Interactive BIOS simulator

HP Elite x2 G4

Welcome to the interactive BIOS simulator for the
HP Elite x2 G4

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   Advanced   UEFI Drivers

HP Computer Setup

Item Specific Help

Suppress POST Errors

BASIC SYSTEM INFORMATION

Item Specific Help

Product Name	HP Elite x2 G4
Processor 1	Intel(R) Core(TM) i7-8565U CPU @ 1.80GHz
Memory Size	16384 MB
System BIOS	R91 Ver. 80.31.00 04/03/2019

SERVICE --

Born On Date	00/00/0000
Serial Number	CND91416H4
SKU Number	EPM2001#ABA
Universally Unique Identifier (UUID)	1C274149-309D-49FD-72F2-55EF163D10C6
Asset Tracking Number	CND91416H4

Help

HP

Item Specific Help

Product Name	HP Elite x2 G4
Memory Size	16384 MB
Storage Device	1-INTEL HBRPEKNX0202AH-PHTE903600YU5128-1 (512 GB)
PROCESSOR 1 ---	
ProcessorType	Intel(R) Core(TM) i7-8565U CPU @ 1.80GHz
Cache Size (L1/L2/L3)	256 KB / 1 MB / 8 MB
Processor Speed	1683 MHz
Processor Cores	4
MicroCode Revision	B2
Processor Stepping	C
Memory Speed	2133 MHz
Bottom-OnBoard 1	8 GB Hynix/Hyundai
Bottom-Onboard 2	8 GB Hynix/Hyundai

Help

Main

Item Specific Help

FIRMWARE --

System BIOS	R91 Ver. 80.31.00 04/03/2019
ME Firmware Version	12.0.33.1424
ME Firmware Mode	Enable
Audio Controller	Realtek ALC3292
Video BIOS Version	Intel(R) GOP Driver [9.0.1084]
Reference Code Revision	7.0.58.40
Embedded Controller Firmware Version	62.24.00
USB Type-C Controller(s) Firmware Version:	
	CCG5 (Dual Port PD) : 1.1.0
	CCG5 (Single Port PD) : 1.1.0
Base KBC Version	64.03

Help

Item Specific Help

SERVICE --

Born On Date	00/00/0000
Serial Number	CND091416H4
SKU Number	EPM2001#ABA
Base Serial Number	L55839-001
Base SKU Number	5ZP61AV#ACH
Universally Unique Identifier (UUID)	1C274149-309D-49FD-72F2-55EF163D10C6
Asset Tracking Number	CND91416H4
Feature Byte	3X476J6S6B7B7H7M7R7W7m7saBapaqaubtbhcAdUdpdqfAfXguhKhWhZjhk8.QM
Build ID	19WWMRAT6ap#SABA#DABA
Product Family	103C_5336AN HP Elite x2
System Board ID	8589
System Board CT Number	PXXXXA1MYC54PE
Primary Battery Serial Number	01300 2019/03/18

Help

HP PC Hardware Diagnostics UEFI

Please select a Language.

English

Cestina

Dansk

Deutsch

Nederlands

Espanol

eesti keel

Suomi

Francais

Hrvatski

Magyar

HP Computer Setup

BIOS Event Log

Clear BIOS Event Log on Next Boot

Item Specific Help

Help

Item Specific Help

View BIOS Event Log

Date   Time   Description

No event have been logged.

Help

Export to USB Key

The file cannot be accessed. Please insert a USB storage device and try again.

Update System BIOS

Current System BIOS Version: R91 Ver. 80.31.00
Current BIOS Release Date: 04/03/2019
Installation Date of Current BIOS: 04/11/2019
Most Recent Update Check: Never Checked

----

(1)

Lock BIOS Version **(2)**
BIOS Rollback Policy   **(3)**

Allow BIOS Updates Using a Network **(4)**
(5)
(6)

Help

Item Specific Help

1. Check HP.com for BIOS Updates
   Checks for the latest BIOS release revision on the network, and lets the user decide whether to download the BIOS image and update System.

2. Lock BIOS Version
   If not selected, then BIOS updates are allowed, if selected then updates to BIOS are not allowed.

