

= iPad 2 =

The iPad 2 is a tablet designed , developed and marketed by Apple Inc . Compared to the first iPad , as the second device in the iPad line it gained a faster dual core A5 processor , a lighter build structure , and was the first iPad to feature VGA front @-@ facing and 720p rear @-@ facing cameras designed for FaceTime video calling .

The device was available initially with three storage sizes , 16 , 32 and 64 GB and two varying connectivity options , Wi @-@ Fi only or Wi @-@ Fi and cellular . Each variation of the device is available with either a black or white front glass panel . However , upon the release of the 3rd generation iPad , only the 16 GB variation with two connectivity options and two front color options was available .

Apple unveiled the device on March 2 , 2011 . Upon the announcement of the iPad 2 , the original model of the iPad was discontinued . Sales of the iPad 2 online and at retail stores began in the United States on March 11 . It was then released in 25 other Oceanian , North American and Western European countries on March 25 and released in eleven Asian countries as well as one African country on April 29 . Subsequently on May 6 and 27 , the device was released in three South American , six Eastern European and three Asian countries .

The device received mixed to positive reception from various blogs and publications . Although it was praised for its hardware improvement , such as the new Apple A5 chip , the software restriction on the iPad 2 and iOS in general drew criticism from various technology commentators . The device sold well in its first month of sales with 2 @. @ 4 ? 2 @. @ 6 million units sold and 11 @. @ 12 million units were sold in the third quarter of 2011 .

A popular product , with a lower screen resolution and performance than the two Retina models that followed it but a lighter build and longer battery life , it remained in the Apple line @-@ up as an entry @-@ level iPad model for three years until March 2014 , latterly with a silent upgrade to a die @-@ shrunk version of the A5 processor . Its basic design formed the core of the first iPad mini , which had the same screen pixel count and similar features at a smaller size . The iPad 2 has been able to run six major versions of iOS , from 4 to 9 , the first and only iOS device to be able to do so .

= = History = =

Apple sent invitations to journalists on February 23 , 2011 , for a media event on March 2 . On March 2 , 2011 , CEO Steve Jobs unveiled the device at the Yerba Buena Center for the Arts , despite being on medical leave . Upon the announcement of the iPad 2 , the original iPad was discontinued from sales online and at Apple authorized retail stores .

Apple began selling the iPad 2 on its website on March 11 , and in its U.S. retail stores at 5 pm local time on that date . Many stores in major cities , such as New York , sold out within hours . Online shipping delays had increased to three to four weeks on Sunday and four to five weeks by Tuesday .

The iPad 2 was released internationally in 25 other countries on March 25 , 2011 . The countries included Australia , Austria , Belgium , Canada , Czech Republic , Denmark , Finland , France , Germany , Greece , Iceland , Italy , Ireland , Hungary , Luxembourg , Mexico , Netherlands , New Zealand , Norway , Poland , Portugal , Spain , Sweden , Switzerland and the United Kingdom .

The April 29 , 2011 release date for Japan was postponed due to the earthquake and tsunami which struck the nation on March 11 , 2011 . The iPads were delayed due to the NAND flash storage chip used in the iPads being created by Toshiba , which was affected by the earthquake and tsunami thus resulting in the suspension of operations for an indefinite period of time . The slowdown caused analysts to downgrade Apple 's stock .

The iPad 2 was later released in Hong Kong , South Korea , Singapore , Malaysia and other countries including Japan on April 29 , 2011 . It was then released in numerous other nations which include China , Estonia , Thailand , Brazil , Russia and Taiwan on two major release dates , May 6 and 27 .

The 32 and 64 GB models were discontinued on March 7 , 2012 , upon the introduction of the third

generation iPad . The 16 GB Wi @-@ Fi and 16 GB Wi @-@ Fi + 3G models were discontinued on March 18 , 2014 .

= = Features = =

= = = Software = = =

In late March 2011 , the iPad 2 was released alongside iOS 4 @.@ 2 @.@ 1 , which primarily introduced FaceTime , Personal Hotspots and AirPlay support among other features . The iPad 2 is compatible with iOS 4 @.@ 3 , which introduced Airplay Mirroring and Home Sharing among other features . On October 12 , 2011 , upon the release of the iPhone 4S , the iPad was upgradable to the iOS 5 firmware which brought over 200 new user features to iOS compatible devices including Notification Center , iMessage , Reminders , and an updated notifications system , using a new " banner " style instead of the previously used pop @-@ up " alert " style .

