



Section 508 Conformance Audit
Voluntary Product Accessibility Template
Dell™ Projector S320wi

Dell Inc.
One Dell Way
Round Rock, TX 78682

Section 508 Evaluation Template

This Voluntary Product Accessibility Template (VPAT) provides guidance on the accessibility characteristics of the **Dell™ Projector S320wi** as of **October 20, 2012**.

Name of Product: Dell™ Projector S320wi

Covered items: S320wi projector hardware, Web management interface, Conference Control and S320wi software application.

The current version of the **Dell™ Projector S320wi** was tested for conformance with Section 508 of the Rehabilitation Act, specifically, the Access Board's Technical Requirements. This product was tested as of **October 18, 2012** and is only valid for the version and date it was tested.

VPAT™ Summary Table
Voluntary Product Accessibility Template®

VPAT Summary	Total Standards	Total Applicable Standard	Supports	Exceptions
Section 1194.21 Software Applications and Operating Systems	12	12	9	3
Section 1194.22 Web-based Internet Information and Applications	16	9	2	7
Section 1194.23 Telecommunications Products	14	3	3	0
Section 1194.24 Video and Multi-media Products	5	0	0	0
Section 1194.25 Self-Contained, Closed Products	13	10	9	1
Section 1194.26 Desktop and Portable Computers	4	3	3	0
Section 1194.31 Functional Performance Criteria	6	6	4	2
Section 1194.41 Information, Documentation and Support	3	3	3	0
Total	73	46	33	13

**Section 1194.21 Software Applications and Operating Systems --
Detail
VPAT™
Voluntary Product Accessibility Template®**

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>Supports with Exceptions</p>	<p>The on-screen display (OSD) utility is controlled by tactilely discernible buttons on a remote.</p> <p>The web management is keyboard accessible for conducting management tasks.</p> <p>The S320wi Presentation software is keyboard operable.</p> <p>The Conference Control and Cestrum remote plug-in are not keyboard accessible.</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>Supports</p>	<p>The projector, OSD and S320wi Presentation software and web interface do not disrupt or disable accessibility features of attached products, e.g., Microsoft Windows PC and Microsoft Windows Operating System.</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</p>	<p>Supports</p>	<p>The web management, Conference Control and S320wi Presentation software have an on-screen focus which is visually discernible and can be tracked by assistive technology.</p> <p>Note: The projector only displays images from the device to which it is attached.</p>

<p>track focus and focus changes.</p> <p>(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.</p> <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.</p> <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.</p>	<p>Supports with Exceptions</p> <p>Supports</p> <p>Supports</p>	<p>The web management of administrative functions is accessible to assistive technology.</p> <p>The Conference Control, S320wi presentation software and Cestron remote plug-in do not provide accessibility information to assistive technology for buttons and controls.</p> <p>Note: The projector hardware only displays images from the device to which it is attached.</p> <p>The images used to identify controls, status indicators, and programmatic elements are consistent and maintain their meanings.</p> <p>The S320wi Presentation software displays text using operating system functions.</p> <p>The web management interface uses the accessing web browser to display textual information.</p> <p>Note: The projector hardware only displays images and/or text from the device to which it is attached.</p>
<p>(g) Applications shall not override user selected contrast and color selections and other individual display attributes.</p>	<p>Supports</p>	<p>The projector, OSD, web management interface and S320wi Presentation software do not override user selected contrast and color selections and other individual display attributes.</p>
<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.</p> <p>(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.</p>	<p>Supports</p> <p>Supports</p>	<p>No animation is displayed by OSD, web management, Conference Control and S320wi presentation software.</p> <p>Color coding is not used as the only means of conveying information.</p>

<p>(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.</p>	<p>Supports</p>	<p>OSD allows users to adjust color and contrast settings</p>
<p>(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.</p>	<p>Supports</p>	<p>OSD, web management, Conference Control and S320wi Presentation software do not contain flashing or blinking text, objects, or other elements.</p>
<p>(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.</p>	<p>Supports with Exceptions</p>	<p>The S320wi presentation software dialog cannot be read by assistive technology. Its main interactive screen is inaccessible to screen reader assistive technology.</p> <p>The web management screens contain form fields that are not explicitly labeled with HTML markup.</p>

