

Hewlett-Packard Certificate of Volatility

Model: HP PageWide Enterprise MFP 785zs	Part Number: J7Z12A	Address: Hewlett Packard Company 11311 Chinden Blvd Boise, ID 83714
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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: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Contains system acceleration 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: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Contains internal printer data	Steps to clear memory: N/A
Type (Flash, EEPROM, etc): Flash	Size: 4 MB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: System Acceleration Firmware and firmware upgrade	Steps to clear memory: Firmware upgrade
Type (Flash, EEPROM, etc): eMMC	Size: 8 GB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: System Acceleration Firmware and firmware upgrade	Steps to clear memory: Firmware upgrade
Type (Flash, EEPROM, etc): Flash	Size: 6 KB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Contains secure internal printer data.	Steps to clear memory: N/A

Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (HDD, Tape, etc): HDD	Size: 320 GB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: System firmware and firmware upgrade. System control data, user preferences, variables and encrypted job storage and PIN printing.	Steps to clear memory: 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)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> 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) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below	
Purpose: WiFi connectivity for printer activity such as print jobs and printer configuration	
Frequency: 2.4GHz ISM band (2400-2500MHz) and 5GHz U-NII-1,2,3 band (5.1-5.9GHz)	Bandwidth: 20MHz and 40MHz; Typical speed for 20MHz BW = 50Mbps/ 40MHz BW = 100Mbps
Modulation: DSSS(Direct sequence spread spectrum), DBPSK, DQPSK, CCK, OFDM	Effective Radiate Power (ERP): 20.5 dbm
Specifications: _802.11b/g/n	
This product uses WiFi connectivity for printer activity such as print jobs and printer configuration.	

RF/RFID	
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below	
Purpose: Bluetooth 4.0 connectivity for easier attachment with printer Networking	
Frequency: 2.4-2.5 GHz	Bandwidth: ~ 2 MHz
Modulation: 1 Mbps GFSK	Effective Radiate Power (ERP): less than 10 dbm
Specifications: BT 4.0 compliant	
This product uses Bluetooth 4.0 connectivity for device beaconing to printer Networking Subsystems	

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)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below:
Purpose: FAX
Specifications: T.30 FAX protocol standard for FAX communication. Within T.30, we use V21 protocol as control channel Within T.30, we use V.17, V.29, and V.34 as data transfer protocols Speeds = Up to 33.6Kbps Note: Kbps = thousand bits per second Note: If line transmission is poor, the data protocols may lower speed.

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