

Section 508 Conformance Audit Voluntary Product Accessibility Template

Marketing Name: Dell Display P2217H, with display manager

Dell Inc. One Dell Way Round Rock, TX 78682 Reviewed by:

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 | 10 | 6 | 4 |
| Section 1194.22 Web-based Internet Information and Applications | 16 | 0 | 0 | 0 |
| 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 | 0 | 0 | 0 |
| Section 1194.26 Desktop and Portable Computers | 4 | 2 | 2 | 0 |
| Section 1194.31 Functional Performance Criteria | 6 | 6 | 3 | 3 |
| Section 1194.41 Information, Documentation and Support | 3 | 3 | 3 | 0 |
| Total | 73 | 24 | 17 | 7 |

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

| Criteria | Supporting Features | Remarks and explanations |
|--|--------------------------------|--|
| (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. | Supports with Exceptions | Product is designed to be used with the Dell Display Manager (DDM) Windows® application. All functions of the DDM can be executed via the keyboard, and DDM is not known to interfere with any Windows® OS keyboard accessibility features (e.g. |

| | | sticky keys, filter keys, toggle keys), documented in Microsoft VPATs. A rating of Supports with Exceptions is given because the tab order on some DDM screens is not intuitive. |
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| (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. | Supports | The DDM application is not known to interfere with, disrupt or disable any Windows® OS accessibility features, documented in Microsoft VPATs. |
| (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. | Supports with Exceptions | The DDM application exposes visual and programmatic focus for most controls. A rating of Supports with Exceptions is given because focus is not indicated visually when the adjustment sliders receive focus. |
| (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. | Supports with Exceptions | The DDM application exposes name, role, state and value information for most controls. A rating of Supports with Exceptions is given because some sliders and combo boxes within the application are missing accessible names. |
| (e) When bitmap images are used to identify controls, status | Supports | In the DDM application, bitmap images used to identify controls, |

| | status indicators, or programmatic elements are consistent and maintain their meanings. |
|-------------------|---|
| Supports | The DDM application's textual information is provided through Windows® OS functions for displaying text. |
| Supports | The DDM application does not override user selected contrast and color selections set in Windows® OS and other individual display attributes when the display is connected to a computer and displaying for the computer. |
| Not Applicable | No animation is displayed by DDM application. No animation is displayed by Dell Driver Installation on CD. |
| Supports | Color coding is not used as the only means of conveying information in the DDM application. |
| Not Applicable | The DDM application does not permit the user to adjust color and contrast settings within the application. |
| Supports | The DDM application not contain flashing or blinking text, objects, or other elements. The Dell Driver Installation on CD does not contain flashing or blinking text, objects, or other elements. |
| | Supports Not Applicable Supports Not Applicable |

| (I) When electronic forms are used, the form shall allow |
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| 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. |

Supports with Exceptions

Most form fields within the DDM application can be accessed by users of assistive technologies. A rating of Supports with Exceptions is given because some sliders and combo boxes within the application are missing accessible names. The tab order of some form elements within the application is not intuitive.

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

| Criteria | Supporting Features | Remarks and explanations |
|--|------------------------|---|
| (a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content). | Not Applicable | This product is a display monitor, and does not contain any web-based internet information or applications. |
| (b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation. | Not Applicable | This product is a display monitor, and does not contain any web-based internet information or applications. |
| (c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup. | Not Applicable | This product is a display monitor, and does not contain any web-based internet information or applications. |
| (d) Documents shall be organized so they are readable without requiring an associated style sheet. | Not Applicable | This product is a display monitor, and does not contain any web-based internet information or applications. |
| (e) Redundant text links shall be provided for each active region of a server-side image map. | Not Applicable | This product is a display monitor, and does not contain any web-based internet information or applications. |
| (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 | This product is a display monitor, and does not contain any web-based internet information or applications. |

