Interactive BIOS simulator

HP 22/24/27 All-in-One PC

Welcome to the interactive BIOS simulator for the HP 22/24/27 All-in-One PC

Here's how to use it...

BIOS Utility Menus: (Click the link to navigate to the individual menus) On this page you will find thumbnail images of each of the product's BIOS utility menus. To view a specific menu in greater detail, simply click that thumbnail. Just as in the live BIOS, on each menu, you can select the tab of each of the other utility menus to navigate directly to that menu.

Menu options:

While the menu options cannot be toggled, many of them offer item specific information about that option. To view this information, use the cursor to rollover the option and the information will present in a pane on the right of the BIOS screen.

That's it!

On every page there is a link that brings you back to either this Welcome page or the BIOS Utility Menus page enabling you to navigate to whatever BIOS option you wish to review.

BIOS Utility Menus

Main

Security

Configuration

Boot Options

Exit

Main Menu



Main

System Time System Date Product Name System Family Product Number System Board ID Born On Date Processor Type Total Memory BIOS Vendor

Serial Number UUID System Board CT Number Factory installed OS 1

Build ID Feature Byte [22:02:59] 12/18/2019 HP All-in-One HP HP Bibury N17PVTB#01 86F8 00/00/0000 Intel(R) Core(TM) i7-10510U C 16 GB AMI B.10

8C94327RV 3B911C82-6D0D-3FD5-A4FA PJHVA0A8JCW04M Win10

20WW1BIT6ag#SABA#DABA 2U3E 3K3N 3Q4h 6b7K 7P7Q dUdp dqeV fPkV kZm9 .n7

	Item Specific Help
	1. Provides firmware revision information of devices built in the system.
	2. View System Log.
CPU @ 1.80GHz	
A-F3164DF	
١	
Q 7S7W 7saB apaq asbC bhcb	

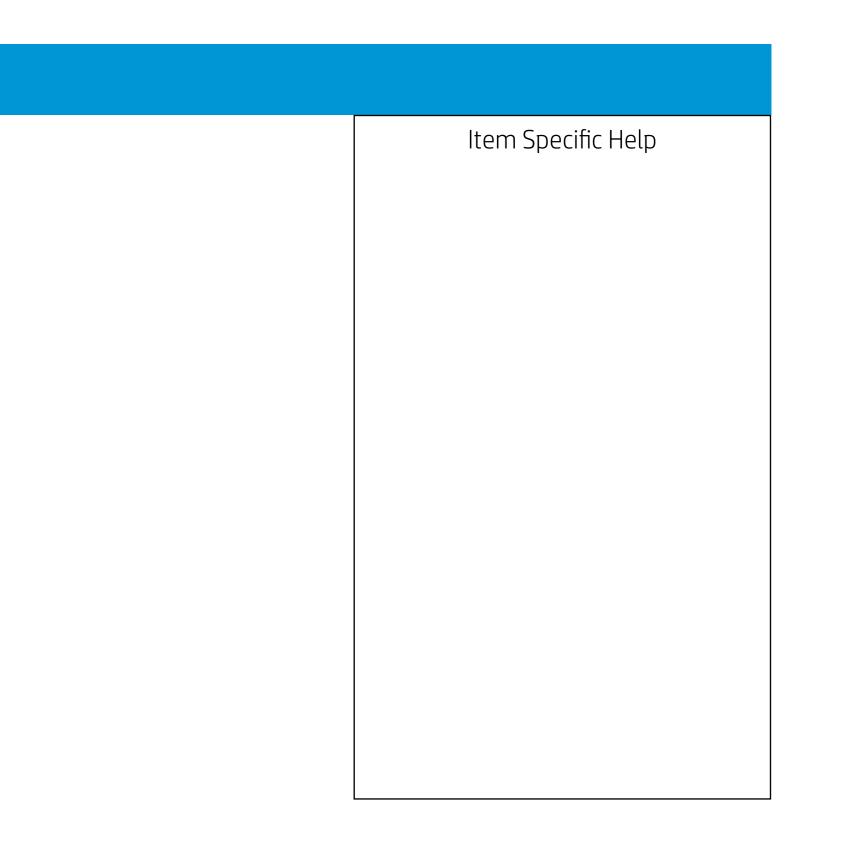
Main Menu



Main

Device Firmware Revision

Embedded Controller	39.14
Intel ME (Management Engine)	12.0.40.1433
GOP (Graphic Output Protocol)	9.0.1086



