Print only

HP LaserJet Enterprise M608 series

This HP LaserJet with JetIntelligence combines performance, energy efficiency, and security.[1]

This HP LaserJet Printer with JetIntelligence combines exceptional performance and energy efficiency with professional-quality documents right when you need them—all while protecting your network from attacks with the industry's deepest security.[1]

HP LaserJet Enterprise M608n

HP LaserJet Enterprise M608dn

HP LaserJet Enterprise M608x

The world's most secure printing[1]

- With HP Sure Start, each printer regularly checks its operating code and repairs itself from attempted hacks.
- Help prevent potential attacks and take immediate action with instant notification of security issues.
- Centralize control of your printing environment with HP Web Jetadmin—and help build business efficiency.[2]
- Give workgroups what they need to succeed. Easily choose and deploy over 180 HP and third-party solutions.

High-speed performance meets energy efficiency

- Speed through tasks and save paper. Print two-sided documents nearly as fast as single-sided.
- This printer wakes up fast and prints your first page faster—in as quickly as 7.8 seconds.[4]
- This printer uses exceptionally low amounts of energy thanks to its innovative design and toner technology.[5]
- Paper handling options include a wheeled stand and 550-sheet input feeder for paper sizes A6 to legal.

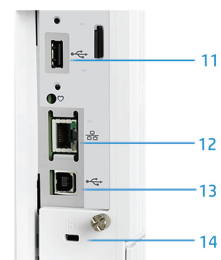### More. Pages, Performance, and Protection.[6]

- Produce sharp text, bold blacks, and crisp graphics with precision black toner.
- Original HP Toner cartridges with JetIntelligence deliver more pages per cartridge than predecessors.[6]
- Help retain the Original HP quality you paid for with anti-fraud and cartridge authentication technology.
- Spend less time replacing toner, and more on business. Choose high-yield toner cartridges.[7]

Product walkaround

1. Hardware Integration Pocket[3]
2. 10.9 cm (4.3-inch) colour touchscreen control panel
3. Easy-access USB port[1]
4. 100-sheet multipurpose tray 1
5. Front door access to toner cartridges
6. 550-sheet input tray 2
7. 550-sheet input tray 3
8. 500-sheet output bin
9. Automatic two-sided printing
10. Wi-Fi Direct®[5]/Bluetooth® Low Energy[8]
11. Host USB port
12. Gigabit Ethernet network port
13. Hi-Speed USB 2.0 printing port
14. Slot for cable-type security lock

HP LaserJet Enterprise M608x

Series at a glance

Model	HP LaserJet Enterprise M608n	HP LaserJet Enterprise M608dn	HP LaserJet Enterprise M608x
Product number	K0Q17A	K0Q18A	K0Q19A
Print speeds (A4)[2]	Up to 61 ppm	Up to 61 ppm	Up to 61 ppm
Control panel	6.9 cm (2.7-inch) LCD with keypad	6.9 cm (2.7-inch) LCD with keypad	10.9 cm (4.3-inch) colour touchscreen
Automatic two-sided printing	Not available	Yes	Yes
Hardware Integration Pocket[3]	Not available	Yes	Yes
100-sheet tray 1, 550-sheet tray 2	Yes	Yes	Yes
550-sheet paper feeder[4]	Optional (up to four)	Optional (up to four)	Yes (plus up to three optional)
2,100-sheet paper feeder[4]	Optional	Optional	Optional
Envelope feeder	Optional (up to two)	Optional (up to two)	Optional (up to two)
Printer stand	Optional	Optional	Optional
5-bin stapler/stacker/mailbox with job offset	Optional	Optional	Optional
Direct mobile printing	Optional wireless direct[5]/NFC[6]	Optional wireless direct[5]/NFC[6]	Embedded Wi-Fi Direct[5]/Bluetooth Low Energy[8]
Wireless networking	Optional[7]	Optional[7]	Optional[7]
HP High-Performance Secure Hard Disk	Optional	Optional	Optional

HP Services

Downtime can have serious consequences, so HP provides support beyond the standard warranty. You benefit from reduced risk, maximized uptime, predictable service delivery and no unbudgeted repair costs.