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| (g) Row and column headers shall be identified for data tables. | Not Applicable | This product is a display monitor, and does not contain any web-based internet information or applications. |
| (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 | This product is a display monitor, and does not contain any web-based internet information or applications. |
| (i) Frames shall be titled with text that facilitates frame identification and navigation | Not Applicable | This product is a display monitor, and does not contain any web-based internet information or applications. |
| (j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz. | Not Applicable | This product is a display monitor, and does not contain any web-based internet information or applications. |
| (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 | This product is a display monitor, and does not contain any web-based internet information or applications. |
| (I) 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 | This product is a display monitor, and does not contain any web-based internet information or applications. |
| (m) When a web page requires 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). | Not Applicable | This product is a display monitor, and does not contain any web-based internet information or applications. |
| (n) When electronic forms are designed to be completed online, the form shall allow people using Assistive Technology to | Not Applicable | This product is a display monitor, and does not contain any web-based internet information or applications. |

| access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues. | | |
|--|-------------------|---|
| (o) A method shall be provided that permits users to skip repetitive navigation links. | Not Applicable | This product is a display monitor, and does not contain any web-based internet information or applications. |
| (p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required. | Not Applicable | This product is a display monitor, and does not contain any web-based internet information or applications. |

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®

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|--|------------------------|--|--|
| 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 | This product is a display monitor, not a Telecommunications Product. The product does not provide voice communication functionality. | |
| (b) Telecommunications products which include voice communication functionality shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols. | Not Applicable | This product is a display monitor, not a Telecommunications Product. The product does not provide voice communication functionality. | |

| (c) Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs. | Not Applicable | This product is a display monitor, not a Telecommunications Product. The product does not provide voice mail, auto-attendant, or interactive voice response functionality. |
|--|-------------------|--|
| (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 | This product is a display monitor, not a Telecommunications Product. The product does not provide voice mail, auto-attendant, or interactive voice response functionality. |
| (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 | This product is a display monitor, not a Telecommunications Product. The product does not provide caller identification or similar telecommunications functionality. |
| (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 | This product is a display monitor, not a Telecommunications Product. The product does not transmit voice signals. |
| (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 | This product is a display monitor, not a Telecommunications Product. |
| (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 | This product is a display monitor, not a Telecommunications Product. The product does not deliver audio output. |
| (i) Interference to hearing technologies (including hearing aids, cochlear implants, and | Not Applicable | This product is a display monitor, not a Telecommunications Product. |

| assistive listening devices) shall be reduced to the lowest possible level that allows a user of hearing technologies to utilize the telecommunications product. | | |
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| (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 | This product is a display monitor, 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 | All buttons can be discerned tactilely without activating the control. |
| (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. | Supports | Controls and keys may be triggered with one hand and do not require tight grasping, pinching or twisting of the wrist. Controls and keys may be activated using less than 5 pound of force (pressure). |
| (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 | Product does not offer key repeat function. |

| (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. | Supports through Equivalent Facilitation | The status of toggle keys is visually discernible via illumination of the key. The state of the power button via a clicking sound when depressed |
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Section 1194.24 Video and Multi-media Products – Detail VPAT™ Voluntary Product Accessibility Template®

| Criteria | Supporting Features | Remarks and explanations |
|--|------------------------|---|
| (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 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. | Not Applicable | This product does not have analog television receiver or display circuitry. |
| (b) Television tuners, including tuner cards for use in computers, shall be equipped | Not Applicable | The product does not include a television tuner. |

| with secondary audio program playback circuitry. | | |
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| (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. | Not Applicable | This product contains no training, informational videos or multimedia presentations. |
| (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. | Not Applicable | This product contains no training, informational videos or multimedia presentations. |
| (e) Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent. | Not Applicable | This product contains no training, informational videos or multimedia presentations, and no display or presentation of alternative text presentation or audio descriptions. |

Section 1194.25 Self-Contained, Closed Products – Detail **VPAT**TM Voluntary Product Accessibility Template® Supporting Criteria **Remarks and explanations Features** This product is not a Self-Contained, Closed Product. The product is designed to be used only as an (a) Self contained products shall attachment to a computer that can run be usable by people with Windows® OS or another OS with disabilities without requiring an accessibility features and compatible end-user to attach Assistive Not assistive technologies. Technology to the product. applicable Personal headsets for private The product does contain an onlistening are not Assistive screen display (OSD), firmware Technology. housed in the monitor, that is accessed by selecting buttons on the front of the monitor. For users of