Main Menu



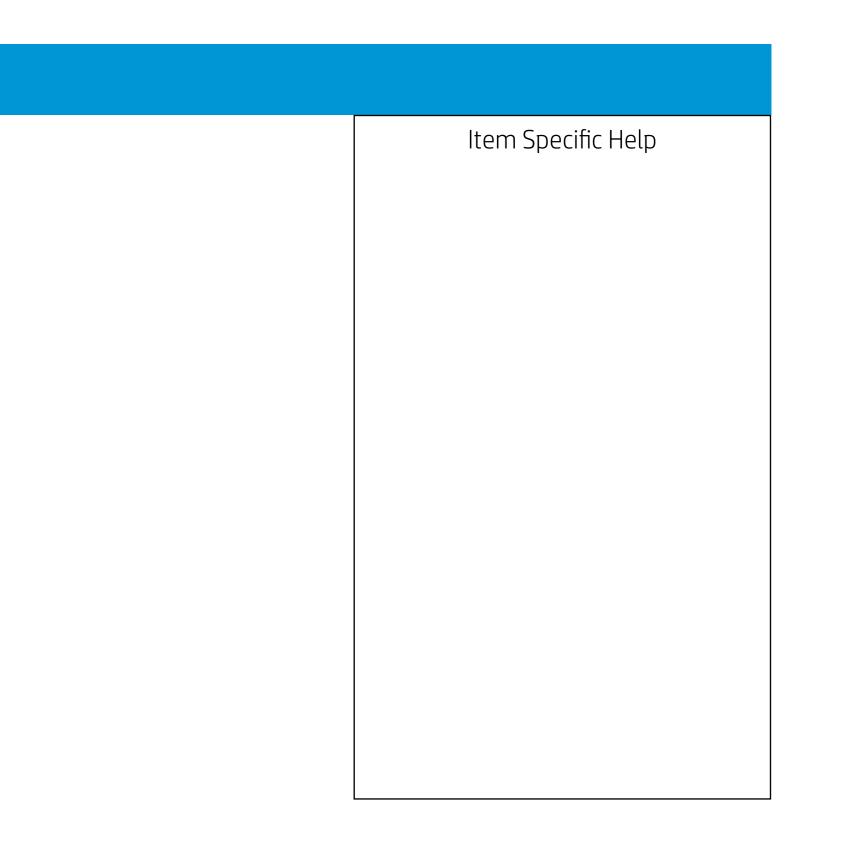
Main

System Log

Result:

Time: 010109-000035

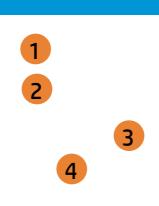
- No Data -





Security

Administrator Password Power-On Password Intel Software Guard Extensions (SGX) TPM Device

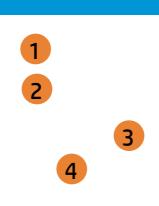


- 1. Administrator Password prevents unauthorized access to the Setup Utilities.
- 2. Power-On Password prevents unauthorized computer system start (boot).
- 3. Enable/Disable Intel Software Guard Extensions (SGX)
- 4. If the item is set to HIdden, the TPM device is not visible to the operating system.
- 5. If the TPM device setting is set to Hidden, the BIOS hides this item. If the TPM Device setting changes from Hidden to Available, the BIOS makes this item visible immediately without a restart. The TPM state setting is saved when the TPM Device setting changes to Hidden and is restored when it is changed back to Available. The TPM State setting can change only if you confirm the request via the Physical Presence check prompted by the BIOS during the next startup.
- 6. If the TPM device setting is set to Hidden, the BIOS hides this item. The TPM can be cleared only when you confirm the request via the Physical Presence check prompted by the BIOS during the next startup. If you select Yes, the BIOS sends TPM2_Clear to clear the Storage and Endorsement Hierarchy. Once the TPM is cleared, the BIOS disables TPM Power-on Authentication and sets the Clear TPM setting stays the same before and after the clear TPM operation. The Clear TPM settings is also set to No without any action taken if you select No for the Physical Prsenece check.
- 7. This option will restore all the security settings to factory defaults. For example, TPM device will be cleared and set to default shipping state.



Security

Administrator Password Power-On Password Intel Software Guard Extensions (SGX) TPM Device

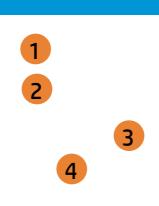


- 1. Administrator Password prevents unauthorized access to the Setup Utilities.
- 2. Power-On Password prevents unauthorized computer system start (boot).
- 3. Enable/Disable Intel Software Guard Extensions (SGX)
- 4. If the item is set to HIdden, the TPM device is not visible to the operating system.
- 5. If the TPM device setting is set to Hidden, the BIOS hides this item. If the TPM Device setting changes from Hidden to Available, the BIOS makes this item visible immediately without a restart. The TPM state setting is saved when the TPM Device setting changes to Hidden and is restored when it is changed back to Available. The TPM State setting can change only if you confirm the request via the Physical Presence check prompted by the BIOS during the next startup.
- 6. If the TPM device setting is set to Hidden, the BIOS hides this item. The TPM can be cleared only when you confirm the request via the Physical Presence check prompted by the BIOS during the next startup. If you select Yes, the BIOS sends TPM2_Clear to clear the Storage and Endorsement Hierarchy. Once the TPM is cleared, the BIOS disables TPM Power-on Authentication and sets the Clear TPM setting stays the same before and after the clear TPM operation. The Clear TPM settings is also set to No without any action taken if you select No for the Physical Prsenece check.
- 7. This option will restore all the security settings to factory defaults. For example, TPM device will be cleared and set to default shipping state.



