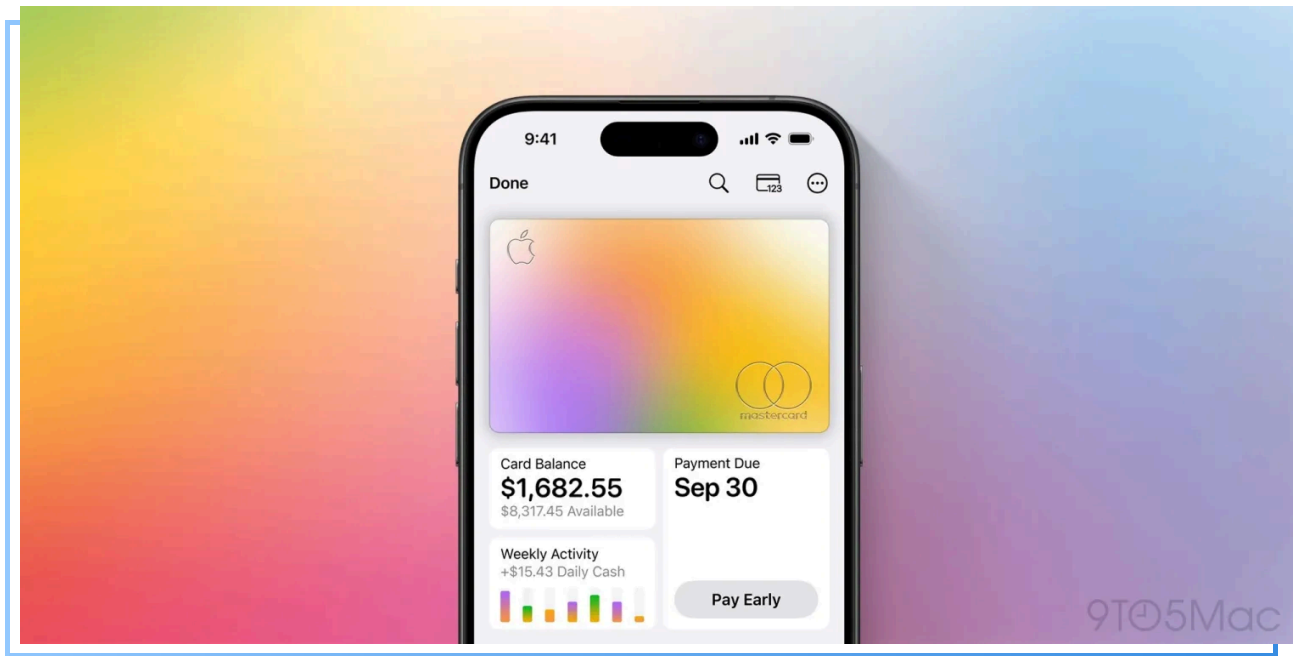


APPLE CARD

Should you get an Apple Card? Here's what you need to know



[Chance Miller](#) | 13 hours ago | [5 Comments](#)



We're coming up on the sixth anniversary of the Apple Card's debut, and it's proven to be a very popular credit card. If you're considering applying for the Apple Card, here's everything you need to know. Is the Apple Card worth it?



APPLE INTELLIGENCE

Our Apple Intelligence privacy reports are empty – how about yours? [Poll]

 Ben Lovejoy | 14 hours ago |  2 Comments



Apple handles AI tasks on-device wherever possible, but where more power is needed it can call on Apple Intelligence servers, aka Private Cloud Compute (PCC).

If you want to see exactly what data has been sent to PCC, you can call up [privacy reports on iPhone, iPad, and Mac](#) – but so far everyone at 9to5Mac who's checked has found theirs empty ...