The iPad 2 comes with several applications by default , including Safari , Mail , Photos , Video , Music , iTunes (store) , Maps , Notes , Calendar , Photo Booth , and Contacts . The App Store is also available as a default application , it enables users to download from a database of 800 @,@ 000 applications , the price of these applications is set by the developers . Like all iOS devices , the iPad 2 can sync music , videos , apps and photos with a Mac or PC using iTunes , although when using iOS 5 and later , the user does not have to connect the iPad to the computer. iCloud also allows users to backup and sync their data with other compatible iOS devices via the internet . Game Center is available as a native social gaming platform on iOS , games downloaded via the App Store that have this feature enabled are able to integrate their achievement points , high @-@ scores and bonus system across all iOS devices into a single accumulative points and social platform . Although the tablet is not designed to make phone calls over a cellular network , a user can use a wired headset or the built @-@ in speaker and microphone and place phone calls over Wi @-@ Fi or cellular using a VoIP application .

The iPad 2 also adds the capability to support GarageBand , iMovie , and the iWork apps Pages , Keynote , and Numbers . These applications do not come with the iPad but are instead official applications from Apple sold within the App Store . On March 7 , 2012 , after the unveiling of the third generation iPad , the firmware of the iPad 2 was upgradable to iOS 5 @.@ 1 . Scott Rohde , a senior Sony executive described the iPad as " a game console disguised as a device that can be appropriated in the business workplace . "

On September 19 , 2012 , almost a week after the announcement of the iPhone 5 , iOS 6 was released for numerous iOS devices , including the iPad 2 . However , on iOS 6 , not all features are available on the iPad 2 . The software upgrade was downloadable as an over the air (OTA) update package and contains two @-@ hundred new features , including a mapping software designed by Apple dubbed Apple Maps , a " Clock " app , which features a timer , stopwatch and alarm , and Facebook integration among other new features and tweaks .

The iPad 2 is compatible with iOS 7 , which was released on September 18 , 2013 . However , some features are not supported . For example , like the iPhone 4 , the Notification Center and the Control Center use the transparent style instead of the translucent style in later iOS models .

The iPad 2 supports iOS 8 which was released September 17 , 2014 , making it the first iOS device to support 5 major versions of iOS (including iOS 4 , 5 , 6 , 7 , and 8) . While the device is still supported , most of the new features of the software are not supported due to relatively aged hardware and therefore , is limited in terms of performance . Users have also reported numerous problems after receiving the update including the accessibility features and battery @-@ related issues . Many users predicted that the iPad 2 was going to be dropped from updating to iOS 8 along with the iPhone 4 , the same process that happened with the iPhone 3GS and the iPod Touch (fourth generation) and earlier models , considering that it has been supported for more than 3 years .

It was confirmed on June 8 , 2015 , at Apple 's WWDC that the iPad 2 would support iOS 9 . This

makes the iPad 2 the first iPad and only iOS device to support six major versions of iOS . As with previous releases , though , many headline features are unavailable on the iPad 2 , including predictive Siri , translucency effects , split @-@ view , slide @-@ over and picture @-@ in @-@ picture multitasking , Low Power Mode and the Health app. iOS 9 is said to feature performance improvements that may help the aging device function more smoothly , and initial tests suggest that it did not significantly impact available space . Other A5 @-@ based devices will also support iOS 9 including the iPhone 4S (five major iOS versions) , the iPad Mini (four major iOS versions) and iPod Touch 5G (four major iOS versions) .

It was confirmed that iPad 2 and iPad (3rd Generation) will not support iOS 10 .

= = = Hardware = = =

The iPad 2 features an Apple A5 package @-@ on @-@ package (PoP) System @-@ on @-@ chip (SoC) , which comprises a 1 GHz dual @-@ core 32 @-@ bit Cortex @-@ A9 CPU , 512 MB of RAM and a dual @-@ core PowerVR SGX543MP2 GPU . Other features include front and rear cameras , a three @-@ axis gyroscope , headset controls , proximity and ambient light sensors , microphone , magnetometer , accelerometer and a 9 @.@ 7 inch multi @-@ touch screen with a maximum resolution of 1024 × 768 hence resulting in 132 ppi . The iPad 2 has four physical switches , including a home button near the display that returns the user to the home screen , and three plastic physical switches on the sides : wake / sleep , volume up / down , and a third switch for either screen rotation lock or mute . The home button on the iPad 2 is " easier to double tap " than the previous generation of the iPad . Apple reduced the size of the iPad by eliminating the stamped sheet metal frame from the display , integrating new thinner glass technology for the touch screen overlay , and slightly reducing the space between the display and battery . The iPad 2 's screen is thinner , lighter , and yet stronger than the original iPad 's . The iPad 2 also supports screen mirroring via the digital AV adapter and through AirPlay as of iOS 5 .