Security

Administrator Password Power-On Password Intel Software Guard Extensions (SGX) TPM Device

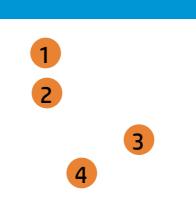


- 1. Administrator Password prevents unauthorized access to the Setup Utilities.
- 2. Power-On Password prevents unauthorized computer system start (boot).
- 3. Enable/Disable Intel Software Guard Extensions (SGX)
- 4. If the item is set to HIdden, the TPM device is not visible to the operating system.
- 5. If the TPM device setting is set to Hidden, the BIOS hides this item. If the TPM Device setting changes from Hidden to Available, the BIOS makes this item visible immediately without a restart. The TPM state setting is saved when the TPM Device setting changes to Hidden and is restored when it is changed back to Available. The TPM State setting can change only if you confirm the request via the Physical Presence check prompted by the BIOS during the next startup.
- 6. If the TPM device setting is set to Hidden, the BIOS hides this item. The TPM can be cleared only when you confirm the request via the Physical Presence check prompted by the BIOS during the next startup. If you select Yes, the BIOS sends TPM2_Clear to clear the Storage and Endorsement Hierarchy. Once the TPM is cleared, the BIOS disables TPM Power-on Authentication and sets the Clear TPM setting stays the same before and after the clear TPM operation. The Clear TPM settings is also set to No without any action taken if you select No for the Physical Prsenece check.
- 7. This option will restore all the security settings to factory defaults. For example, TPM device will be cleared and set to default shipping state.



Security

Administrator Password Power-On Password Intel Software Guard Extensions (SGX) TPM Device



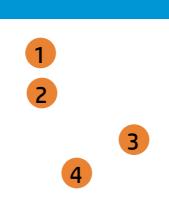
Intel Software Guard Extension

	Item Specific Help
	1. Administrator Password prevents unauthorized access to the Setup Utilities.
	2. Power-On Password prevents unauthorized computer system start (boot).
	3. Enable/Disable Intel Software Guard Extensions (SGX)
	4. If the item is set to HIdden, the TPM device is not visible to the operat- ing system.
ns (SGX)	5. If the TPM device setting is set to Hidden, the BIOS hides this item. If the TPM Device setting changes from Hidden to Available, the BIOS makes this item visible immediately without a restart. The TPM state setting is saved when the TPM Device setting changes to Hidden and is restored when it is changed back to Available. The TPM State setting can change only if you confirm the request via the Physical Presence check prompted by the BIOS during the next startup.
	6. If the TPM device setting is set to Hidden, the BIOS hides this item. The TPM can be cleared only when you confirm the request via the Physical Presence check prompted by the BIOS during the next startup. If you select Yes, the BIOS sends TPM2_Clear to clear the Storage and Endorsement Hierarchy. Once the TPM is cleared, the BIOS disables TPM Power-on Authentication and sets the Clear TPM setting stays the same before and after the clear TPM operation. The Clear TPM settings is also set to No without any action taken if you select No for the Physical Prsenece check.
	7. This option will restore all the security settings to factory defaults. For example, TPM device will be cleared and set to default shipping state.



Security

Administrator Password Power-On Password Intel Software Guard Extensions (SGX) TPM Device



TPM Device

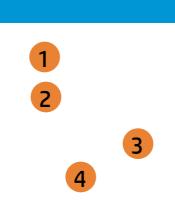
- 1. Administrator Password prevents unauthorized access to the Setup Utilities.
- 2. Power-On Password prevents unauthorized computer system start (boot).
- 3. Enable/Disable Intel Software Guard Extensions (SGX)
- 4. If the item is set to HIdden, the TPM device is not visible to the operating system.
- 5. If the TPM device setting is set to Hidden, the BIOS hides this item. If the TPM Device setting changes from Hidden to Available, the BIOS makes this item visible immediately without a restart. The TPM state setting is saved when the TPM Device setting changes to Hidden and is restored when it is changed back to Available. The TPM State setting can change only if you confirm the request via the Physical Presence check prompted by the BIOS during the next startup.
- 6. If the TPM device setting is set to Hidden, the BIOS hides this item. The TPM can be cleared only when you confirm the request via the Physical Presence check prompted by the BIOS during the next startup. If you select Yes, the BIOS sends TPM2_Clear to clear the Storage and Endorsement Hierarchy. Once the TPM is cleared, the BIOS disables TPM Power-on Authentication and sets the Clear TPM setting stays the same before and after the clear TPM operation. The Clear TPM settings is also set to No without any action taken if you select No for the Physical Prsenece check.
- 7. This option will restore all the security settings to factory defaults. For example, TPM device will be cleared and set to default shipping state.



