

= iPhone 6 =

The iPhone 6 and iPhone 6 Plus are smartphones designed and marketed by Apple Inc . The devices are part of the iPhone series and were announced on September 9 , 2014 , and released on September 19 , 2014 . The iPhone 6 and iPhone 6 Plus jointly serve as successors to the iPhone 5c and iPhone 5s .

The iPhone 6 and iPhone 6 Plus include a number of changes over their predecessor , including models with larger 4 @. @ 7 and 5 @. @ 5 inches ( 120 and 140 mm ) displays , a faster processor , upgraded cameras , improved LTE and Wi @-@ Fi connectivity and support for a near field communications @-@ based mobile payments offering .

Pre @-@ orders of the iPhone 6 and iPhone 6 Plus exceeded four million within its first 24 hours of availability ? an Apple record . More than ten million iPhone 6 and iPhone 6 Plus devices were sold in the first three days , another Apple record .

= = History = =

Since the launch of the original iPhone , the majority of iPhone models have used 3 @. @ 5 @-@ inch displays ? which are smaller than screens used by flagship phones from competitors . The last change in size for the iPhone series came with the iPhone 5 ; the phone and its immediate successors featured a display that was taller , but the same width as prior models , measuring at 4 inches diagonally . Following Apple 's loss in smartphone market share to companies producing phones with larger displays , reports as early as January 2014 suggested that Apple was preparing to launch new iPhone models with larger , 4 @. @ 7 @-@ inch and 5 @. @ 5 @-@ inch displays . Reports prior to its unveiling also speculated that Apple might use a new iPhone model to introduce a mobile payments platform using near @-@ field communications ? a technology that has been incorporated into many Android phones , but has experienced a low adoption rate among users .

The iPhone 6 and iPhone 6 Plus were officially unveiled during a press event at the Flint Center for Performing Arts in Cupertino , California on September 9 , 2014 . The event featured other previously rumored product announcements by Apple alongside the new iPhone models , including the Apple Pay mobile payment platform , and the company 's entry into the wearable computing market with the Apple Watch smart watch .

The iPhone 6 and iPhone 6 Plus were unveiled on September 9 , 2014 and released on September 19 , 2014 ; pre @-@ orders began on September 12 , 2014 , with the iPhone 6 starting at US \$ 649 and the iPhone 6 Plus starting at US \$ 749 . In China , where the iPhone 5c and 5s were the first models in the iPhone series to be released in the country on the same day as their international launch , Apple notified local wireless carriers that it would be unable to release the iPhone 6 and iPhone 6 Plus on the 19th because there were " details which are not ready " ; local media reported that the devices had not yet been approved by the Ministry of Industry and Information Technology , and earlier in the year , a news report by state broadcaster China Central Television alleged that iPhone devices were a threat to national security because iOS 7 's " frequent locations " function could expose " state secrets . "

In August 2015 Apple admitted that some iPhone 6 Plus may have faulty cameras that could be causing photos to look blurry and initiated a replacement program .

On September 9 , 2015 the 128 GB version of both the iPhone 6 and iPhone 6 Plus was discontinued along with the gold version of both phones , the 16 GB and 64 GB versions of the iPhone 6 and iPhone 6 Plus in silver and space gray remain available for sale at a reduced price due to the release of the iPhone 6s and iPhone 6s Plus flagship devices .

In June 2016 , Apple faced a potential sales ban in China , as Shenzhen Baili , a Chinese device maker , alleged that the iPhone 6 and iPhone 6 Plus infringed on its design patent .

Apple did not use Corning 's Gorilla Glass for the iPhone 6 screen .

= = Specifications = =

## == Hardware ==

The design of the iPhone 6 and iPhone 6 Plus are influenced by that of the iPad Air with a glass front that is curved around the edges of the display, and an aluminum rear that contains two plastic strips for the antenna. Both models come in gold, silver, and "space gray" finishes. The iPhone 6 has a thickness of 6.9 millimetres (0.27 in), while the iPhone 6 Plus is 7.1 mm (0.28 in) in thickness; both are thinner than the iPhone 5c and iPhone 5s, with the iPhone 6 being Apple's thinnest phone to date. The most significant changes to the iPhone 6 and iPhone 6 Plus are its displays; both branded as "Retina HD Display" and "ion strengthened", the iPhone 6 display is 4.7 inches in size with a 16:9 resolution of 1334x750 (326 ppi, minus one row of pixels), while the iPhone 6 Plus includes a 5.5 inch 1920x1080 (1080p) display (401 PPI). The displays use a multiple-domain LCD panel, dubbed "dual-domain pixels"; the RGB pixels themselves are skewed in pattern, so that every pixel is seen from a different angle. This technique helps improve the viewing angles of the display.

