

The following Voluntary Product Accessibility information refers to **iPad 2 running iOS 5 or later**. For more information on the accessibility features of **iPad 2**, visit Apple’s accessibility web site at <http://www.apple.com/accessibility>

## Summary Table Voluntary Product Accessibility Template

Criteria	Supporting Features	Remarks and explanation
<a href="#">Section 1194.21</a> Software applications and operating systems.	Refer to the attached VPAT	
<a href="#">Section 1194.22</a> Web-based intranet and internet information and applications.	Not applicable	
<a href="#">Section 1194.23</a> Telecommunications products.	Not applicable	
<a href="#">Section 1194.24</a> Video and multimedia products.	Not applicable	
<a href="#">Section 1194.25</a> Self contained closed products.	Refer to the attached VPAT	
<a href="#">Section 1194.26</a> Desktop and portable computers.	Refer to the attached VPAT	
<a href="#">Section 1194.31</a> Functional performance criteria.	Refer to the attached VPAT	
<a href="#">Section 1194.41</a> Information, documentation, and support.	Refer to the attached VPAT	

## Section 1194.21 Software Applications and Operating Systems – Detail

Criteria	Supporting Features	Remarks and explanations
<p>(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.</p>	<p>Supported through equivalent facilitation</p>	<p>iPad is controlled using Multi-Touch gestures on its capacitive touch screen. The built-in AssistiveTouch feature enables Multi-Touch gestures to be entered using only one finger (or stylus, sold separately), and supports the use of adaptive input products (sold separately).</p> <p>iPad features an onscreen keyboard for text input. The touch-screen is capacitive, and requires no force.</p> <p>Spoken feedback when using the keyboard can be provided using the built-in VoiceOver screen reader.</p> <p>Alternatively, an external Bluetooth wireless keyboard (sold separately) can be used for text input.</p>
<p>(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.</p>	<p>Supported</p>	
<p>(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.</p>	<p>Supported</p>	<p>iPad runs iOS 5 which provides a clear and distinct visual indication of the currently selected item and keyboard insertion point.</p> <p>Using VoiceOver, an additional visual cursor can be displayed and description of the elements on which the cursor is focused can be spoken</p>

Criteria	Supporting Features	Remarks and explanations
(d) Sufficient information about a user interface element including the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.	Supported with exceptions	<p>The software included on iPad provides accessibility information for user interface elements and an Accessibility API that enables applications to provide information about the identity, operation, and state of elements in applications. Not all apps purchased from the App Store will provide this information.</p> <p>Apple is encouraging developers to support the iOS Accessibility API in their apps and provides accessibility technical documentation on the Apple Developer Web site:  <a href="http://developer.apple.com/iphone/library/documentation/UserExperience/Conceptual/iPhoneAccessibility/Making_Application_Accessible/Making_Application_Accessible.html#//apple_ref/doc/uid/TP40008785-CH102-SW5">http://developer.apple.com/iphone/library/documentation/UserExperience/Conceptual/iPhoneAccessibility/Making_Application_Accessible/Making_Application_Accessible.html#//apple_ref/doc/uid/TP40008785-CH102-SW5</a></p>
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supported	<p>Images used in iOS on iPad are used in a consistent manner.</p> <p>Apple provides Human Interface Guidelines that instruct developers of iOS apps to support this as well.  <a href="http://developer.apple.com/iphone/library/documentation/UserExperience/Conceptual/MobileHIG/Introduction/Introduction.html">http://developer.apple.com/iphone/library/documentation/UserExperience/Conceptual/MobileHIG/Introduction/Introduction.html</a></p>
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supported	
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supported with exceptions	<p>iOS provides user-selected control of display characteristics that cannot be overridden by applications, including:</p> <ul style="list-style-type: none"> <li>• Reverse video: White-On-Black or Black-On-White.</li> <li>• Screen magnification</li> <li>• Screen brightness</li> </ul> <p>Applications can change the screen brightness while the app is running.</p>
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Not applicable	

Criteria	Supporting Features	Remarks and explanations
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Not applicable	iPad does not provide color or contrast settings.
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supported	
(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supported	<p>iOS communicates form element information for assistive technologies via the Accessibility API.</p> <p>Through VoiceOver, users can complete HTML “web” forms using the built in Safari web browser.</p>

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## Section 1194.23 Telecommunications Products – Detail

Criteria	Supporting Features	Remarks and explanations
(a) Telecommunications products or systems which provide a function allowing voice communication and which do not themselves provide a TTY functionality shall provide a standard non-acoustic connection point for TTYs. Microphones shall be capable of being turned on and off to allow the user to intermix speech with TTY use.	Not applicable	
(b) Telecommunications products which include voice communication functionality shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols.	Not applicable	
(c) Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs.	Not applicable	
(d) Voice mail, messaging, auto-attendant, and interactive voice response telecommunications systems that require a response from a user within a time interval, shall give an alert when the time interval is about to run out, and shall provide sufficient time for the user to indicate more time is required.	Not applicable	
(e) Where provided, caller identification and similar telecommunications functions shall also be available for users of TTYs, and for users who cannot see displays.	Not applicable	
(f) For transmitted voice signals, telecommunications products shall provide a gain adjustable up to a minimum of 20 dB. For incremental volume control, at least one intermediate step of 12 dB of gain shall be provided.	Not applicable	
(g) If the telecommunications product allows a user to adjust the receive volume, a function shall be provided to automatically reset the volume to the default level after every use.	Not applicable	
(h) Where a telecommunications product delivers output by an audio transducer which is normally held up to the ear, a means for effective magnetic wireless coupling to hearing technologies shall be provided.	Not applicable	