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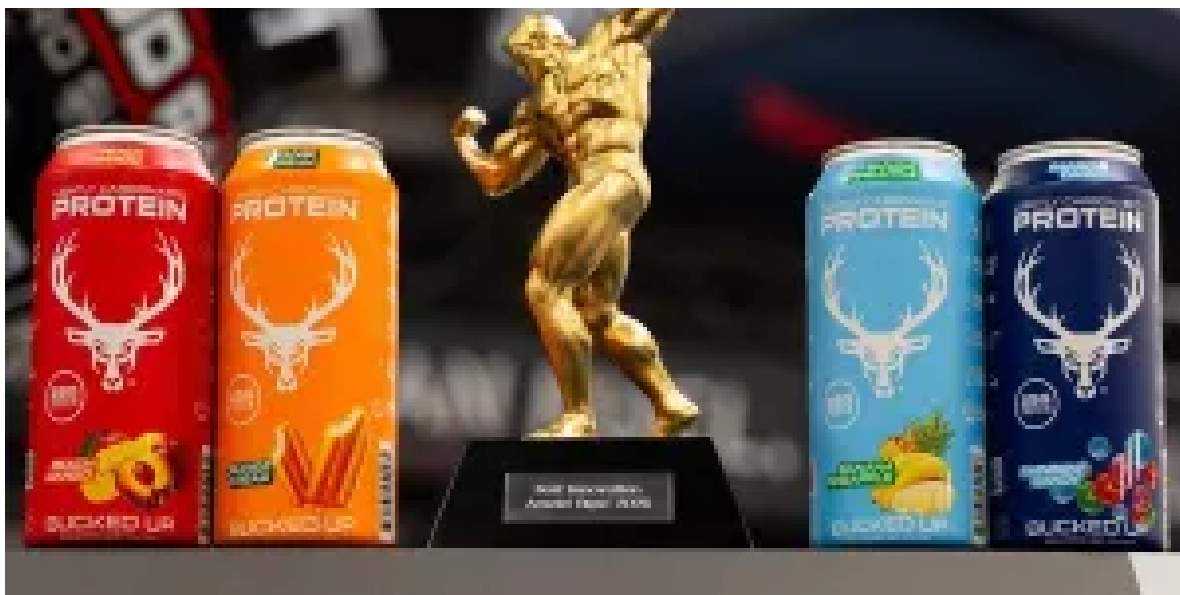
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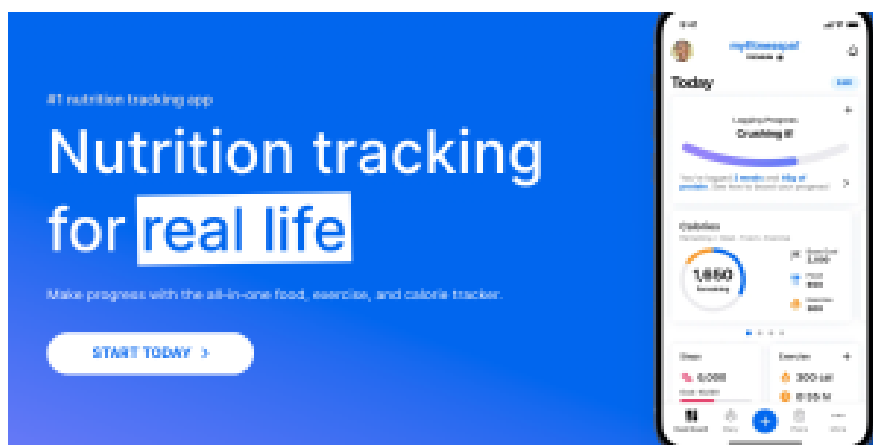
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CAR KEY

Audi A6 Avant E-Tron gets Car Key support; coming to Porsche EVs next

 Ben Lovejoy | 15 hours ago |  5 Comments



The Audi A6 Avant E-Tron is the first of the company's cars to support [Car Key](#) – and a shared platform means we can also be confident it's coming soon to some Porsche EVs.

Audi hasn't yet formally announced Car Key support for its latest station wagon, but it was discovered in the Audi app during a review of the car ...