3. *Click on the field to see the options.*

4. Allow BIOS Updates Using a Network
   Enable/Disable automatic BIOS updates through the network in a scheduled basis.

5. BIOS Update Preferences
   Sets the configurations to perform BIOS updates through the network.

6. Network Configuration Settings
   Configure network settings to be used for download and upload.

Network BIOS Update

MS Windows Bitlocker Drive Encryption (BDE) may be enabled on your system.
HP requires that BDE be suspended temporarily before the BIOS is flashed and
that you obtain your BDE recovery password or recovery PIN before suspending BDE.
After the BIOS is updated, BDE can be resumed.

BIOS Update Preferences

    Check for Update on Next Reboot **1**

BIOS Source **2**

Automatic BIOS Update Setting

 3

BIOS Update Frequency **4**

Item Specific Help

1. Check for Update on Next Reboot
  Enable/Disable an automatic BIOS check on next reboot.

2. BIOS Source
  Choose one of the available options.
  Click on the field to see the options.

Automatic BIOS Update Setting
  Choose one of the available options.
  Click on the field to see the options.

3. BIOS Update Frequency
  Choose one of the available options.

Help

HP Computer Setup

Network Configuration Settings

    Proxy Server **1**

2

IPv4 Configuration **3**

➡ IPv4 Subnet Mask
➡ IPv4 Gateway

DNS Configuration **4**

Data transfer timeout   100

    Force HTTP no-cache **5**

Help

Item Specific Help

1. Proxy Server
   Enable/Disable the use of a proxy server.

2. Test Network Connection
   Check the network connection using current
   BIOS update configuration.
   Click on the field to see the options.

3. IPv4 Configuration
   Setup for static IPv4 address.
   Click on the field to see the options.

4. DNS Configuration
   Configure a list of DNS addresses.

5. Force HTTP no-cache
   Disable HTTP caching.

Item Specific Help

Change Date And Time

Set Date (MM/DD/YYYY)   08 / 27 / 2019
Set Time (HH:MM):   22 : 22

Help

HP Computer Setup

Item Specific Help

Help

Feature Byte

Current Setting: 3X476J6S6B7B7H7M7R7W7m7saBapaqaubTbhcAdUdpdqfAfXguhKhWhZjhk8.QM

Build ID

Current Setting: 19WWMRAT6ap#SABA#DABA

Press the space key followed by the enter key to clear current setting

Serial Number

Current Setting: CND91416H4

Press the space key followed by the enter key to clear current setting

SKU Number

Current Setting: EPM2001#ABA

Press the space key followed by the enter key to clear current setting

Product Family

Current Setting: 103C_5336AN HP Elite x2

Press the space key followed by the enter key to clear current setting

System Board CT Number

Current Setting: PXXXXA1MYC54PE

Press the space key followed by the enter key to clear current setting

Product Name

Current Setting: HP Elite x2 G4

Press the space key followed by the enter key to clear current setting

HP Computer Setup

System IDs

Item Specific Help

Help

Asset Tracking Number

Current Setting: CND91416H4

Press the space key followed by the enter key to clear current setting

Ownership Tag

Current Setting:

Press the space key followed by the enter key to clear current setting

Replicated Setup

Help

Administrator Tools

1

Fingerprint Reset on Reboot

Security Configuration

Physical Presence Interface **2**

Trusted Execution Technology (TXT)

Intel Software Guard Extension (SGX) **3**

Utilities

Absolute® Persistence Module Current State

Activation Status : Inactive

Absolute® Persistence Module Permanent Disable : No

System Management Command

Item Specific Help

1. Create BIOS Administrator Password
The Administrator password controls access to the following features:
- Setup Menu (F10)
- 3rd Party Option ROM Management (F3)
- Update System ROM
- WMI Commands that change system settings
- BIOS Configuration Utility (BCU)
- Alternative Power-On Password

2. Physical Presence Interface
When this feature is set to "Enable", then the user is notified on system power up when changes are made to system security policy, and the user must manually agree to those changes before the change is confirmed

3. Intel Software Guard Extensions (SGX)
Enable/Disable Software Guard Extensions (SGX)

BIOS Administrator Password

Enter BIOS Administrator Password

POST Power-On Password

Enter POST Power-On Password

Password Policies

Password Maximum Length

At least one symbol is required in Administrator and User passwords

At least one number is required in Administrator and User passwords

At least one upper case character is required in Administrator and User passwords

At least one lower case character is required in Administrator and User passwords

Are spaces allowed in Administrator and User passwords?