**Section 1194.22 Web-based Internet information and applications --
Detail
VPAT™
Voluntary Product Accessibility Template®**

Criteria	Supporting Features	Remarks and explanations
<p>(a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).</p>	<p>Does Not Support</p>	<p>The logo graphic does not have an ALT attribute.</p> <p>The graphics in the Conference Control do not have text equivalents.</p>
<p>(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.</p>	<p>Not Applicable</p>	<p>Multimedia is not present.</p>
<p>(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.</p>	<p>Supports</p>	<p>Color coding is not used as the sole means of conveying information.</p>
<p>(d) Documents shall be organized so they are readable without requiring an associated style sheet.</p>	<p>Supports with Exceptions</p>	<p>The web pages can be read without style sheets.</p> <p>The headings do not have heading markup</p>

		and are not conveyed to assistive technology.
(e) Redundant text links shall be provided for each active region of a server-side image map.	Not Applicable	Server-side image maps are not used.
(f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	Not Applicable	Server and client-side image maps are not used.
(g) Row and column headers shall be identified for data tables.	Does Not Support	Header cells for rows and columns in data tables are not identified with HTML markup.
(h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	Not Applicable	Data tables with multiple levels are not used.
(i) Frames shall be titled with text that facilitates frame identification and navigation	Does Not Support	Frames are not titled.
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	Supports	Flickering does not occur within the prohibited range.
(k) A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	Not Applicable	A text-only page is not applicable for displaying an interactive web application.
(l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology.	Not Applicable	Client-side scripting is not used to display user interface elements.
(m) When a web page requires	Does Not	The Cestron flash plug-in used for the on-

<p>that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that complies with §1194.21(a) through (l).</p>	<p>Support</p>	<p>screen remote is not accessible.</p>
<p>(n) When electronic forms are designed to be completed on-line, 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.</p>	<p>Supports with Exceptions</p>	<p>Form fields are keyboard accessible. Form fields are not explicitly labeled.</p>
<p>(o) A method shall be provided that permits users to skip repetitive navigation links.</p>	<p>Supports with Exceptions</p>	<p>The menu links are inside a frame, thus frame skipping keystrokes may be used in some cases. A skip navigation link or landmark is not provided.</p>
<p>(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.</p>	<p>Not Applicable</p>	<p>A timed response is not required by the web application.</p>

Note to 1194.22: The Board interprets paragraphs (a) through (k) of this section as consistent with the following priority 1 Checkpoints of the Web Content Accessibility Guidelines 1.0 (WCAG 1.0) (May 5 1999) published by the Web Accessibility Initiative of the World Wide Web Consortium: Paragraph (a) - 1.1, (b) - 1.4, (c) - 2.1, (d) - 6.1, (e) - 1.2, (f) - 9.1, (g) - 5.1, (h) - 5.2, (i) - 12.1, (j) - 7.1, (k) - 11.4.

Section 1194.23 Telecommunications Products – Detail
VPAT™
Voluntary Product Accessibility Template®

Criteria	Supporting Features	Remarks and explanations
<p>(a) Telecommunications products or systems which provide a function allowing voice communication and which do not themselves provide a TTY functionality shall provide a</p>	<p>Not Applicable</p>	<p>Not a Telecommunications Product. Does not provide voice communication functionality.</p>

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.

(b) Telecommunications products which include voice communication functionality shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols.

(c) Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs.

(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.

(e) Where provided, caller identification and similar telecommunications functions shall also be available for users of TTYs, and for users who cannot see displays.

(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.

(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

Not
Applicable

Not a Telecommunications Product. Does not provide voice communication functionality.

Not
Applicable

Not a Telecommunications Product. Does not contain Voice mail, auto-attendant, and interactive voice response telecommunications systems.

Not
Applicable

Not a Telecommunications Product. Does not contain Voice mail, auto-attendant, and interactive voice response telecommunications systems.

Not
Applicable

Not a Telecommunications Product. Does not contain telecommunications functionality such as caller ID.