| | | assistive technologies, the Windows® based DDM application provides access to most of the functionality provided by the OSD. |
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| (b) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required. | Not applicable | This product is not a Self-Contained, Closed Product. The product is designed to be used only as an attachment to a computer that can run Windows® OS or another OS with accessibility features and compatible assistive technologies. The product's OSD menu appears for 20 seconds then disappears if no response is received from the user. For users of assistive technologies, the Windows® based DDM application can be used to adjust some of the settings if additional time is required. |
| (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). | Not Applicable | This product is not a Self-Contained, Closed Product, and it does not utilize a touchscreen or contact-sensitive controls. |
| (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 | This product is not a Self-Contained, Closed Product, and it does not employ 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 audio at anytime. | Not Applicable | This product is not a Self-Contained, Closed Product, and it does not support audio output. |

| (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 Applicable | This product is not a Self-Contained, Closed Product, and it does not provide voice output. |
|--|-------------------|--|
| (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. | Not Applicable | This product is not a Self-Contained, Closed Product, and it does not use color coding as the sole means of conveying information in the OSD. |
| (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. | Not Applicable | This product is not a Self-Contained, Closed Product. The OSD firmware utility does provide a limited number of color and contrast settings. |
| (i) Products shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz. | Not Applicable | This product is not a Self-Contained, Closed Product. The OSD product does not blink in the prohibited range. |
| (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 | This product is not a Self-Contained, Closed Product. The product is not freestanding, non-portable or intended to be used in one location. |

| (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 | Not Applicable | This product is not a Self-Contained, Closed Product. The product is not freestanding, non-portable or intended to be used in one location. |
|--|-------------------|--|
| maximum and 15 inches minimum above the floor. | | |
| (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 | This product is not a Self-Contained, Closed Product. The product is not freestanding, non-portable or intended to be used in one location. |
| (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 | This product is not a Self-Contained, Closed Product. The product is not freestanding, non-portable or intended to be used in one location. |

| Section 1194.26 Desktop and Portable Computers – Detail VPAT™ Voluntary Product Accessibility Template® | | |
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| Criteria | Supporting Features | Remarks and explanations |
| (a) All mechanically operated controls and keys shall comply with §1194.23 (k) (1) through (4). | Supports through Equivalent Facilitation | All buttons are tactilely discernible. Controls are not touch sensitive. 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 5 lbs. No key repeat. The status of toggle controls is indicated visually. The status of the power button can be determined audibly via a clicking sound |
|---|-------------------|--|
| (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). | Not Applicable | This product does not include a touchscreen or any touch-operated controls. |
| (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 | No biometric forms used for 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 |
|--|--------------------------------|---|
| (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. | Supports with Exceptions | This product allows some monitor settings to be adjusted through the Windows® based DDM application. A rating of Supports with Exceptions is given because some settings available through the on-screen display (OSD) software embedded on the display cannot be adjusted using the DDM application. As noted in §1194.21 (d) and (l), some sliders and combo boxes in the DDM application |

| | | are missing accessible names. As noted in §1194.21 (a) and (l), the tab order of some form elements in the DDM application is not intuitive. |
|---|--------------------------------|---|
| (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. | Supports with Exceptions | This product allows some monitor settings to be adjusted through the Windows® based DDM application. A rating of Supports with Exceptions is given because some settings available through the on-screen display (OSD) software embedded on the display cannot be adjusted using the DDM application. As noted in §1194.21 (d) and (l), some sliders and combo boxes in the DDM application are missing accessible names. As noted in §1194.21 (a) and (l), the tab order of some form elements in the DDM application is not intuitive. As noted under §1194.21 (c), keyboard focus is not indicated visually when focus is set to the adjustment sliders. |
| (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 | Supports | This product does not require user hearing for operation. |
| (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. | Supports | This product does not require user hearing for operation. |
| (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. | Supports | This product does not require user speech for operation. |

| (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 | The product does not require fine motor control or simultaneous actions for routine operation. The product can be operated using limited reach and strength for routine functions. A rating of Supports with Exceptions is given for the following reasons: As noted under §1194.21 (a) and (l), the tab order of some form elements within the DDM is not intuitive. As noted under §1194.21 (c), keyboard focus is not indicated visually when the adjustment sliders receive focus. |
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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 endusers 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 endusers with disabilities. | Supports | Dell Provides support for Technical Support via Online Chat, Telephone and E-mail. |