Choose from:

Optimized Care (optimum performance and stability):
4 hour Onsite Support, Maintenance Kit Replacement Service, Installation with Network Configuration Service

Standard Care (high level of uptime):
Next Business Day Onsite Support, Maintenance Kit Replacement Service, Installation with Network Configuration Service

Basic Care (minimum recommended support):
Next Business Day Onsite Support

4 hr Onsite Support:
Onsite support within four hours after a service call received within the coverage window

Next Business Day Onsite Support:
Onsite service the next business day after the service call is received

Maintenance Kit Replacement Service:
Onsite replacement of your printer's maintenance kit including parts, materials, and labor

Installation with Network Configuration Service:
Assembly, network configuration, and basic administrator familiarization
For more information about HP Care Pack, HP Contractual, or HP Managed Print Services, visit hp.com/go/printservices

Top Features

Only HP Enterprise printers repair themselves from attacks in real time while offering outstanding manageability. Automatically monitor threats, detect intrusions, and validate operating software while centrally managing your fleet with ease.[1]

With speeds up to 65 pages per minute,[3] fast first page out, and a variety of paper-handling options, you get confidence that your employees can speed through their tasks without interruption.

Get more pages and help protect your printer using Original HP Toner cartridges with JetIntelligence.[6]

Product
K0Q17A	HP LaserJet Enterprise M608n
K0Q18A	HP LaserJet Enterprise M608dn
K0Q19A	HP LaserJet Enterprise M608x

Accessories
B5L28A	HP Internal USB Ports
B5L29A	HP High-Performance Secure Hard Disk
F5S62A	HP Trusted Platform Module Accessory
G6W84A	HP 1 GB 90-pin DDR3 DIMM
J8030A	HP Jetdirect 3000w NFC/Wireless Accessory
J8031A	HP Jetdirect 2900nw Print Server
L0H17A	HP LaserJet 550-sheet Paper Tray
L0H18A	HP LaserJet 2100 Sheet Paper Tray
L0H19A	HP LaserJet Printer Stand
L0H20A	HP LaserJet Stapler/Stacker/Mailbox
L0H21A	HP LaserJet Envelope Feeder

Supplies
CF237A	HP 37A Black Original LaserJet Toner Cartridge (11,000 pages)
CF237X	HP 37X High Yield Black Original LaserJet Toner Cartridge (25,000 pages)
CF237Y	HP 37Y Extra High Yield Black Original LaserJet Toner Cartridge (41,000 pages)
L0H24A	HP LaserJet 110V Maintenance Kit (Up to 225,000 pages)
L0H25A	HP LaserJet 220V Maintenance Kit (Up to 225,000 pages)

HP Care Packs
U9NE0E	HP 3 year Next Business Day HW Support w/Defective Media Retention for LaserJet Enterprise M608
U9NE1E	HP 4 year Next Business Day HW Support w/Defective Media Retention for LaserJet Enterprise M608
U9NE2E	HP 5 year Next Business Day HW Support w/Defective Media Retention for LaserJet Enterprise M608
U9NE3E	HP 3 year 4 hour 9x5 HW Support w/Defective Media Retention for LaserJet Enterprise M608
U9NE4E	HP 4 year 4 hour 9x5 HW Support w/Defective Media Retention for LaserJet Enterprise M608
U9NE5E	HP 5 year 4 hour 9x5 HW Support w/Defective Media Retention for LaserJet Enterprise M608
U9NG4PE	HP 1 year Post Warranty Next Business Day Hardware Support w/DMR for LaserJet Enterprise M608
U9NG5PE	HP 2 year Post Warranty Next Business Day Hardware Support w/DMR for LaserJet Enterprise M608
U9NG6PE	HP 1 year Post Warranty 4 hour 9x5 Hardware Support w/DMR for LaserJet Enterprise M608
U9NG7PE	HP 2 year Post Warranty 4 hour 9x5 Hardware Support w/DMR for LaserJet Enterprise M608

Protect your investment with HP Care Pack. Let HP certified engineers resolve your technical issues.
For more details on HP Care Pack, go to hp.com/go/cpc

Paper
Contact HP via phone: Asia: 65 6253 8500

Solutions
HP Web Jetadmin: hp.com/go/wja
HP Universal Print Driver: hp.com/go/upd
HP Imaging and Printing Security Center: hp.com/go/ipsc