Security Administrator Password Power-On Password

Intel Software Guard Extensions (SGX)

TPM Device

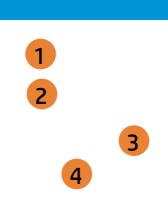


TPM State

- 1. Administrator Password prevents unauthorized access to the Setup Utilities.
- 2. Power-On Password prevents unauthorized computer system start (boot).
- 3. Enable/Disable Intel Software Guard Extensions (SGX)
- 4. If the item is set to HIdden, the TPM device is not visible to the operating system.
- 5. If the TPM device setting is set to Hidden, the BIOS hides this item. If the TPM Device setting changes from Hidden to Available, the BIOS makes this item visible immediately without a restart. The TPM state setting is saved when the TPM Device setting changes to Hidden and is restored when it is changed back to Available. The TPM State setting can change only if you confirm the request via the Physical Presence check prompted by the BIOS during the next startup.
- 6. If the TPM device setting is set to Hidden, the BIOS hides this item. The TPM can be cleared only when you confirm the request via the Physical Presence check prompted by the BIOS during the next startup. If you select Yes, the BIOS sends TPM2_Clear to clear the Storage and Endorsement Hierarchy. Once the TPM is cleared, the BIOS disables TPM Power-on Authentication and sets the Clear TPM setting stays the same before and after the clear TPM operation. The Clear TPM settings is also set to No without any action taken if you select No for the Physical Prsenece check.
- 7. This option will restore all the security settings to factory defaults. For example, TPM device will be cleared and set to default shipping state.



Security Administrator Password Power-On Password Intel Software Guard Extensions (SGX) TPM Device



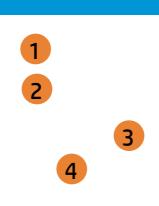
Clear TPM

- 1. Administrator Password prevents unauthorized access to the Setup Utilities.
- 2. Power-On Password prevents unauthorized computer system start (boot).
- 3. Enable/Disable Intel Software Guard Extensions (SGX)
- 4. If the item is set to HIdden, the TPM device is not visible to the operating system.
- 5. If the TPM device setting is set to Hidden, the BIOS hides this item. If the TPM Device setting changes from Hidden to Available, the BIOS makes this item visible immediately without a restart. The TPM state setting is saved when the TPM Device setting changes to Hidden and is restored when it is changed back to Available. The TPM State setting can change only if you confirm the request via the Physical Presence check prompted by the BIOS during the next startup.
- 6. If the TPM device setting is set to Hidden, the BIOS hides this item. The TPM can be cleared only when you confirm the request via the Physical Presence check prompted by the BIOS during the next startup. If you select Yes, the BIOS sends TPM2_Clear to clear the Storage and Endorsement Hierarchy. Once the TPM is cleared, the BIOS disables TPM Power-on Authentication and sets the Clear TPM setting stays the same before and after the clear TPM operation. The Clear TPM settings is also set to No without any action taken if you select No for the Physical Prsenece check.
- 7. This option will restore all the security settings to factory defaults. For example, TPM device will be cleared and set to default shipping state.



Security

Administrator Password Power-On Password Intel Software Guard Extensions (SGX) TPM Device



- 1. Administrator Password prevents unauthorized access to the Setup Utilities.
- 2. Power-On Password prevents unauthorized computer system start (boot).
- 3. Enable/Disable Intel Software Guard Extensions (SGX)
- 4. If the item is set to HIdden, the TPM device is not visible to the operating system.
- 5. If the TPM device setting is set to Hidden, the BIOS hides this item. If the TPM Device setting changes from Hidden to Available, the BIOS makes this item visible immediately without a restart. The TPM state setting is saved when the TPM Device setting changes to Hidden and is restored when it is changed back to Available. The TPM State setting can change only if you confirm the request via the Physical Presence check prompted by the BIOS during the next startup.
- 6. If the TPM device setting is set to Hidden, the BIOS hides this item. The TPM can be cleared only when you confirm the request via the Physical Presence check prompted by the BIOS during the next startup. If you select Yes, the BIOS sends TPM2_Clear to clear the Storage and Endorsement Hierarchy. Once the TPM is cleared, the BIOS disables TPM Power-on Authentication and sets the Clear TPM setting stays the same before and after the clear TPM operation. The Clear TPM settings is also set to No without any action taken if you select No for the Physical Prsenece check.
- 7. This option will restore all the security settings to factory defaults. For example, TPM device will be cleared and set to default shipping state.