Not
Applicable

Not a Telecommunications Product. Does not transmit voice signals.

Not
Applicable

Not a Telecommunications Product.

level after every use.

(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

Not a Telecommunications Product. Does not deliver audio output.

(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

Not a Telecommunications Product.

(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

Not a Telecommunications Product.

(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.

Supports

Controls and keys are tactilely discernible without activating the controls or keys.

(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

Supports

Controls and keys on the projector and accompanying pointer pen are operable with one hand and do not require tight grasping, pinching, or twisting of the wrist.

The force required to activate controls and keys is less than 5LBS.

<p>activate controls and keys shall be 5 lbs. (22.2N) maximum.</p>		
<p>(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.</p>	<p>Not Applicable</p>	<p>No key repeat.</p>
<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.</p>	<p>Supports</p>	<p>The status of all locking or toggle control or keys is visually discernible, and discernible through sound (a tone is played at power up and power down, and the fans on the projector).</p>

**Section 1194.24 Video and Multi-media Products – Detail
VPAT™
Voluntary Product Accessibility Template®**

Criteria	Supporting Features	Remarks and explanations
<p>(a) All analog television displays 13 inches and larger, and computer equipment that includes analog television receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals. As soon as practicable, but not later than July 1, 2002, widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and stand-alone DTV tuners, whether or not they are marketed with display screens, and computer</p>	<p>Not Applicable</p>	<p>This product is not a Video or Multi-Media Product. Does not have analog receiver or display circuitry.</p>

<p>equipment that includes DTV receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.</p>	<p>Not Applicable</p>	<p>This product is not a Video or Multi-Media Product. Does not have tuner capabilities.</p>
<p>(b) Television tuners, including tuner cards for use in computers, shall be equipped with secondary audio program playback circuitry.</p>	<p>Not Applicable</p>	<p>This product is not a Video or Multi-Media Product. Does not have tuner capabilities.</p>
<p>(c) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content, shall be open or closed captioned.</p>	<p>Not Applicable</p>	<p>This product is not a Video or Multi-Media Product. No training, informational videos or multimedia is provided with this product.</p>
<p>(d) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.</p>	<p>Not Applicable</p>	<p>This product is not a Video or Multi-Media Product. This product contains no user required multimedia presentations.</p>
<p>(e) Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent.</p>	<p>Not Applicable</p>	<p>Displays image from device to which it is attached.</p>

**Section 1194.25 Self-Contained, Closed Products – Detail
VPAT™
Voluntary Product Accessibility Template®**

Criteria	Supporting Features	Remarks and explanations
<p>(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</p>	<p>Supports with Exceptions</p>	<p>The On Screen Display (OSD) utility is firmware that is housed within the projector. The OSD is designed to be used by selecting the buttons on the remote control.</p>

listening are not Assistive Technology.

(b) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.

Supports

There is no audio feedback for blind users.

The projector has a web-based control panel which provides access to a subset of features of the on-screen display utility.

The software also contains a Conference Control which allows wireless broadcasting of presentations; this is not accessible to screen reader users.

The on-screen menu displays for a certain length of time. The time limit is user adjustable and provides sufficient time for navigating the menu.

Controls and keys are tactilely discernible without activating the controls or keys.

Controls and keys are operable with one hand and do not require tight grasping, pinching, or twisting of the wrist.

(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).

Supports

The force required to activate controls and keys is less than 5LBS.

No key repeat.

The status of all locking or toggle control or keys is visually discernible, and discernible either through touch or sound. (The fan is audible when the projector is powered on and tones are played at power-up and power-down).

(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

No biometric forms used for user identification or control.

(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

Not Applicable

The projector does not support audio output in its operation.

Note: It does serve as a pass-through for other audio devices.