HP LaserJet Enterprise M608 series

Model	HP LaserJet Enterprise M608n	HP LaserJet Enterprise M608dn	HP LaserJet Enterprise M608x
Product number	K0Q17A	K0Q18A	K0Q19A
Functions	Print		
Print			
Duplex print options	Manual (driver support provided)	Automatic (standard)	
Print speed[7]	**Black (normal, A4):** Up to 61 ppm; **Black (normal, letter):** Up to 65 ppm; **Black (Landscape, A5):** Up to 100 ppm; **Black (Portrait, A5):** Up to 6 ppm; **Black (Duplex, A4):** Up to 50 ppm; **Black (Duplex, letter):** Up to 53 ppm		
First page out[9]	**Black (A4, ready):** As fast as 5.4 sec; **Black (A4, sleep):** As fast as 7.9 sec		
Print technology	Laser		
Print resolution	**Black (best):** Up to 1200 x 1200 dpi; **Black (normal):** FastRes 1200; **Black (fine lines):** Up to 1200 x 1200 dpi		
Print resolution technology	FastRes 1200; 1200 x 1200 dpi		
Standard print languages	HP PCL 6, HP PCL 5 (HP PCL 5 driver available from the Web only), HP postscript level 3 emulation, native PDF printing (v 1.7), Apple AirPrint™		
Printer management	HP JetAdvantage Security Manager; HP SNMP Proxy Agent; HP Web Jetadmin Software; HP WS Pro Proxy Agent; Printer Administrator Resource Kit for HP Universal Print Driver		
Connectivity			
Standard connectivity	1 Hi-Speed Device USB 2.0; 2 Hi-Speed USB 2.0 Host; 1 Gigabit/Fast Ethernet 10/100/1000 Base-TX network; Hardware Integration Pocket		1 Hi-Speed Device USB 2.0; 2 Hi-Speed USB 2.0 Host; 1 Gigabit/Fast Ethernet 10/100/1000 Base-TX network; Hardware Integration Pocket; 1 Wi-Fi direct 802.11b/g/n; 1 Bluetooth low energy I/O
Mobile print capability[6]	HP ePrint; Apple AirPrint™; Mopria-certified		HP ePrint; Wireless direct printing; Apple AirPrint™; Mopria-certified
Network capability	Yes, via HP Jetdirect Ethernet embedded print server (standard) which supports: 10Base-T, 100Base-Tx, 1000Base-T; 802.3az (EEE) support on Fast Ethernet and Gig Links; IPsec (standard); 802.11a/b/g/n wireless networking (optional).		Yes, via HP Jetdirect Ethernet embedded print server (standard) which supports: 10Base-T, 100Base-Tx, 1000Base-T; 802.3az (EEE) support on Fast Ethernet and Gig Links; IPsec (standard); 802.11a/b/g/n wireless networking (standard).
Wireless capability	Optional, enabled with purchase of HP Jetdirect 2900nw Print Server J8031A or HP Jetdirect 3000w NFC/Wireless Accessory J8030A		No
Memory	**Standard:** 512 MB ; **Maximum:** 1.5 GB, MAX memory, when 1GB Accessory DIMM is installed		
Processor speed	1.2 GHz		
Duty cycle (monthly)	Up to 275,000 pages; 5000 to 25000		
Paper handling			
Input	100-sheet multipurpose feeder, 550-sheet input feeder; Optional 1x550-sheet paper feeder, optional 1x550 paper feeder and stand with cabinet, optional 3x550-sheet paper feeder and stand, optional high-capacity paper feeder and stand with 1x550 sheet feeder and 1x2,000-sheet feeder		100-sheet multipurpose feeder, 550-sheet input feeder, 550 accessory feeder; Optional 1x550-sheet paper feeder, optional 1x550 paper feeder and stand with cabinet, optional 3x550-sheet paper feeder and stand, optional high-capacity paper feeder and stand with 1x550 sheet feeder and 1x2,000-sheet feeder
Output	500 sheet output bin		
