## Which is better, the Samsung S23 Ultra or the iPhone 15 Pro?

For each **[?]**, replace the **?** with the source number in the sources list (on the last page of this document) that corresponds to the subject matter of the text just preceding the **[?]**. To get you started, [?] should be **[1]** because source 1 corresponds to the subject matter in the first paragraph.

Some text has been removed from the following.

Copy this text, paste it into a document on your computer, make the changes, and rename the file with **documentation** and some identifying part of your name, for example, davidmcm\_documentation.docx. Send the file by e-mail extension to davidm@austincc.edu

Are you in the market for a new premium smartphone this year? The smartphone market is dominated by the Apple iPhone and the Samsung Galaxy brands; both companies released a new premier model in 2023. Samsung released the Galaxy S23 Ultra in February, and eight months later, in September, Apple released its comparable model, the iPhone 15 Max [?]. Let’s look at each model to see which is better.

The iPhone 15 Max and the Samsung S23 Ultra are leading models targeted at those familiar with smartphones and versed in their various features. Each device has multiple processors and is as powerful as your desktop computer from a decade ago. This report will detail the critical differences between these two models to determine which is best and gives the user the best experience.

To be compared are the dimensions, weights, components, screens, cameras, storage, batteries, options or extras, and most importantly, price.

### Case, size, weight, composition

The iPhone 15 Max and the Samsung S23 Ultra cases are similar in size and weight. Figure 1 shows the case specifications of both devices.

|  |  |  |
| --- | --- | --- |
|  | *iPhone 15 Pro Max* | *Samsung Galaxy S23 Ultra* |
| *Size* | 6.29 x 3.02 x 0.32 inches | 6.43 x 3.07 x 0.35 inches |
| *Weight* | 221 grams | 234 grams |
| *Case* | Titanium | Aluminum |

Figure 1. Case comparison. [?] and [3]

The two smartphones are different in composition, as the S23 Ultra is made from aluminum, while the iPhone case is made of titanium. Since titanium is more durable than aluminum, the iPhone case should also be more scratch-resistant. Since the iPhone case is lighter, slightly smaller, and more durable, it is the better case, but the difference with the S23 is relatively minuscule. Both are excellent cases that will last the life of the phone.

### Screen, size, resolution, brightness

While the iPhone may have a more durable case, most consumers would be more concerned with how scratch-resistant the screen is. Both smartphones have excellent technology to minimize scratching of their screen. Apple uses Ceramic Shield for its glass, which, according to the Eiger Scratch scale, scratches at level 6. In the Eiger Scratch scale, the higher the number, the more scratch-resistant the glass is. [?] The S23 leverages Corning Gorilla Glass Victus 2 protection, which scratches at level 8, which makes the S23 the most scratch-resistant smartphone on the market. [?]

### How fast are these devices, processor, speed, memory

The processor, processor speed, and memory are essential in determining how fast the smartphone is. The processor (CPU) refers to the main chip or integrated circuitry, and the speed, defined in gigahertz (GHz), refers to how fast the device processes data. The higher the GHz, the faster the processor. Memory refers to the device's ability to store and access data temporarily. Memory is expressed in RAM, and more RAM means better memory. [?]

The processors in both devices are blazingly fast, but the iPhone came out eight months after the S23 Ultra and has a slightly faster chip. The iPhone opens at a millisecond faster when opening the same app on both phones, even as they give precisely the same performance. [?]

|  |  |  |
| --- | --- | --- |
|  | *iPhone 15 Pro Max* | *Samsung Galaxy S23 Ultra* |
| Processor | Apple A17 Pro | Snapdragon 8 Gen 2 for Galaxy |
| Processor speed | Up to 3.78 GHz | Up to 3.36 GHz |
| RAM | 8GB | 8GB and 12GB |

Figure 3. Processor, speed and memory. [?] and [?]

[Text deleted]

### References

[1] D. Phelan, “Apple iPhone 15 Pro Max release: Insider Reveals Surprising Details.” forbes.com. <https://www.forbes.com/sites/davidphelan/2023/09/17/apple-iphone-15-pro-max-release-date-insider-reveals-surprising-details/?sh=9e38adf75cb6> (accessed Dec. 21, 2023).

“Samsung Galaxy S23,” en.wikipedia.org. <https://en.wikipedia.org/wiki/Samsung_Galaxy_S23> (accessed Dec 21, 2023).

[2] “Samsung Galaxy S23,” en.wikipedia.org. <https://en.wikipedia.org/wiki/Samsung_Galaxy_S23> (accessed Dec 21, 2023).

[3] “iPhone 15 Pro,” en.wikipedia.org. <https://en.wikipedia.org/wiki/IPhone_15_Pro> (accessed Dec. 21, 2023).

[4] Eiger Switzerland’s No 1 Brand, “What is Scratch Testing and what is the Eiger Scratch Scale?,” eigerprotection.com. <https://eigerprotection.com/blogs/news/what-is-scratch-testing-and-what-is-the-eiger-scratch-scale> (accessed Dec. 20, 2023).

[5] C. Martin, “ Samsung Galaxy S23 Ultra durability, repairability put to the test and here's how it fared.” moneycontrol.com. <https://www.moneycontrol.com/news/technology/samsung-galaxy-s23-ultra-durability-repairability-put-to-the-test-and-heres-how-it-fared-10050711.html> (accessed Dec 21, 2023).

[6] Cool Blue, ““What's a smartphone processor and what does it do?,” coolblue.nl. <https://www.coolblue.nl/en/advice/smartphone-processors.html> (accessed Dec. 21, 2023).

[7] Hayls World. S23 Ultra VS iPhone 15 Pro Max | Best Phone of the Year? (2023). Accessed Dec. 20, 2023. Available: <https://www.youtube.com/watch?v=K0pkjeQVNqQ>

[8] N. Carrasco, “Opinion | Why the iPhone Is The Best Camera for Mobile Photography.” shopmoment.com. <https://www.shopmoment.com/reviews/opinion-why-the-iphone-is-the-best-camera-for-mobile-photography> (accessed Dec. 20, 2023).