Configuration
1
2
3
4
5

Item Specific Help
1. Select the display language for the BIOS.
 Enable Virtualization Technology Sup- port. A Power Cycle is required for a change to be activated.
3. When set to AHCI, SATA is configured to AHCI mode. When set to RAID, SATA is configured to RAID mode.
4. Sets the Num Lock state after POST.
5. Permits the user to control whether the system should wale from S4 or S5 if a magic packet is received by the NIC



	Configuration
Language	1
Virtualization Technology	2
SATA Emulation	3
After Power Loss	
Num Lock State at Power-On	4
S4/S5 Wake on LAN	5

Language

Item Specific Help
1. Select the display language for the BIOS.
 Enable Virtualization Technology Sup- port. A Power Cycle is required for a change to be activated.
3. When set to AHCI, SATA is configured to AHCI mode. When set to RAID, SATA is configured to RAID mode.
4. Sets the Num Lock state after POST.
5. Permits the user to control whether the system should wale from S4 or S5 if a magic packet is received by the NIC



	Configuration
Language	1
Virtualization Technology	2
SATA Emulation	3
After Power Loss	
Num Lock State at Power-On	4
S4/S5 Wake on LAN	5

Virtualization Technology

Item Specific Help
1. Select the display language for the BIOS.
 Enable Virtualization Technology Sup- port. A Power Cycle is required for a change to be activated.
3. When set to AHCI, SATA is configured to AHCI mode. When set to RAID, SATA is configured to RAID mode.
4. Sets the Num Lock state after POST.
5. Permits the user to control whether the system should wale from S4 or S5 if a magic packet is received by the NIC



	Configuration
Language	1
Virtualization Technology	2
SATA Emulation	3
After Power Loss	
Num Lock State at Power-On	4
S4/S5 Wake on LAN	5
	SATA Emulation
	SAMEMalation

Item Specific Help
1. Select the display language for the BIOS.
 Enable Virtualization Technology Sup- port. A Power Cycle is required for a change to be activated.
3. When set to AHCI, SATA is configured to AHCI mode. When set to RAID, SATA is configured to RAID mode.
4. Sets the Num Lock state after POST.
5. Permits the user to control whether the system should wale from S4 or S5 if a magic packet is received by the NIC



	Configuration
Language	1
Virtualization Technology	2
SATA Emulation	3
After Power Loss	
Num Lock State at Power-On	4
S4/S5 Wake on LAN	5

Item Specific Help
1. Select the display language for the BIOS.
 Enable Virtualization Technology Sup- port. A Power Cycle is required for a change to be activated.
3. When set to AHCI, SATA is configured to AHCI mode. When set to RAID, SATA is configured to RAID mode.
4. Sets the Num Lock state after POST.
5. Permits the user to control whether the system should wale from S4 or S5 if a magic packet is received by the NIC

S4/S5 Wake on LAN



	Configuration
Language	1
Virtualization Technology	2
SATA Emulation	3
After Power Loss	
Num Lock State at Power-On	4
S4/S5 Wake on LAN	5

Item Specific Help
1. Select the display language for the BIOS.
 Enable Virtualization Technology Sup- port. A Power Cycle is required for a change to be activated.
3. When set to AHCI, SATA is configured to AHCI mode. When set to RAID, SATA is configured to RAID mode.
4. Sets the Num Lock state after POST.
5. Permits the user to control whether the system should wale from S4 or S5 if a magic packet is received by the NIC

	Configuration	
Thermal		Item Specific Help
CPU Fan Speed System Fan Speed	1310 RPM 1061 RPM	1. This formset allows the user to man- age RAID volumes on the Intel(R) RAID Controller



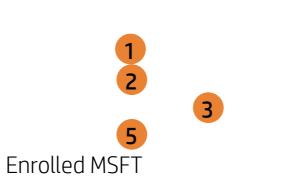
Post Hotkey Delay (sec) USB Boot Network Boot Network Boot Protocol

Platform Key Pending Action

Load HP Factory Default Keys Load MSFT Debug Policy Keys

UEFI Boot Order USB Flash Drive/USB Hard Disk

OS Boot Manager
 USB CD/DVD ROM Drive
 Network Adapter
 Internal CD/DVD ROM Drive



None

Boot Options	
	Item Specific Help
	1. Enable/Disable USB boot.
	 Enable/Disable network boot during boot time.
	3. Select Network Boot Protocol using IPv4, IPv6 or IPv4+IPv6. When IPv4+IPv6 is se- lected, BIOS will use IPv4 first.
	4. Secure Boot flow control. Secure Boot is possible only if System runs in User Mode.