TPM Embedded Security

TPM Specification Version   2.0

TPM Device   **(1)**

     TPM State   **(2)**

Clear TPM

TPM Activation Policy

Item Specific Help

1. TPM Device
Exposes the integrated Trusted Platform Module (TPM) for use.
Click on the field to see the options.

TPM State
Enables the integrated Trusted Platform Module (TPM).

BIOS Sure Start

    Verify Boot Block on every boot

BIOS Data Recovery Policy

    Dynamic Runtime Scanning of Boot Block

    Sure Start BIOS Settings Protection   **1**

    Sure Start Secure Boot Keys Protection

    Enhanced HP Firmware Runtime Intrusion Prevention and Detection   **2**

Sure Start Security Even Policy   **3**

Sure Start Security Event Boot Notification

Item Specific Help

1. Sure Start BIOS Settings Protection
When enabled, HP Sure Start will lock all critical BIOS settings and provide enhanced protection for these settings via the HP Sure Start non-volatile (flash) memory

- The BIOS administrator credentials must be set to enable this setting
- See HP Sure Start documentation for details on which BIOS settings are protected

2. Enhanced HP Firmware Runtime Intrusion Prevention and Detection
- Enables monitoring of HP system firmware executing out of main memory while the user Operating System is running.
- Any anomalies detected in HP System firmware that is active while the user operating system is running will result in a Sure Start Security Event being generated. *Click on the field to see the options.*

3. Sure Start Security Event Policy
This setting controls HP Sure Start behavior upon identifying a critical security event (any modification to HP firmware) during OS runtime.
- Log event only - HP Sure Start will log all critical security events m the HP Sure Start Audit log within the HP Sure Start non-volatile (flash) memory
- Log Event and notify user: In addition to logging all critical security events. HP Sure Start will notify the user within thr operating system that a critical event has occurred
- Log Event and power off system: In addition to logging all critical events. HP Sure Start will power off the system upon detecting a HP Sure Start Security Event. Due to the potential for data loss, use of this setting is only recommended in situations where security integrity of the system is a higher priority than the risk of potential data loss

Secure Platform Management (SPM)

NOTE: Some actions may not be selectable due to a pending password change.

SPM

    SPM Current State: Not provisioned

HP Sure run

    HP Sure Run Current State: Inactive

Enhanced BIOS Authentication Mode (EBAM)

    EBAM Current State: Disabled

Local Access Key: Not Present

Item Specific Help

Hard Drive Utilities

Save/Restore MBR of the system hard drive is only available with drives that have a Master Boot Record.

Save/Restore GPT of System Hard Drive **1**

Boot Sector (MBR/GPT) Recovery Policy

Allow OPAL Hard Drive SID Authentication

Item Specific Help

1. Save/Restore GPT of System Hard Drive
Enabling this feature will save the GUID Partition table (GPT) of the system Hard Drive. If the GPT is subsequently changed the user will he prompted to choose whether to restore GPT.

Help

Item Specific Help

Select a Drive

Help

Item Specific Help

Select a Drive

Help

Secure Erase

This operation will erase all data on the hard drive. Please make sure the computer is connected to AC power during this process.

Enter BIOS Administrator Password

①

Remote HP PC Hardware Diagnostics

②

③

Item Specific Help

1. Port Options
Enable/Disable Port Settings

2. Settings
Set the configuration for Remote HP PC Hardware Diagnostics, including the URLs used for download and upload, the scheduled execution frequency, etc.

3. Execute Remote HP PC Harware Diagnostics
Immediate execution of Remote HP PC Hardware Diagnostics based on the configurations is Settings option. Note that any unsaved BIOS settings are lost.

Display Language

Select Language

Select Keyboard Layout

Item Specific Help

Scheduled Power-On

Sunday **1**

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Hour   0
Minute   0

Item Specific Help

Boot Options

Startup Delay (sec.)