Media type	Paper (plain, light, bond, recycled, heavy, extra heavy, cardstock, pre-printed, pre-punched, colored, rough, heavy rough), mono transparency, labels, letterhead, envelope, heavy envelope		
Media weight	Feeder 1: 60 to 199 g/m²; feeder 2: 60 to 120 g/m²		Feeder 1: 60 to 199 g/m²; feeder 2, 3: 60 to 120 g/m²
Media sizes custom	feeder 1: 76 x 127 to 216 x 356 mm; feeder 2: 99 x 148 to 216 x 356 mm		feeder 1: 76 x 127 to 216 x 356 mm; feeder 2: 99 x 148 to 216 x 356 mm, feeder 3: 99 x 148 to 216 x 356 mm
Dimensions (W x D x H)	431 x 466 x 380 mm		431 x 466 x 505 mm
Weight	21.6 kg		
What's in the box[2]	HP LaserJet Printer; HP Black Original LaserJet Toner Cartridge (~11K yield); CD with software drivers and documentation;Documentation (Hardware Install Guide); Power cord		
Warranty features	One-year, next-business day, onsite warranty. Warranty and support options vary by product, country and local legal requirements. Go to hp.com/support to learn about HP award winning service and support options in your region. (wty code 4G)		
Systems			
Compatible operating systems	Android, Linux Boss (5.0), Linux Debian (7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 8.0, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6), Linux Fedora (22, 23, 24), Linux Mint (17, 17.1, 17.2, 17.3, 18), Linux Red Hat Enterprise (6.0, 7.0), Linux SUSE (13.2, 42.1), Linux Ubuntu (12.04, 14.04, 15.10, 16.04, 16.10), OS macOS 10.12 Sierra, OS X 10.10 Yosemite, OS X 10.11 El Capitan, UNIX, Windows 10 all 32- & 64-bit editions (excluding RT OS for Tablets), Windows 7 all 32- & 64-bit editions, Windows 8/8.1 all 32- & 64-bit editions (excluding RT OS for Tablets), Windows Vista all 32bit editions (Home Basic, Premium, Professional, etc.), Windows XP SP3 32-bit editions (XP Home, XP Pro, etc.)		
Minimum system requirements	**PC:** 2 GB available hard disk space; OS hardware requirements see microsoft.com **Mac:** 1.3 GB available hard drive space; Internet; OS hardware requirements see Apple.com for more info		
Security management	Identity management: Kerberos authentication; LDAP authentication; 1000 user PIN codes; optional HP and 3rd party advanced authentication solutions (e.g.; badge readers); Network: IPsec/firewall with Certificate; Pre-Shared Key; and Kerberos authentication; Supports WJA-10 IPsec configuration Plug-in; 802.1X authentication (EAP-PEAP; EAP-TLS); SNMPv3; HTTPS; Certificates; Access Control List; Data: Storage Encryption; Encrypted PDF & Email (uses FIPS 140 validated cryptographic libraries from Microsoft); Secure Erase; SSL/TLS (HTTPS); Encrypted Credentials; Device: Security lock slot; USB port disablement; Intrusion Detection with Red Balloon Security Technology - Constant in-device monitoring for attacks; SureStart Secure Boot - BIOS Integrity Checking with self-healing capability; Whitelisting - loads only known good code (DLLs, EXEs, ...); Security management: Compatible with HP JetAdvantage Security Manager, Device Security Syslog Messages processed and accessable in Arcsight and Splunk SIEMs		
Fonts and Typefaces	105 internal TrueType fonts scalable in HP PCL, 92 internal scalable fonts in HP postscript level 3 emulation (Euro symbol built-in); 1 internal Unicode Fonts (Andale Mono WorldType); 2 Internal Windows Vista 8 Fonts (Calibri, Cambria); Additional font solutions available via third-party flash memory cards; HP LaserJet Fonts and IPDS Emulation available at http://www.hp.com/go/laserjetfonts		