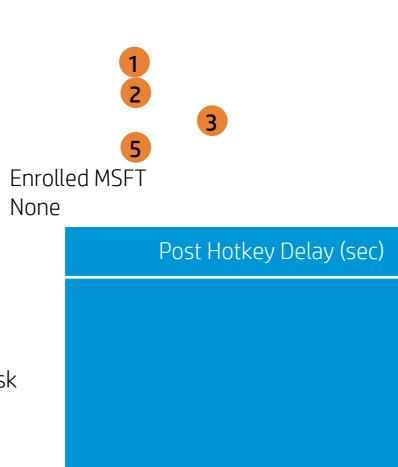
Post Hotkey Delay (sec) USB Boot Network Boot Network Boot Protocol

Platform Key Pending Action

Load HP Factory Default Keys Load MSFT Debug Policy Keys

UEFI Boot Order USB Flash Drive/USB Hard Disk

► OS Boot Manager USB CD/DVD ROM Drive Network Adapter Internal CD/DVD ROM Drive



Specific Help USB boot. network boot during boot
USB boot.
network boot during boot
: Boot Protocol using IPv4, Pv6. When IPv4+IPv6 is se- Il use IPv4 first.
w control. Secure Boot is System runs in User Mode.



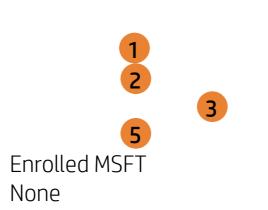
Post Hotkey Delay (sec) USB Boot Network Boot Network Boot Protocol

Platform Key Pending Action

Load HP Factory Default Keys Load MSFT Debug Policy Keys

UEFI Boot Order USB Flash Drive/USB Hard Disk

OS Boot Manager USB CD/DVD ROM Drive Network Adapter Internal CD/DVD ROM Drive



USB Boot

Boot Options	
	Item Specific Help
	1. Enable/Disable USB boot.
	 Enable/Disable network boot during boot time.
	 Select Network Boot Protocol using IPv4, IPv6 or IPv4+IPv6. When IPv4+IPv6 is se- lected, BIOS will use IPv4 first.
Boot	4. Secure Boot flow control. Secure Boot is possible only if System runs in User Mode.



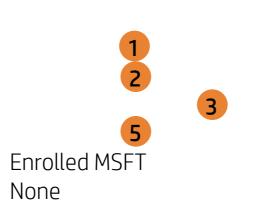
Post Hotkey Delay (sec) USB Boot Network Boot Network Boot Protocol

Platform Key Pending Action

Load HP Factory Default Keys Load MSFT Debug Policy Keys

UEFI Boot Order USB Flash Drive/USB Hard Disk

► OS Boot Manager USB CD/DVD ROM Drive Network Adapter Internal CD/DVD ROM Drive



Network Boot

Boot Options	
	Item Specific Help
	1. Enable/Disable USB boot.
	 Enable/Disable network boot during boot time.
	 Select Network Boot Protocol using IPv4, IPv6 or IPv4+IPv6. When IPv4+IPv6 is se- lected, BIOS will use IPv4 first.
ork Boot	4. Secure Boot flow control. Secure Boot is possible only if System runs in User Mode.



Post Hotkey Delay (sec) USB Boot Network Boot Network Boot Protocol

Platform Key Pending Action

Load HP Factory Default Keys Load MSFT Debug Policy Keys

UEFI Boot Order USB Flash Drive/USB Hard Disk

OS Boot Manager USB CD/DVD ROM Drive Network Adapter Internal CD/DVD ROM Drive



Network Boot Protocol

Root Options	
Boot Options	Item Specific Help 1. Enable/Disable USB boot. 2. Enable/Disable network boot during boot time. 3. Select Network Boot Protocol using IPv4, IPv6 or IPv4+IPv6. When IPv4+IPv6 is se-
oot Protocol	4. Secure Boot flow control. Secure Boot is possible only if System runs in User Mode.