To accommodate the larger physical size of the iPhone 6 and iPhone 6 Plus, the power button was moved to the side of the phone instead of the top to improve its accessibility. The iPhone 6 features a 6.91 Wh (1810 mAh) battery, while the iPhone 6 Plus features an 11.1 Wh (2915 mAh) battery. Unlike the previous model, the rear-facing camera is not flush with the rear of the device, and has a slight "bulge" around the lens. It has a dual-core 1.4 GHz "Typhoon" processor (ARM v8 based) and Imagination's PowerVR GX6450 quad-core graphics processor.

Both models include an Apple A8 system on a chip, and an M8 motion coprocessor, an update of the M7 chip from the iPhone 5s. The main difference between the M8 and the original M7 coprocessor is that the M8 also includes a barometer to measure altitude changes. Phil Schiller touted that the A8 chip would provide, in comparison to the 5s, a 25% increase in CPU performance, a 50% increase in graphics performance, and less heat output. Early hands-on reports suggested that the A8's GPU performance might indeed break away from previous generations doubling of performance at each yearly release, scoring 21204.26 in Base mark X compared to 20253.80, 10973.36 and 5034.75 on respectively the 5s, 5 and 4s.

The expanded LTE connectivity on the iPhone 6 and iPhone 6 Plus is improved to LTE Advanced, with support for over 20 LTE bands (7 more than the iPhone 5s), for up to 150 Mbit/s download speed, and VoLTE support. Wi-Fi performance has been improved with support for 802.11ac specifications, providing speeds up to 433.0581 Mbit/s which is up to 3 times faster than 802.11n, along with Wi-Fi Calling support where available. The iPhone 6 and iPhone 6 Plus add support for near-field communications (NFC), which is used exclusively for Apple Pay, a new mobile payments system which will allow users to store their credit cards in Passbook for use with online payments and retail purchases over NFC. NFC support is restricted to Apple Pay only, and cannot be used for any other purposes (such as sharing content with other iPhone users).

While still 8 megapixels in size, the iPhone 6's rear-facing camera includes a new sensor which, like the camera in the iPhone 5s, has 1.5 micron pixels, an f/2.2 aperture lens, and the ability to shoot 1080p video at either 30 or 60 frames per second. The camera also includes phase detection autofocus. It can also record slow-motion video at either 120 or 240 frames per second. The iPhone 6 Plus camera is nearly identical, but also includes optical image stabilization. The front-facing camera was also updated with a new sensor and f/2.2 aperture, along with support for burst and HDR modes.

## == Software ==

When first released, the iPhone 6 and iPhone 6 Plus shipped pre-loaded with iOS 8, while the iPhone 5s shipped pre-loaded with iOS 7. Apps are able to take advantage of the increased screen size in the iPhone 6 and 6 Plus to display more information on-screen; for

example , the Mail app uses a dual @-@ pane layout similar to its iPad version when the device is in landscape mode on the iPhone 6 Plus . As it uses an identical aspect ratio , apps designed for the iPhone 5 , iPhone 5c , and 5s can be upscaled for use on the iPhone 6 and 6 Plus . To improve the usability of the devices ' larger screens , an additional " Reachability " gesture was added ; double @-@ tapping the Home button will slide the top half of the screen 's contents down to the bottom half of the screen . This function allows users to reach buttons located near the top of the screen , such as a " Back " button in the top @-@ left corner .

= = Reception = =

Both iPhone 6 models received generally positive reviews . Re / code called it " the best smartphone you can buy " . TechRadar praised the iPhone 6 's " brilliant " design , improved battery life over the 5s , iOS 8 for being " smarter and more intuitive than ever " , along with the quality of its camera . However , the plastic antenna strips on the rear of the phone were criticized for resulting in poor aesthetics , the display for having lower resolution and pixel density in comparison to other recent smartphones ? including those with the same physical screen size as the iPhone 6 , such as the HTC One , and for not having a sufficient justification for its significantly higher price in comparison to similar devices running Android or Windows Phone . The Verge considered the iPhone 6 to be " simply and cleanly designed " in comparison to the 5s , noting that the phone still felt usable despite its larger size , but criticized the antenna plastic , the protruding camera lens ( which prevents the device from sitting flat without a case ) , and the lack of additional optimization in the operating system for the bigger screen . Improvements such as performance , battery life , VoLTE support , and other tweaks were also noted . In conclusion , the iPhone 6 was considered " good , even great , but there ? s little about it that ? s truly ambitious or truly moving the needle . It ? s just a refinement of a lot of existing ideas into a much more pleasant package " .

In regards to the 6 Plus , Engadget panned the device 's design for feeling uncomfortable to hold and harder to grip in comparison to other devices such as the Galaxy Note 3 and LG G3 , but praised its inclusion of optical image stabilization and slightly better battery life than the 6 .