Fast Boot
USB Storage Boot
Network (PXE) Boot
Power On When AC Detected
Power On When Lid is Opened
Prompt on Battery Errors
Prompt on Fixed Storage Change
Audio Alerts During Boot
NumLock on at boot
UEFI Boot Order

        USB:
        M.2 SSD 1: 1 –INTEL HBRPEKNX0202AH–PHTE903600YU512B-1
        HP_AED: Hard Drive
        Network Boot:IPV6
        Network Boot:IPV4

☐ Legacy Boot Order

        USB:
        M.2 SSD 1: 1 –INTEL HBRPEKNX0202AH–PHTE903600YU512B-1

HP Sure Recover

HP Sure Recover **(1)**
Recover from Network **(2)**
Recover after Boot Failure **(3)**

Recover Agent
URL: ftp://ftp.hp.com/pub/pcbios/CPR
Username:
Provisioning Version: 0

Recovery Image
URL:
Username:
Provisioning Version: 0

Item Specific Help

1. HP Sure Recover
If this setting is enabled, the system firmware will honor local and remote requests to reinstall the OS. If it is disabled, all requests to reinstall the OS will be ignored.

2. Recover from Network
If this setting is enabled, the system firmware will obtain the recovery agent from the network. Otherwise, the system firmware will obtain the recovery agent from a local drive.

3. Recover after Boot Failure
If this setting is enabled and no bootable UEFI OS is found, the system firmware will launch HP Sure Recover.

Item Specific Help

Secure Boot Configuration

Configure Legacy Support and Secure Boot

Secure Boot Key Management
    Import Custom Secure Boot keys
    Clear Secure Boot keys
    Reset Secure Boot keys to factory defaults
    Enable MS UEFI CA key
 Access to the above settings requires Sure Start Secure Boot Keys Protection to be disabled
Ready BIOS for Device Guard Use

 Requires BIOS Administrator credentials to be configured and Secure Boot to be enabled.

System Options

    Turbo-Boost
    Hyperthreading **1**
    Virtualization Technology (VTx)
    Virtualization Technology for Directed I/O (VTd)
    DMA Protection
    Fast Charge
Power Button Protection **2**

    USB Type-C Connector System Software Interface (UCSI) **3**
    Enable High Resolution mode when connected to a USB-C DP al mode dock
    Special Keys mapped to Fn + keypress **4**
    Swap Arrow Up/Down and Page Up/Down Function
    Swap Fn and Ctrl (Keys)
Launch Hotkeys without Fn Keypress
    Max DC Performance
    Dynamic Platform and Thermal Framework (DPTF)
    HP Application Driver

Item Specific Help

1. Hyperthreading
Permits the user to control the processor capability

2. Power Button Protection
This feature ensures that unintentional activation of the power button while it is being transported in a bag does not cause the system to wake up.

On Battery Only: Power button is only disabled when the lid is closed, the system is in a low power state, and no power external power source is present.

Always: Power button is always disabled when the lid is closed.

Never: Power button is enabled always when this lid is closed.

3. USB Type-C Connector System Software Interface (UCSI)
The UCSI option should be disabled if booting a Microsoft Windows 10 version before 1709 to avoid system stability issues.

4. Special Keys mapped to Fn + keypress
Fn+R. Fn+S. Fn+C, Fn+ W, Fn+E will worked as Break. Sys Rq, Scroll Lock, pause, insert if no legacy keys when enabled

Built-In Device Options

Wake On LAN

Video memory size

    Audio Device **1**

    Microphone

    Internal Speakers

    Headphone Output

    Wake on Voice (WoV)

    Wireless Network Device (WLAN)

    Bluetooth

    Mobile Network Device (WWAN) and GPS Combo Device

HP LAN-Wireless Protection

    LAN/WLAN Auto Switching

    LAN/WWAN Auto Switching

    Fan Always on while on AC Power

    Boost Converter

Backlist keyboard timeout

    Integrated Front Camera

    Integrated Rear Camera

    Touch Device

Disable battery on next shut down **2**

Item Specific Help

1. Audio Device
   Hides the Audio device from OS

2. Disable battery on next shut down
   Set this item to 'Next shut down' to disconnect the battery.
   This is to maintain battery life in situations where the system will not be used for long periods of time.
   Once in this state, AC power must be disconnected and reconnected to turn the system back on.