Criteria	Supporting Features	Remarks and explanations
(i) Interference to hearing technologies (including hearing aids, cochlear implants, and assistive listening devices) shall be reduced to the lowest possible level that allows a user of hearing technologies to utilize the telecommunications product.	Not applicable	
(j) Products that transmit or conduct information or communication, shall pass through cross-manufacturer, non-proprietary, industry-standard codes, translation protocols, formats or other information necessary to provide the information or communication in a usable format. Technologies which use encoding, signal compression, format transformation, or similar techniques shall not remove information needed for access or shall restore it upon delivery.	Not applicable	
(k)(1) Products which have mechanically operated controls or keys shall comply with the following: Controls and Keys shall be tactilely discernible without activating the controls or keys.	Supported with exception	<p>The built-in VoiceOver screen reader provides audio and visual feedback for touchscreen controls without requiring the user to activate them.</p> <p>The Home, Sleep/Wake, Side Switch and Volume rocker switch are also tactilely discernible.</p> <p>The Volume rocker switch must be pressed to determine the current volume setting.</p>
(k)(2) Products which have mechanically operated controls or keys shall comply with the following: Controls and Keys shall be operable with one hand and shall not require tight grasping, pinching, twisting of the wrist. The force required to activate controls and keys shall be 5 lbs. (22.2N) maximum.	Supported	
(k)(3) Products which have mechanically operated controls or keys shall comply with the following: If key repeat is supported, the delay before repeat shall be adjustable to at least 2 seconds. Key repeat rate shall be adjustable to 2 seconds per character.	Not applicable	<p>iPad uses a non-mechanical, onscreen keyboard. An external Bluetooth wireless keyboard (available separately) can also be used for text input.</p> <p>Key repeat is only supported on the delete key. The repeat rate and delay before repeat are not adjustable.</p>
(k)(4) Products which have mechanically operated controls or keys shall comply with the following: The status of all locking or toggle controls or keys shall be visually discernible, and discernible either through touch or sound.	Supported	<p>The side-switch is the only locking mechanical switch. It can be locked in two positions which are visually, and physically discernible.</p>

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## Section 1194.25 Self-Contained, Closed Products – Detail

Criteria	Supporting Features	Remarks and explanations
(a) Self contained products shall be usable by people with disabilities without requiring an end-user to attach Assistive Technology to the product. Personal headsets for private listening are not Assistive Technology.	Supported	To learn more about all of the accessibility features of iPad, visit <a href="http://www.apple.com/accessibility">http://www.apple.com/accessibility</a>
(b) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Supported	iPad includes an auto-lock feature that is on by default and locks the screen after a period of inactivity. But it can be disabled in the Settings app using the setting "never".
(c) Where a product utilizes touchscreens or contact-sensitive controls, an input method shall be provided that complies with §1194.23 (k) (1) through (4).	Supported with exceptions	Refer to §1194.23 (k) (1) through (4).
(d) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.	Not applicable	
(e) When products provide auditory output, the audio signal shall be provided at a standard signal level through an industry standard connector that will allow for private listening. The product must provide the ability to interrupt, pause, and restart the audio at anytime.	Supported	The iPad uses an industry standard 3.5mm audio headphone jack and supports wireless Bluetooth headsets.  iPad also supports "line-out" audio via the iPad 2 Dock (sold separately)  Interrupt, pause and restart for controlling audio output is also supported.
(f) When products deliver voice output in a public area, incremental volume control shall be provided with output amplification up to a level of at least 65 dB. Where the ambient noise level of the environment is above 45 dB, a volume gain of at least 20 dB above the ambient level shall be user selectable. A function shall be provided to automatically reset the volume to the default level after every use.	Not supported	
(g) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supported	

Criteria	Supporting Features	Remarks and explanations
(h) When a product permits a user to adjust color and contrast settings, a range of color selections capable of producing a variety of contrast levels shall be provided.	Supported with exception	iPad provides adjustable brightness and a setting to reverse video (white on black or black on white) but does not provide user-adjustable color selections
(i) Products shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	Supported	
(j) (1) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: The position of any operable control shall be determined with respect to a vertical plane, which is 48 inches in length, centered on the operable control, and at the maximum protrusion of the product within the 48 inch length on products which are freestanding, non-portable, and intended to be used in one location and which have operable controls.	Not applicable	
(j)(2) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Where any operable control is 10 inches or less behind the reference plane, the height shall be 54 inches maximum and 15 inches minimum above the floor.	Not applicable	
(j)(3) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Where any operable control is more than 10 inches and not more than 24 inches behind the reference plane, the height shall be 46 inches maximum and 15 inches minimum above the floor.	Not applicable	
(j)(4) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Operable controls shall not be more than 24 inches behind the reference plane.	Not applicable	