Control panel	2.7-in (6.86 cm) QVGA LCD (color graphics) rotating (adjustable angle) display with 24-key pad		4.3-in (10.92 cm) Color Graphics Display (CGD) with touchscreen; rotating (adjustable angle) display; Home button
Display	2.7-in (6.86 cm) QVGA LCD (color graphics) rotating (adjustable angle)		4.3-in (10.92 cm) Color Graphics Display (CGD) with touchscreen; rotating (adjustable angle) display
Power	**Power supply type:** Built in 115V or 220V Power Supply (Not dual voltage, power supply varies by part number with # Option code identifier); **Power supply required:** 100V - 127V nominal @ +/-10% (min 90V, max 140V); 50 - 60Hz nominal +/- 3Hz (min 47Hz, max 63Hz), 12 A; 220V - 240V nominal, @ +/-10% (min 198V, Max 264V); 50 - 60Hz nominal +/- 3Hz (min 47Hz, max 63Hz), 6 A; **Power consumption[3]:** 780 watts (printing), 15.3 watts (ready), 3.1 watts (sleep), < 0.1 watts (Auto Off/Manual On), < 0.1 watts (Manual Off); **Typical Electricity Consumption number:[4]** ES: 2.622 kWh/week, BA: 2.425 kWh/week		
Software included	HP Connected, HP Device Experience (DXP), HP PCL 6 (XPS) Printer Driver, HP Software Installer/Uninstaller, Mac OS Welcome Screen (Directs users to 123.HP.com or OS App Source for printer software), Online user manuals		
Acoustics	**Acoustic Power Emissions:** 6.9 B(A); **Acoustic Power Emissions (ready):** Inaudible; **Acoustic Pressure Emissions Bystander (active, printing):** 55 dB(A); **Acoustic Pressure Emissions Bystander (ready):** Inaudible		**Acoustic Power Emissions:** 6.9 B(A); **Acoustic Power Emissions (ready):** Inaudible; **Acoustic Pressure Emissions Bystander (active, printing):** 54 dB(A); **Acoustic Pressure Emissions Bystander (ready):** Inaudible
Environmental ranges	**Operating Temperature Range:** 15 to 32.5ºC; **Recommended Operating Temperature:** 59 to 90.5ºF; **Non-operating Humidity Range:** 10 to 80% RH; **Operating Humidity Range:** 30 to 70% RH; **Recommended Operating Humidity Range:** 10 to 90% RH		
Safety approvals and requirements	IEC 60950-1:2005 +A1:2009 +A2:2013 (International); EN60950-1:2006 +A11:2009 +A1:2010 +A12:2011 +A2:2013 (EU); EN 60825-1:2007 / IEC 60825-1:2007 (Class 1 Laser Product); EN 62479:2010 / IEC 62479:2010; Low Voltage Directive 2006/95/EC with CE Mark Europe); GS Certificate (Germany, Europe); UL/cUL Listed and UC CoC (US/Canada); CAN/CSA C22.2 No. 60950-1-07 2nd Ed. 2011-12; Compliance with Laser safety standards 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser notice No. 50, Dated June 24, 2007. Other safety approvals as required by individual countries		
Supported network protocols	Via built-in networking solution: TCP/IP, IPv4, IPv6; Print: TCP-IP port 9100 Direct Mode, LPD (raw queue support only), Web Services Printing, IPP 2.0, Apple AirPrint™, HP ePrint, FTP Print, Google Cloud Print; DISCOVERY: SLP, Bonjour, Web Services Discovery; IP CONFIG: IPv4 (BootP, DHCP, AutoIP, Manual, TFTP Config, ARP-Ping), IPv6 (Stateless Link-Local and via Router, Stateful via DHCPv6); Management: SNMPv2/v3, HTTP/HTTPs, Telnet, TFTP Config, FTP FW Download, Syslog; Security: SNMPv3, SSL Cert Management, Firewall, ACL, 802.1x		