Port Options

Right USB Ports **1**

USB Legacy Port Charging **2**

Disable Charging Port
in sleep/off if battery below (%):   10

Thunderbolt Type-C Ports

Item Specific Help

1. Right USB Ports
    Hides the right USB ports from the OS

2. USB Legacy Port Charging
    Enable USB Charging port for charging
    capability when system Hibernate/Shutdown

Option ROM Launch Policy

Configure Option ROM Launch Policy ①

Item Specific Help

1. Configure Option ROM Launch Policy
   Configure the launching of EFI versus Legacy
   Option ROM's

Power Management Options

Runtime Power Management   **1**

Extended Idle Power States   **2**
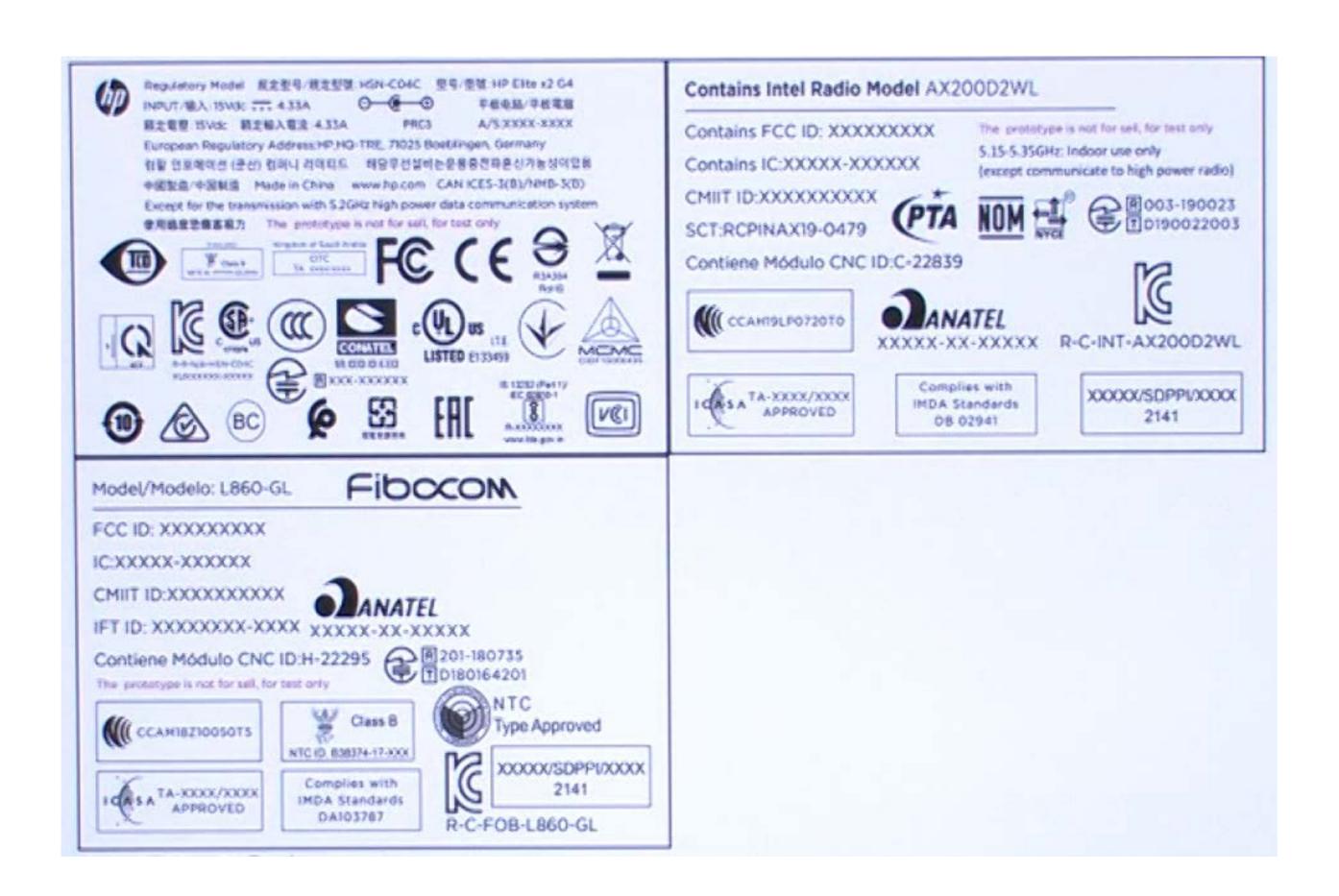
Power control

Battery Health Manager

Item Specific Help

1. **Runtime Power Management**
   Enables Runtime Power Management.