The iPad 2 has a 25 W · h rechargeable lithium @-@ ion polymer battery that lasts 10 hours , like the original iPad . It is charged via USB or included 10 W , 2 A power adapter . The battery is 2 @.@ 5 mm thick , 59 % smaller than the original and has three cells instead of two . The improvements allowed the injection @-@ molded plastic support frame to be omitted . The 10 W USB power adapter provides 4x the power of a conventional USB port . The tablet has an audio frequency response of 20 Hz to 20 kHz . Without third @-@ party software it can play the following audio formats : HE @-@ AAC , AAC , Protected AAC , MP3 , MP3 VBR , Audible formats (2 , 3 , 4 , AEA , AAX , and AAX +) , ALAC , AIFF , and WAV .

The revised tablet adds front- and rear @-@ facing cameras , which allow FaceTime video calls with other iPad 2s , the third generation iPad , iPhone 4 and 4S , fourth @-@ generation iPod Touch and Macintosh computers (running Mac OS X 10 @.@ 6 @.@ 6 or later with a webcam) . The 0 @.@ 3 MP front camera shoots VGA @-@ quality 30 frame / s video and VGA @-@ quality still photos . The 0 @.@ 7 MP back camera can shoot 720p HD video at 30 frame / s and has a 5 × times digital zoom . Both shoot photo in a 4 : 3 fullscreen aspect ratio . The rear camera shoots video in 16 : 9 widescreen to match the 720p standard , although only the central 4 : 3 part of the recording is shown on the screen during recording . The forward @-@ facing camera shoots in 4 : 3 .

The Apple A5 chip doubles processing speed and has graphics processing that is up to nine times faster than the previous iPad . However , benchtests and hardware assessments performed by various third party news sources and technology blogs indicate that those claims are exaggerated , the benchmark assessment conducted by Anandtech showed that the GPU of the iPad 2 is only 3 times faster than that of the original iPad . CPU benchmarks conducted on the iPad 2 by iOSnoops indicate a 66 % performance increase compared to the original iPad .

3G versions of the iPad 2 offer CDMA2000 support for customers using the device on a CDMA network or GSM / UMTS support for customers using the device on a GSM / UMTS network . The iPad Wi @-@ Fi + 3G model includes an A @-@ GPS receiver for tracking the user 's location given permission . Also , the iPad 2 3G model includes a plastic cap @-@ like band at the top on the back

for the 3G antenna . The metallic grille for the microphone is replaced with a matching plastic black grille on the 3G model . GSM models of iPad 2 use a SIM card while CDMA models use an ESN to connect to the cellular network .

The device is 15 % lighter and 33 % thinner than the original iPad ; it is thinner than the iPhone 4 by 0 . 5 mm . The Wi-Fi version is 1 . 33 lb (600 g) . Both the GSM and CDMA versions (known respectively as the AT & T and Verizon versions in the US) differ in weight slightly due to the mass difference between the GSM and CDMA cellular radios , with the GSM model at 1 . 35 lb (612 g) and the CDMA model at 1 . 34 lb (608 g) . The size of the iPad 2 is also less than the original iPad at only 9 . 50 × 7 . 31 × 0 . 34 in (241 . 2 × 185 . 7 × 8 . 8 mm) , compared to the original iPad 's size at 9 . 56 × 7 . 47 × 0 . 5 in (242 . 8 × 189 . 7 × 13 . 4 mm) .

After the announcement and release of the third generation iPad , the iPad 2 , which continued to be available for purchase , received a hardware upgrade . The upgraded variant of the iPad 2 features a smaller version of the Apple A5 SoC , which is able to reduce battery consumption . Benchmark tests conducted by Anandtech concluded that the upgraded variant is able to last longer by at least an hour and a half , depending on the task that is conducted on the device . The maximum temperature that the device heated up to was also less than original iPad 2 , tests conducted by the same organisation revealed that the upgraded variant was able to operate at 1 degree lower when performing intensive tasks . Performance difference between the two variants , according to Anandtech is negligible .

