Hewlett-Packard Certificate of Volatility		
Model: HP PageWide MFP Managed E77650zs HP PageWide MFP Managed E77660zs	**Part Number:** J7Z14A J7Z07A 2GP13A 2GP14A	**Address:** Hewlett Packard Company 11311 Chinden Blvd Boise, ID 83714

Volatile Memory				
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? ☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (SRAM, DRAM, etc): DDR3 -DRAM	Size: 5.5 GB	User Modifiable: ☐ Yes ☒ No	Function: Contains decompressed system firmware and print data during printing	Steps to clear memory: When the printer is powered off, the memory is erased.
Type (SRAM, DRAM, etc): DDR3 -DRAM	Size: 2 GB	User Modifiable: ☐ Yes ☒ No	Function: Contains acceleration system software	Steps to clear memory: When the printer is powered off, the memory is erased.
Type (SRAM, DRAM, etc): DDR3 -DRAM	Size: 128 MB	User Modifiable: ☐ Yes ☒ No	Function: Contains decompressed system software	Steps to clear memory: When the printer is powered off, the memory is erased.

Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? ☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (Flash, EEPROM, etc): IOD EEPROM	Size: 64 KB	User Modifiable: ☒ Yes ☐ No	Function: Store customer setting data for backup/restore	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): EEPROM	Size: 32 KB	User Modifiable: ☒ Yes ☐No	Function: Contains system control data, user preferences and variables	Steps to clear memory: User preferences and variables cleared by performing various resets via "Support" menu.
Type (Flash, EEPROM, etc): EEPROM (2 devices)	Size: 64 KB & 64 KB	User Modifiable: ☐ Yes ☒ No	Function: Contains backup of critical system control data and critical user preferences.	Steps to clear memory: Cleared by backing up data from a previously reset system.
Type (Flash, EEPROM, etc): Flash	Size: 128 MB	User Modifiable: ☐ Yes ☒ No	Function: In-Line Finisher System Firmware and firmware upgrade, system control data.	Steps to clear memory: N/A
Type (Flash, EEPROM, etc): Secure EEPROM	Size: 18 KB	User Modifiable: ☐ Yes ☒ No	Function: Contains secure internal printer data.	Steps to clear memory: N/A
Type (Flash, EEPROM, etc): EEPROM (3 devices)	Size: 1 KB 1 KB 64 KB	User Modifiable: ☐ Yes ☒ No	Function: Contains internal printer data	Steps to clear memory: N/A
Type (Flash, EEPROM, etc): Flash	Size: 4 MB	User Modifiable: ☐ Yes ☒ No	Function: System Acceleration Firmware and firmware upgrade	Steps to clear memory: Firmware upgrade
Type (Flash, EEPROM, etc): eMMC	Size: 8 GB	User Modifiable: ☐ Yes ☒ No	Function: System Acceleration Firmware and firmware upgrade	Steps to clear memory: Firmware upgrade
Type (Flash, EEPROM, etc): Flash	Size: 6 KB	User Modifiable: ☐ Yes ☒ No	Function: Contains secure internal printer data.	Steps to clear memory: N/A
Type (Flash, EEPROM, etc): Flash (2 devices)	Size: 8 MB + 8 MB	User Modifiable: ☐ Yes ☒ No	Function: Diagnostic Data Storage, Firmware and firmware upgrade.	Steps to clear memory: N/A

Mass Storage

Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)?
☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below

Type (HDD, Tape, etc):	Size:	User Modifiable: ☒ Yes ☐ No	Function:	Steps to clear memory:
HDD	320 GB		System firmware and firmware upgrade. System control data, user preferences, variables and encrypted job storage and PIN printing.	User preferences and variables cleared by performing various resets via "Support" menu. Encrypted job storage and PIN printing Sanitization must be performed using the printer's Embedded Web Server (EWS). Using a web browser on the same network as the printer, browse to the printer's IP address. Select the "Security" tab at the top, and then from the left navigation bar, select the "Security->Protect Stored Data" menu items. Select the types of files to be erased and click on the "Apply" button.

USB

Does the item accept USB input and if so, for what purpose (i.e. Print Jobs, device firmware updates, scan upload)?
☒ Yes ☐ No If Yes please describe below

Purpose is for Print Jobs, Device FW updates, scan uploads and 3rd part application loading.

Can any data other than scan upload be sent to the USB device)?
☒ Yes ☐ No If Yes please describe below

Diagnostic service logs can be uploaded. Back-up of encrypted system settings. Supports Hardware Integration Pocket (HIP) devices.

Additional information:
This product has both a USB device port and 2 USB host ports. Data on the USB host ports can be accessed from the device port. Also, an internal mini-B USB port enables an accessory option where a Hardware Integration Pocket (HIP) device can be added. The HIP option conforms to the HIP protocol and enables both HP and 3rd party hardware/software. The HIP device does not ship with the product and is added by the user as an option.

RF/RFID

Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) ☐ Yes ☒ No If Yes please describe below

Purpose:		
Frequency:	Bandwidth	
Modulation:	Effective Radiate Power (ERP):	
Specifications:		

Other Transmission Capabilities

Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? ☐ Yes ☒ No If Yes please describe below:

Purpose:	
Frequency:	Bandwidth:
Modulation:	Effective Radiate Power (ERP):
Specifications	

Other Capabilities

Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? ☐ Yes ☒ No If Yes please describe below:

Purpose:

Specifications:

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