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## Section 1194.26 Desktop and Portable Computers – Detail

Criteria	Supporting Features	Remarks and explanations
(a) All mechanically operated controls and keys shall comply with §1194.23 (k) (1) through (4).	Supported with exceptions	Refer to §1194.23 (k) (1) through (4).
(b) If a product utilizes touchscreens or touch-operated controls, an input method shall be provided that complies with §1194.23 (k) (1) through (4).	Supported with exceptions	Refer to §1194.23 (k) (1) through (4).
(c) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.	Not applicable	
(d) Where provided, at least one of each type of expansion slots, ports and connectors shall comply with publicly available industry standards	Supported through equivalent facilitation	The iPad dock connector is proprietary but is the same used in the iPod and iPhone and is licensed by Apple for use in third-party products. It is compatible with industry standard Universal Serial Bus (USB).

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## Section 1194.31 Functional Performance Criteria – Detail

Criteria	Supporting Features	Remarks and explanations
(a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for Assistive Technology used by people who are blind or visually impaired shall be provided.	Supported	<p>iPad includes a built-in screen reader called VoiceOver that enables iPad to be used by those who are blind or visually impaired. VoiceOver is available in over 30 languages. For more information about VoiceOver on iPad, visit <a href="http://www.apple.com/accessibility">www.apple.com/accessibility</a></p> <p>iPad supports more than 30 Bluetooth wireless braille displays (sold separately) and braille tables for more than 20 languages. Some braille displays provide input buttons that can be used in addition to iPad's on screen controls.</p>
(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided.	Supported	<p>iPad includes a feature called Zoom, which provides full-screen magnification up to 500%. For more information about Zoom, visit <a href="http://www.apple.com/accessibility">www.apple.com/accessibility</a></p>
(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provided	Supported	<p>FaceTime video-conferencing can be used for sign-language communication. IP-relay apps are also available separately from the App Store (fees may apply).</p> <p>iMessage enables unlimited text messaging via WiFi or 3G between iOS 5 users and can include photos, videos, contacts, and locations.</p> <p>iPad also supports playback of closed caption content and subtitles (when available).</p>
(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.	Supported	<p>iPad includes a featured called "mono audio" that plays stereo left and right audio channels in both ears.</p> <p>iPad is compatible with ear loop devices (such as TecEar music link) and Bluetooth enabled hearing aid solutions (such as Oticon streamer) that enable the use of some T-coil hearing aids. For more information about iPad accessibility features and solutions, visit <a href="http://www.apple.com/accessibility">www.apple.com/accessibility</a></p>
(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided.	Supported	

Criteria	Supporting Features	Remarks and explanations
<p>(f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.</p>	<p>Supported</p>	<p>Using the iPad touchscreen requires the use of a bare finger or compatible conductive device such as a stylus (sold separately). For those who cannot enter Multi-Touch gestures that require two or more fingers, iPad includes AssistiveTouch which can be used with only one finger, and supports gesture input from adaptive devices.</p> <p>A wireless Bluetooth keyboard can also be used for text input, in addition to, or in place of, the onscreen keyboard.</p> <p>The integrated VoiceOver screen reader can be controlled using a Bluetooth wireless keyboard. Some Bluetooth wireless braille displays provide input buttons that can be used in addition to iPad's on screen controls.</p> <p>For more information about iPad accessibility features and solutions, see <a href="http://www.apple.com/accessibility">www.apple.com/accessibility</a></p>

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## Section 1194.41 Information, Documentation and Support – Detail

Criteria	Supporting Features	Remarks and explanations
<p>(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge</p>	<p>Supported</p>	<p>Product documentation is available using the Safari browser on Pad, in accessible HTML via the web and can be read on-screen using the built-in screen reader VoiceOver.</p> <p>Product documentation is also available in accessible ePUB format and can be read using the downloadable iBooks app (available at no charge), including being read aloud using VoiceOver on the iPad.</p> <p>Product and support documentation are also available on the Web in an HTML and PDF format that is compatible with screen readers for the blind and visually impaired, can be displayed in large print using web browsers and software magnifiers for those with low vision at <a href="http://www.apple.com/support/">http://www.apple.com/support/</a> and can be printed using a personal computer and suitable printing device (sold separately).</p>
<p>(b) End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.</p>	<p>Supported</p>	<p>Information about Apple product accessibility and compatibility features is available on the Web in an accessible HTML format and in ePUB format that is compatible with screen readers for the blind and visually impaired, including the built-in iPad screen reader VoiceOver, can be displayed in large print using web browsers and software magnifiers for those with low vision at <a href="http://www.apple.com/accessibility">http://www.apple.com/accessibility</a> and can be printed using a personal computer and suitable printing device (sold separately).</p>
<p>(c) Support services for products shall accommodate the communication needs of end-users with disabilities.</p>	<p>Supported</p>	<p>E-mail, telephone, and support via the Web are available.</p>

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