== Accessories ==

The Smart Cover , first introduced with the iPad 2 , is a screen protector that magnetically attaches to the face of the iPad . The cover has three folds which allow it to convert into a stand , which is also held together by magnets . While original iPad owners could purchase a black case that included a similarly folding cover , the Smart Cover is meant to be more minimal , easily detachable , and protects only the screen . Smart Covers have a microfiber bottom that cleans the front of the iPad , and wakes up the iPad when the cover is removed . There are five different colors of both polyurethane and leather , with leather being more expensive than the polyurethane version .

Apple offers several more accessories for the iPad 2 , most of which are adapters for the proprietary 30 - pin dock connector , the iPad 's only port besides the headphone jack . A dock holds the iPad upright at an angle , and has a dock connector and audio line out port . The iPad can use Bluetooth keyboards that also work with Macs and PCs . The iPad can be charged by a standalone power adapter (" wall charger ") also used for iPods and iPhones , and a 10 W charger is included with the iPad .

== Reception ==

The iPad 2 received mixed to positive reviews , praising its Apple A5 processor and 720p camera . Joshua Topolsky of Engadget said that " for those of you who haven 't yet made the leap , feel free to take a deep breath and dive in -- the iPad 2 is as good as it gets right now . And it 's really quite good . " Jason Snell of Macworld said the following :

" Though the iPad 2 is an improvement on the original iPad in numerous ways , it 's still an evolutionary product , not a revolutionary one . If you 're happy with your current iPad , there 's no reason to dump it just because there 's a shinier , newer one . (This is not to say that millions of people won 't do just that . I mean : shiny !) If you 've invested in iPad accessories such as a dock or case , keep in mind that you probably won 't be able to use them with the new iPad . "

TechCrunch 's MG Siegler stated : " Let me sum all of this up in a simple way : the iPad 2 , should you buy one ? Maybe ? it depends on a few factors . Will you want to buy one ? Yes . Use that information wisely . "

== Criticism ==

The closed and proprietary nature of iOS has garnered criticism , particularly by digital rights advocates such as the Electronic Frontier Foundation , computer engineer and activist Brewster Kahle , Internet @-@ law specialist Jonathan Zittrain , and the Free Software Foundation who protested the iPad 's introductory event and have targeted the iPad with their " Defective by Design " campaign . Competitor Microsoft , via a PR spokesman , has also criticized Apple 's control over its platform .

= = = Technical problems = = =

At issue are restrictions imposed by the design of iOS , namely DRM intended to lock purchased media to Apple 's platform , the development model (requiring a yearly subscription to distribute apps developed for the iOS) , the centralized approval process for apps , as well as Apple 's general control and lockdown of the platform itself . Particularly at issue is the ability for Apple to remotely disable or delete apps at will . Some in the tech community have expressed concern that the locked @-@ down iOS represents a growing trend in Apple 's approach to computing , particularly Apple 's shift away from machines that hobbyists can " tinker with " and note the potential for such restrictions to stifle software innovation .

Some iPad 2 users reported performance issues when running iOS 8 . Apple improved performance on the iPad 2 and the iPhone 4S on the iOS 8 @.@ 1 @.@ 1 update . However , those 2 devices still don 't run as fast as the later models .

= = = Commercial reception = = =

During the first weekend of sale , more than one million units were sold . Soon after the first weekend , Ashok Kumar , a technology analyst for a financial firm predicted that Apple would sell 35 million iPad 2s in 2011 . Investment banking firm , Piper Jaffray monitored the initial sales of the iPad 2 and reported that 70 % of all iPad 2 sales were to first @-@ time iPad buyers with 49 % of buyers owning a PC compared to the initial buyers of the original iPad where only 26 % of buyers owned a PC . 12 @,@ 000 units were sold on auction site eBay in its first two weeks of release . When the iPhone 4S was released , rumors about the third generation iPad caused a decline in iPad 2 sales . Official figures released in the fourth quarter of 2011 indicate that Apple sold 11 @.@ 4 million iPads in the third quarter , a 166 % increase from the third quarter of 2010 .

= = Timeline = =