= = Controversies = =

The iPhone 6 and 6 Plus were affected by a number of notable hardware @-@ related issues :

= = = Chassis bending = = =

Shortly after its public release , it was reported that the iPhone 6 and iPhone 6 Plus chassis was susceptible to bending under pressure , such as when carried tightly in a user 's pocket . While such issues are not exclusive to the iPhone 6 and 6 Plus , the design flaw came to be known among social media users as " bendgate . " A study by Consumer Reports found the iPhone 6 and 6 Plus were slightly more durable than the HTC One , but considerably less durable than the other phones tested .

Apple responded to the bending allegations , stating that they had only received nine complaints of bent devices , and that the damage occurring due to regular use is " extremely rare . " The company maintained that the iPhone 6 and 6 Plus went through durability testing to ensure they would stand up to daily use . The company offered to replace phones that were bent , if it is determined that the bending was unintentional .

On October 1 , 2014 , it was reported by Axel Telzerowm , editor @-@ in @-@ chief of the German technology magazine Computer Bild , that following the posting of a video where a presenter was able to bend an iPhone 6 Plus , an Apple Germany representative informed the publication that it had been banned from future Apple events and that it would no longer receive devices directly from Apple for testing . Telzerowm responded by saying that " we congratulate you to your fine new generation of iPhones , even if one of them has a minor weakness with its casing . But we are deeply disappointed about the lack of respect of your company . "

== Hair ripping ==

On October 3 , 2014 9to5Mac released a post claiming that certain iPhone 6 and iPhone 6 Plus users complained on social networking sites that the phone ripped off their hair when they held the phone close to their ears when making a call or taking a call . Twitter users claimed that the seam between the glass screen and aluminium back of the iPhone 6 is to blame , with hair becoming caught within it .

== Flash storage performance ==

Some users reported that 64 and 128 GB iPhone 6 models had experienced performance issues , and that some 128 GB iPhone 6 Plus models would , in rare cases , randomly crash and reboot . Business Korea reported that the issues were connected to the triple @-@ layer cell NAND storage of the affected models . Triple @-@ layer cells can store three bits of data per cell of flash , and are cheaper than dual @-@ layer cell solutions , but at the cost of performance . It was reported that Apple had planned to switch the affected model lines back to multi @-@ layer cell flash , and address the performance issues on existing devices in a future iOS update .

== 6 Plus camera issues ==

It was reported that the optical image stabilization systems on some iPhone 6 Plus models were faulty , failing to properly stabilize when the phone is being held perfectly still , leading to blurry photos and " wavy " -looking videos . The optical image stabilization system was also found to have been affected by accessories that use magnets , such as third @-@ party lens attachments ; Apple issued advisories to users and its licensed accessory makers , warning that magnetic or metallic accessories can cause the OIS to malfunction .

On August 21 , 2015 , Apple instituted a repair program for iPhone 6 Plus models released between September 2014 and January 2015 , citing that faulty rear cameras on affected models may produce blurry pictures .

Some iPhone 6 and iPhone 6 Plus models have an issue where the front facing camera is somehow " shifted " , or out of place . Apple has said that they will replace most iPhone 6 's with this issue , free of charge . Many people have complained of this issue , but it does not seem to actually affect the camera itself . It is said that the camera is not what has shifted , but a piece of protective foam around the camera module itself that has gone out of place .

== " Error 53 " ==

If the iPhone 6 home button is repaired or modified by a third @-@ party , the device will fail security checks related to Touch ID as the components had not been " re @-@ validated " for security reasons ? a process which can only be performed by an authorized Apple outlet . Failing these checks disables all features related to Touch ID . Such effects have sometimes happened as a result of damage as well .

It was reported these same hardware integrity checks would trigger an unrecoverable loop into " Recovery Mode " if iOS is updated or restored , with attempts to restore the device via iTunes PC software resulting in an " error 53 " message . Beyond the explanation that this is related to hardware integrity errors regarding Touch ID components , Apple provided no official explanation of what specifically triggers error 53 or how it can be fixed without replacing the entire device .

On February 18 , 2016 , Apple released an iOS 9 @.@ 2 @.@ 1 patch through iTunes which addresses this issue , and admitted that error 53 was actually related to a diagnostic check for inspecting the Touch ID hardware before an iPhone is shipped from its factories .

== Sales ==

Apple Inc. announced that , within 24 hours of availability , over 4 million pre @-@ orders of the iPhone 6 and 6 Plus were made , exceeding the supply available . More than 10 million iPhone 6 and iPhone 6 Plus devices were sold in the first three days .

= = Timeline of models = =