

Date: October 8, 2014

Name of Product: BladeCenter HS23

**VPAT Summary**

Criteria	Status	Remarks and Explanations
Section 1194.21 Software Applications and Operating Systems	Not applicable	Not applicable
Section 1194.22 Web-based Internet information & applications	Not applicable	Not applicable
Section 1194.23 Telecommunications Products	Supports	Refer to Section 1194.23 in VPAT Details section below.
Section 1194.24 Video and Multi-media Products	Not applicable	Not applicable
Section 1194.25 Self-Contained, Closed Products	Supports	Refer to Section 1194.25 in VPAT Details section below.
Section 1194.26 Desktop and Portable Computers	Supports	Refer to Section 1194.26 in VPAT Details section below.
Section 1194.31 Functional Performance Criteria	Supports	Refer to Section 1194.31 in VPAT Details section below.
Section 1194.41 Information, Documentation, and Support	Supports	Refer to Section 1194.41 in VPAT Details section below.

**VPAT Details**

**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 telecommunication 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 receiver 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	Not applicable	

Criteria	Supporting Features	Remarks and Explanations
up to the ear, a means for effective magnetic wireless coupling to hearing technologies shall be provided.		
(i) Interface 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 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.	Supports: Touch can be used to identify and distinguish controls and keys without activating them.	The following component meets this criterion:  - BladeCenter HS23 - Push buttons are designed such that shape and shielding provide tactilely discernible information to user by touch prior to activation force.
(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 latches can be reached and operated using one hand and require minimal dexterity for ease of use by mobility impaired users.	The following component meets this criterion with exceptions:  - BladeCenter HS23 - Controls (power button, KVM selection button, Video selection button) are reachable and operable with one hand and minimal dexterity. Some service tasks (blade installation, blade removal, cover removal, etc.) require two hands. Latches (blade retention in chassis) can be activated with a single hand but blade removal task is much easier with two hands.
(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	The following component does not apply to this criterion:  - BladeCenter HS23 - Product does not support key repeat.
(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.	Not applicable	The following component does not apply to this criterion:  - BladeCenter HS23 - Product does not utilize locking or toggle keys.

## 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.	Not applicable	
(b) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Not applicable	
(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	
(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	Not applicable	The following component does not apply to this criterion:

Criteria	Supporting Features	Remarks and Explanations
will allow for private listening. The product must provide the ability to interrupt, pause, and restart the audio at anytime.		- BladeCenter HS23 - Blade provides no system sounds.
(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	
(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.	Supports: Color is used only as an enhancement, and an alternate means to convey information or indicate an action is available to users with visual impairments.	The following component meets this criterion:  - BladeCenter HS23 - Product uses color as an enhancement, not as the only way to convey information or distinguish between keys, controls, labels, and LED icons.
(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	
(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	
(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.  (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.  (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.  (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	

## 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).	Supports: See 1194.23(k) 1 through 4.	The following component meets this criterion:  - BladeCenter HS23 - Controls (power button, KVM selection button, Video selection button) are reachable and operable with one hand and minimal dexterity. Some service tasks (blade installation, blade removal, cover removal, etc.) require two hands. Latches (blade retention in chassis) can be activated with a single hand but blade removal task

Criteria	Supporting Features	Remarks and Explanations
		is much easier with two hands.
(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	The following component does not apply to this criterion:  - BladeCenter HS23 - Product does not utilize touchscreens or 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	The following component does not apply to this criterion:  - BladeCenter HS23 - Product does not utilize biometric forms of user identification.
(d) Where provided, at least one of each type of expansion slots, ports and connectors shall comply with publicly available industry standards.	Not applicable	The following component does not apply to this criterion:  - BladeCenter HS23 - Due to modular design ports only exist on the BladeCenter level and not the individual Blade level. BladeCenter chassis flavors provide standard USB (keyboard and mouse) ports and standard Video port. Ethernet connections are provided by BladeCenter IO Modules that provide industry standard Ethernet ports. This product is neither a desktop or portable computer. This product is used in back office environments only.

## Section 1194.31 Functional Performance - 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.	Supports:  See the following for supporting features: - 1194.23 k1, k4 - 1194.25 a, b, c, e, f, g - 1194.26 b, d	The following component meets this criterion:  - BladeCenter HS23
(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 what are visually impaired shall be provided.	Not applicable	The following component does not apply to this criterion:  - BladeCenter HS23
(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	The following component meets this criterion:  - BladeCenter HS23
(d) Where audio information is important for the use of the 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	The following component meets this criterion:  - BladeCenter HS23
(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.	Not applicable	The following component does not apply to this criterion:  - BladeCenter HS23
(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:  See the following for supporting features: - 1194.23 k1, k2, k3 - 1194.25 b, j1, j2, j3, j4 - 1194.26 d	The following component meets this criterion:  - BladeCenter HS23

## Section 1194.41 Information, Documentation, and Support - Detail

Criteria	Supporting Features	Remarks and Explanations

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: Product support documentation is provided in at least one accessible format.	<p>The following component meets this criterion:</p> <p>- BladeCenter HS23 - The hardware documentation is in PDF format using a standard template. Minimal or no accessibility testing has been done. If you require an accessible version of the documentation it will be provided to you at no additional cost upon request. If you need an accessible version, send a request to: <a href="mailto:ianlin@tw.ibm.com">ianlin@tw.ibm.com</a>, <a href="mailto:dottieg@us.ibm.com">dottieg@us.ibm.com</a></p> <p>In the request make sure that you include the publication number and title. Alternative text is not provided for all images, but the images are introduced and described in the surrounding text.</p> <p>Headings, sections, lists are used. Bookmarks are provided</p> <p>The only color in the documentation is related to cautions and warnings, in which case the anchor words always accompany the caution or warning icons.</p> <p>Tables use column and row headings to define relationships between cells.</p> <p>The default language of the reader is used.</p> <p>Forms are not used in the document. No flashing images are used.</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.	Supports: Documentation includes a description of accessibility and compatibility features that make it easier for people with disabilities to use the product. Those descriptions are available in alternate formats upon request.	<p>The following component meets this criterion:</p> <p>- BladeCenter HS23 - The documentation includes a section on the accessibility features of the product.</p>
(c) Support services for products shall accommodate the communication needs of end-users with disabilities.	Supports: In addition to standard IBM help desk and support Web sites, IBM has established a TTY telephone service for use by deaf or hard of hearing customers to access sales and support services.	

This document is for informational purposes only. THE INFORMATION PROVIDED IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED. Supporting features apply to product families as a whole. The information shall not be construed as product specifications for purposes of any warranty of compliance with product specifications in a given contract or order. For information on third party software and applications please contact the software manufacturer. Lenovo may make changes to the information in this document or to the products described in this document at any time without notice.