<p>audio at any time.</p> <p>(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.</p>	<p>Not Applicable</p>	<p>The projector does not provide voice output as part of its operation.</p>
<p>(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.</p>	<p>Supports</p>	<p>Color coding is not used as the sole means of conveying information.</p>
<p>(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.</p>	<p>Supports</p>	<p>OSD allows users to adjust color and contrast settings</p>
<p>(i) Products shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.</p>	<p>Supports</p>	<p>Flickering does not occur in the prohibited range.</p>
<p>(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</p>	<p>Supports</p>	<p>The position of operable controls with respect to a vertical plane is 48 inches in length, centered on the operable control, and at the maximum protrusion of the product within the 48 inch length.</p>

controls.

(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.

Supports

Controls are between 15" and 54" from the floor and are within 10" of the reference plane.

(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.

Supports

Projector controls are between 10 inches and 24 inches from the reference plane (front-most of the machine). Controls are between 15" and 46" from the floor.

(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.

Supports

Controls are not more than 24 inches behind the reference plane.

**Section 1194.26 Desktop and Portable Computers – Detail
VPAT™
Voluntary Product Accessibility Template®**

Criteria	Supporting Features	Remarks and explanations
(a) All mechanically operated controls and keys shall comply with §1194.23 (k) (1) through (4).	Supports	<p>Controls and keys are tactilely discernible without activating the controls or keys.</p> <p>Controls and keys are operable with one hand and do not require tight grasping, pinching, or twisting of the wrist.</p>

(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).

Supports

The force required to activate controls and keys is less than 5LBS.

No key repeat.

The status of all locking or toggle control or keys is visually discernible, and discernible either through touch or sound. (The fan is audible and a tone is played when the projector is powered on and off).

The product does not utilize touchscreen or touch sensitive controls. Controls and keys are tactilely discernible without activating the controls or keys.

Controls and keys are operable with one hand and do not require tight grasping, pinching, or twisting of the wrist.

The force required to activate controls and keys is less than 5LBS.

No key repeat.

The status of all locking or toggle control or keys is visually discernible, and discernible either through touch or sound. (The fan is audible and a tone is played when the projector is powered on and off).

(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

Product does not use biometric forms of user identification or control.

(d) Where provided, at least one of each type of expansion slots, ports and connectors shall comply with publicly available industry standards

Supports

Expansion slots, ports and connectors comply with publicly available industry standards.

Section 1194.31 Functional Performance Criteria – Detail
VPAT™
Voluntary Product Accessibility Template®

Criteria	Supporting Features	Remarks and explanations
<p>(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.</p>	<p>Supports with Exceptions</p>	<p>The projector is equipped with an on-board web interface and is accessible over a network. The web interface contains some of the features of the on-screen display utility. The web interface can be used by screen reader users.</p> <p>The web interface does contain some Section 508 exceptions such as form fields are not explicitly labeled. The Conference Control and S320wi presentation software which allows for wireless presenting is not accessible to screen readers.</p>
<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.</p>	<p>Supports</p>	<p>The projector including its on-screen display utility, web management and Conference Control and S320wi presentation software can be used by users with a visual acuity of 20/70.</p>
<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</p>	<p>Supports</p>	<p>User hearing is not required.</p>
<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.</p>	<p>Supports</p>	<p>User hearing is not required.</p>
<p>(e) At least one mode of operation and information</p>	<p>Supports</p>	<p>User speech is not required.</p>

- Dell™ Projector S320wi

retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided.

(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.

Supports
with
Exceptions

Fine motor control and simultaneous actions are not required for operation of the hardware. Controls and keys can be operated with limited reach and strength.

The Conference Control plug-in is not keyboard operable.

Section 1194.41 Information, Documentation and Support – Detail VPAT™ Voluntary Product Accessibility Template®

Criteria	Supporting Features	Remarks and explanations
(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge	Supports	Alternative forms of access to product support documentation in alternative formats are currently available by contacting Dell Customer and Technical Support: http://support.dell.com at no additional charge to the end user.
(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.	Supports	Alternative forms of access to descriptions of the accessibility and compatibility features in alternative formats are currently available via Dell Customer Support and Technical Support Services: http://support.dell.com at no additional charge to the end user.
(c) Support services for products shall accommodate the communication needs of end-users with disabilities.	Supports	Dell Provides support for Technical Support via Online Chat, Telephone and E-mail. Dell has a dedicated TTY line available.