Post Hotkey Delay (sec) USB Boot Network Boot Network Boot Protocol

Platform Key Pending Action

Load HP Factory Default Keys Load MSFT Debug Policy Keys

UEFI Boot Order USB Flash Drive/USB Hard Disk

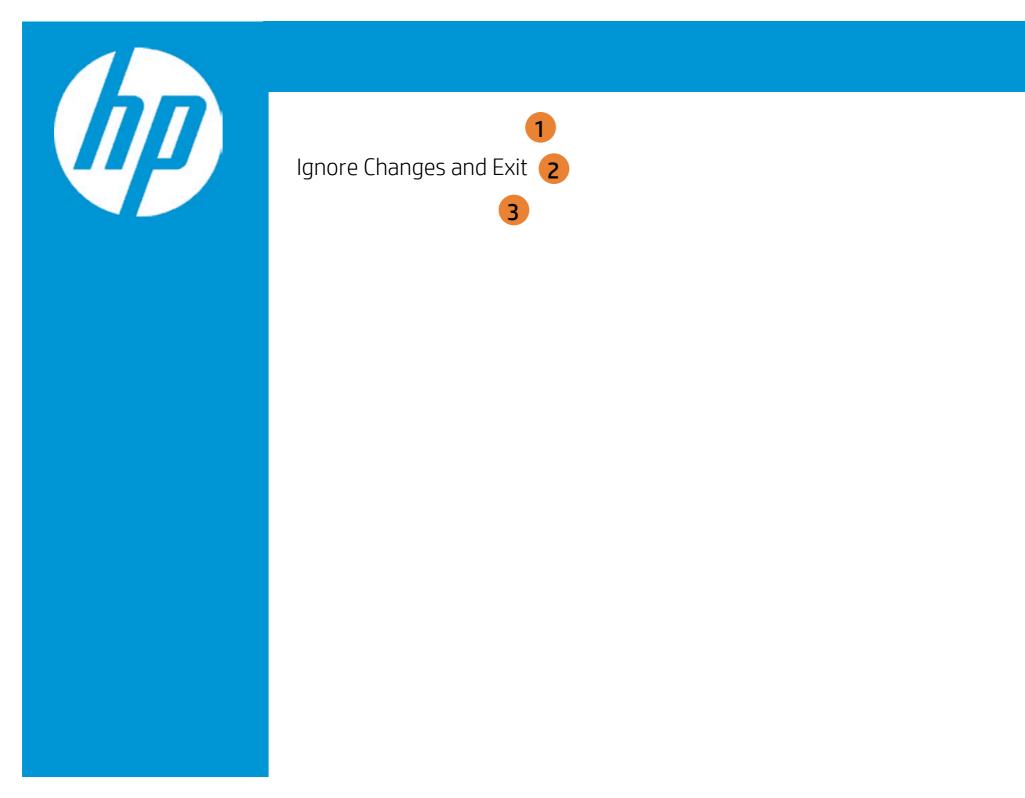
► OS Boot Manager USB CD/DVD ROM Drive Network Adapter Internal CD/DVD ROM Drive



Secure Boot

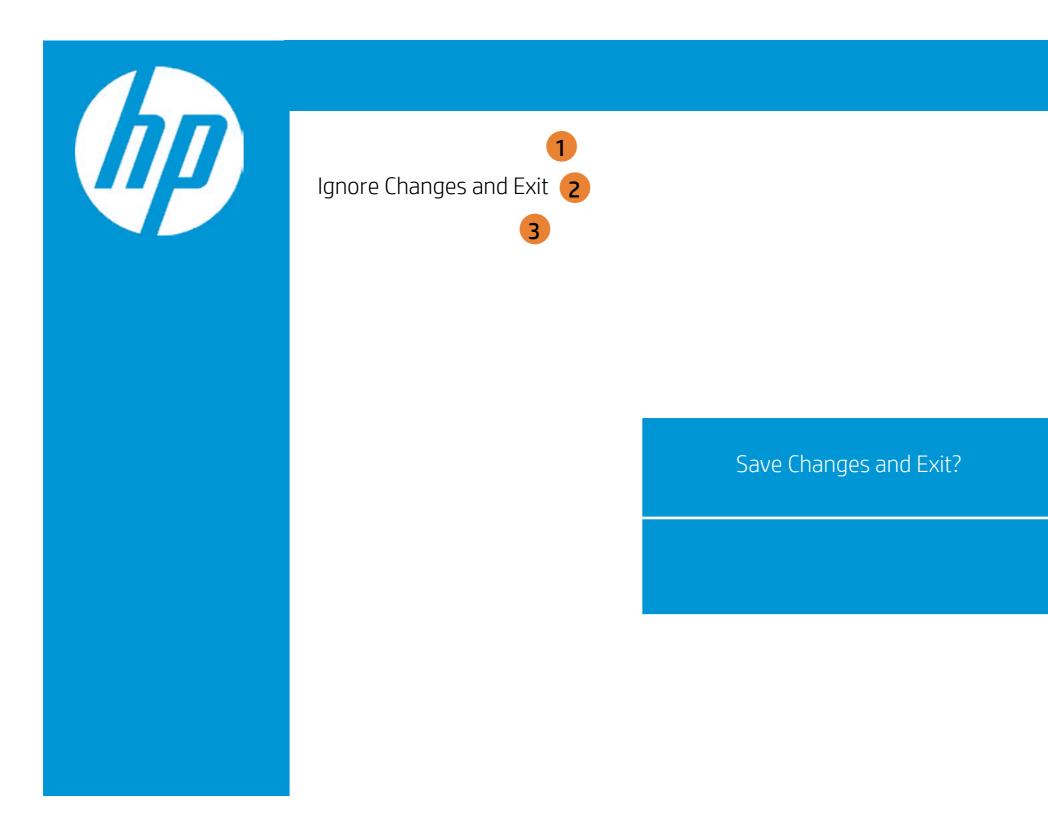
Boot Options	
	Item Specific Help
	1. Enable/Disable USB boot.
	2. Enable/Disable network boot during boot time.
	3. Select Network Boot Protocol using IPv4, IPv6 or IPv4+IPv6. When IPv4+IPv6 is se- lected, BIOS will use IPv4 first.
re Boot	4. Secure Boot flow control. Secure Boot is possible only if System runs in User Mode.