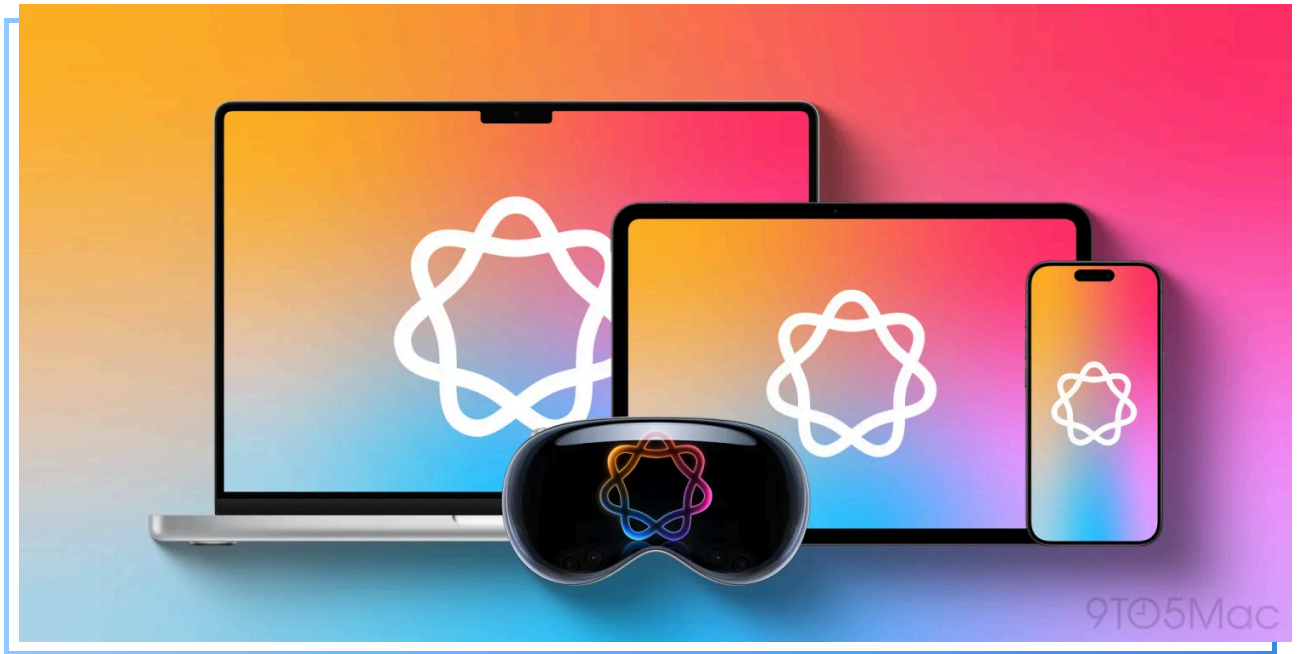


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AAPL COMPANY OPINION SIRI APPLE INTELLIGENCE

Apple could mitigate the Siri crisis with one simple move

 Ben Lovejoy | 15 hours ago |  46 Comments



The **Siri** crisis is showing no sign of ending, with a **blistering attack** by a high-profile commenter, and even senior **Apple** execs admitting that **the delayed features are embarrassing**.

At this point, there isn't anything Apple can do to completely recover from the embarrassment, but a report on an internal Siri team meeting did seem to indicate a potential way to at least mitigate the damage ...



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IPHONE FOLDABLE IPHONE JEFF PU

Report: iPhone sales at risk, but Apple's first foldable in 2026 will change that



Filipe Espósito | 16 hours ago | 17 Comments



Apple has been rumored to be working on new foldable devices, which will be a first for the Cupertino-based company. A new report by analyst Jeff Pu of GF Securities not only corroborates the launch of Apple's first foldable in 2026, but suggests that it will help the company recover from lower iPhone sales in 2025.



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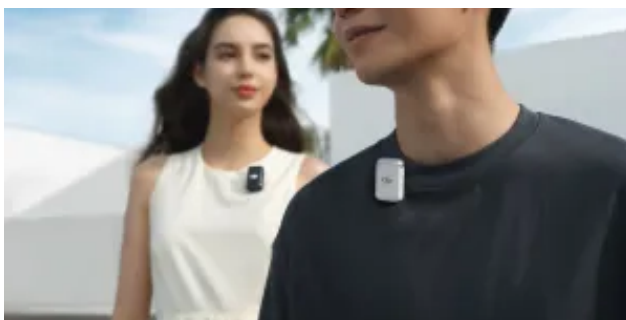
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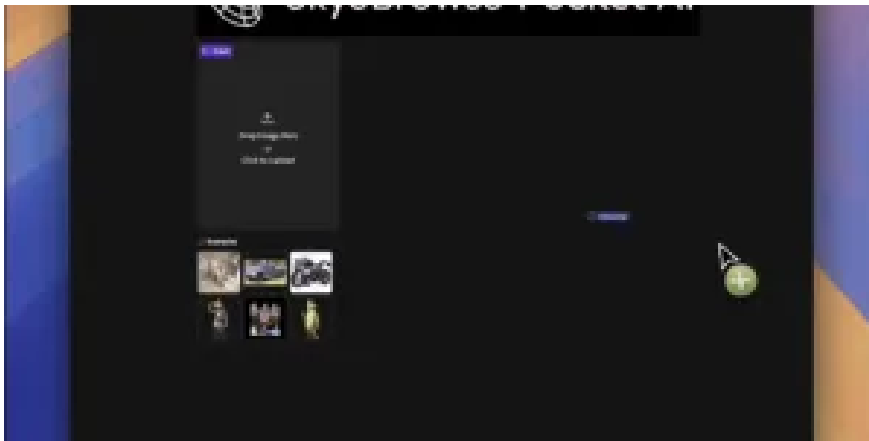
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