Footnotes

[1] Based on HP review of 2016 published security features of competitive in-class printers. Only HP offers a combination of security features that can monitor to detect and automatically stop an attack then self-validate software integrity in a reboot. For a list of printers, visit http://www.hp.com/go/PrintersThatProtect. For more information: http://www.hp.com/go/printersecurityclaims

[2] HP Web Jetadmin is available for download at no additional charge at http://www.hp.com/go/webjetadmin

[3] Measured using ISO/IEC 24734, excludes first set of test documents. For more information, see http://www.hp.com/go/printerclaims. Exact speed varies depending on the system configuration, software application, driver, and document complexity.

[4] Measured after 15 min in sleep. Exact speed varies depending on the system configuration, software application, driver, document complexity and time in sleep.

[5] Based on HP testing using the ENERGY STAR® program's Typical Electricity Consumption (TEC) method or as reported in energystar.gov versus the top three leading competitors as of 8/2015. Actual results may vary. For details see http://www.hp.com/go/Ljclaims

[6] More pages versus predecessor cartridges claim based on page-yield comparison of HP 37X High Yield Black Original LaserJet Toner Cartridges with HP 87X High Yield Black Original LaserJet Toner Cartridges. For more information, see http://www.hp.com/go/learnaboutsupplies

[7] HP 37X High Yield Black Original LaserJet Toner Cartridges not included; please purchase separately.

Product Walkaround disclaimers

[1] An administrator must enable the easy-access USB port before use.

[2] Measured using ISO/IEC 24734; excludes first set of test documents. For more information, see hp.com/go/printerclaims. Exact speed varies depending on the system configuration, software application, driver, and document complexity.

[3] Solutions deployed through the Hardware Integration Pocket (HIP) may require additional purchase. HIP not available on the HP LaserJet Enterprise M607n and M608n.

[4] All models come standard with the 100-sheet multipurpose tray and 550-sheet tray 2. The HP LaserJet Enterprise M608x and M609x models come with one additional 550-sheet paper feeder standard, and can add up to three additional optional 550-sheet paper feeders and the optional 2,100-sheet paper feeder. The M607n, M607dn, M608n, M608dn, and M609dn models can add up to four additional optional 550-sheet paper feeders and the optional 2,100-sheet paper feeder.

[5] Wi-Fi Direct printing is embedded in the HP LaserJet Enterprise M608x and M609x models. All other models can add wireless direct with the purchase of the optional HP Jetdirect 3000w NFC/Wireless Direct Accessory. Mobile device needs to be connected directly to the signal of a Wi-Fi Direct® supported MFP or printer prior to printing. Depending on mobile device, an app or driver may also be required. For details, see hp.com/go/mobileprinting. Wi-Fi Direct is a registered trademark of Wi-Fi Alliance®.

[6] Touch-to-print capability is optional for all models (except M608x and M609x) with purchase of the optional HP Jetdirect 3000w NFC/Wireless Direct Accessory. Mobile device must support Near Field Communication (NFC)-enabled printing. For more information, see hp.com/go/businessmobileprinting.

[7] All models can add wireless networking with the purchase of the optional HP Jetdirect 2900nw Print Server. Wireless performance is dependent on physical environment and distance from access point, and may be limited during active VPN connections.

[8] Bluetooth Low Energy is standard only on the HP LaserJet Enterprise M608x and M609x models, and it cannot be added to other models. Bluetooth is a trademark owned by its proprietor and used by HP Inc. under license.

Technical specification disclaimers

[1] EPEAT® registered where applicable. EPEAT registration varies by country. See http://www.epeat.net for registration status by country.

[2] Cartridges included; yields 11,000 black pages based on ISO/IEC 19798 and continuous printing. Actual yields vary considerably based on images printed and other factors. For details see http://www.hp.com/go/learnaboutsupplies

[3] Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. This will damage the printer and void the product warranty.

[4] Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. This will damage the printer and void the product warranty. Energy Star value typically based on measurement of 115 V device.

[5] Average color composite (C/M/Y) and black declared yields based on ISO/IEC 19798 and continuous printing. Actual yields vary considerably based on images printed and other factors. For details see http://www.hp.com/go/learnaboutsupplies.

[6] May require a firmware upgrade to be compatible, download at http://www.hp.com/go/support

[7] Measured using ISO/IEC 24734, excludes first set of test documents. For more information see http://www.hp.com/go/printerclaims. Exact speed varies depending on the system configuration, software application, driver, and document complexity.

[8] Measured using ISO 24734 Feature Test, A5 Landscape Feed. Speed may vary based on content, PC, media orientation, and media type.

[9] Measured using ISO/IEC 17629. For more information see http://www.hp.com/go/printerclaims. Exact speed varies depending on the system configuration, software application, driver, and document complexity.

[10] eMMC is non-volatile storage; Firmware encryption (AES 128 or AES 256) of customer/job data; Secure Cryptographic Erase – Job Data; Secure Erase – Disk

[11] Declared yield value in accordance with ISO/IEC 19752. Actual yields vary considerably based on images printed and other factors. For more information, visit http://www.hp.com/go/learnaboutsupplies

[12] 1 GB "Slim DIMM" G6W84A

To learn more, visit hp.com

Published in APJ 4AA6-9440EEP 04/17