Exit Menu



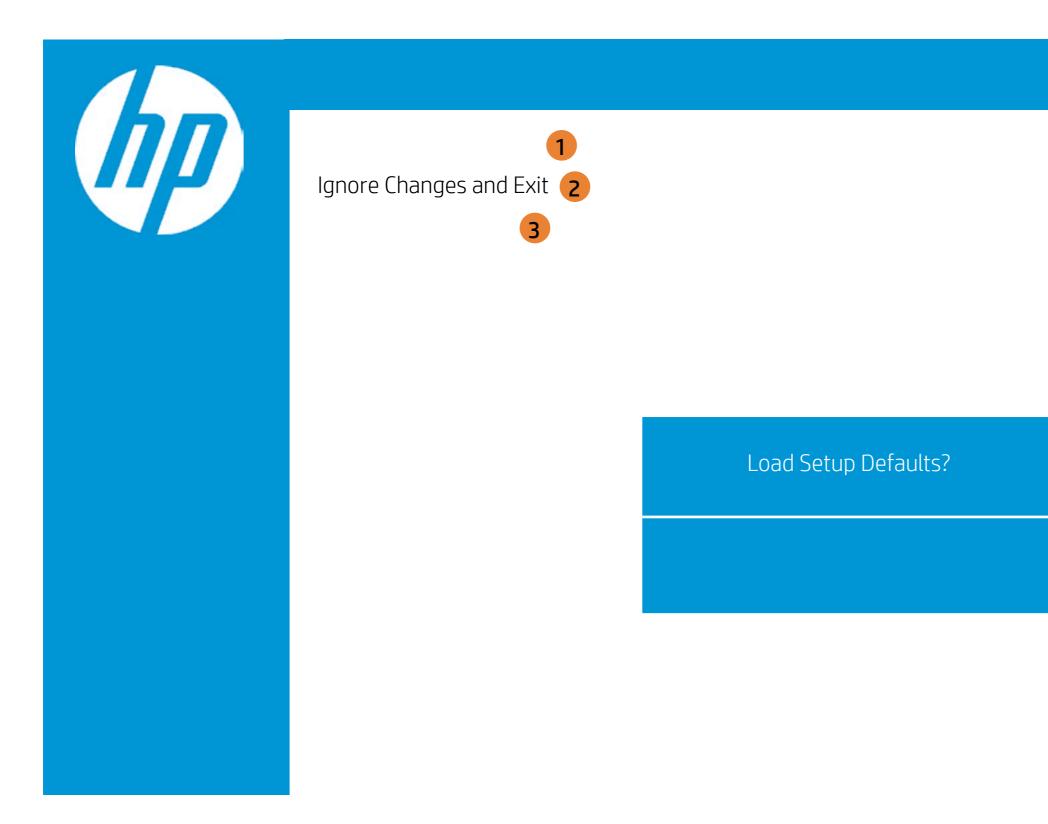
Exit	
	Item Specific Help
	1. Exit System Setup and save your changes to CMOS.
	2. Exit utility without saving Setup data to CMOS.
	3. Load default values for all SETUP items.

Exit Menu



Exit	
	Item Specific Help
	1. Exit System Setup and save your changes to CMOS.
	2. Exit utility without saving Setup data to CMOS.
	3. Load default values for all SETUP items.

Exit Menu



Exit	
	Item Specific Help
	1. Exit System Setup and save your changes to CMOS.
	2. Exit utility without saving Setup data to CMOS.
	3. Load default values for all SETUP items.