2. **Extended Idle Power States**
   Increases the OS's Idle Power Savings.

Electronic Labels

Item Specific Help

Regulatory Model 規定型号/規定型號: HSN-C06C 型号/型號: HP Elite x2 G4
INPUT/輸入: 15Vdc ⎓ 4.33A 平板电脑/平板電腦
額定電壓: 15Vdc 額定輸入電流: 4.33A PRC3 A/S:XXXX-XXXX
European Regulatory Address:HP,HQ-TRE, 71025 Boeblingen, Germany
한밭 안포해약션 (쿤신) 컴퍼니 리미티드 해당무선설비는운용중전파혼신가능성이있음
中国制造/中國製造 Made in China www.hp.com CAN ICES-3(B)/NMB-3(B)
Except for the transmission with 5.2GHz high power data communication system
使用頻率容易墓感力 The prototype is not for sell, for test only

Contains Intel Radio Model AX200D2WL

Contains FCC ID: XXXXXXXXX
Contains IC:XXXXX-XXXXX
CMIIT ID:XXXXXXXXXX
SCT:RCPINAX19-0479
Contiene Módulo CNC ID:C-22839

The prototype is not for sell, for test only
5.15-5.35GHz: Indoor use only
(except communicate to high power radio)

003-190023
D190022003

CCAH19LP0720T0
XXXXX-XX-XXXXX R-C-INT-AX200D2WL

TA-XXXX/XXXX APPROVED
Complies with IMDA Standards DB 02941
XXXXX/SDPPI/XXXX 2141

Model/Modelo: L860-GL Fibocom

FCC ID: XXXXXXXXX
IC:XXXXX-XXXXX
CMIIT ID:XXXXXXXXXX
IFT ID: XXXXXXXXX-XXXX XXXXX-XX-XXXXX
Contiene Módulo CNC ID:H-22295
The prototype is not for sell, for test only

201-180735
D180164201

NTC Type Approved

CCAH18Z10050TS
Class B NTC ID: B38374-17-XXX

TA-XXXX/XXXX APPROVED
Complies with IMDA Standards DA103787
XXXXX/SDPPI/XXXX 2141 R-C-FOB-L860-GL

MAC Address Pass Through

Host Based MAC Address

Configure Factory/System MAC Address

Current Factory : C4-65-16-E4-AC-A4
Current System : C4-65-16-E4-AC-A4

Examples:
1234567890AB
12-34-56-78-90-AB
Writes blank to clear the MAC address
The Second Byte must be even digit, either 0, 2, 4, 6, 8, A, C or E

Press ESC to CANCEL
Type the System MAC Address and press ENTER to SAVE

Thunderbolt Options

Thunderbolt Mode **1**

Require BIOS PW to change Thunderbolt Security Level

Thunderbolt Security Level

Item Specific Help

1. Thunderbolt Mode

When Thunderbolt Mode is disabled, only DisplayPort and USB Type C devices will function on the Thunderbolt Port

Remote HP PC Hardware Diagnostics

Diagnostics Download URL   **1**

➡ Custom Download Address

Diagnostics Logs Upload URL

      2

     3

     4

Scheduled Execution

Frequency   **5**

Execute On Next Boot   **6**

Item Specific Help

1. Diagnostics Download URL
Select between HP server URL and a custom server URL.

2. Custom Upload Address
Configure a URL for diagnostics logs upload.

3. Username
Configure the username for uploading diagnostics logs to the server, if authentication is required.

4. Password
Configure the password for uploading diagnostics logs to the server, if authentication is required.

5. Frequency
Select the frequency for scheduled execution of Remote HP PC Hardware Diagnostics.

6. Execute On Next Boot
Enable/disable the execution on next boot. The flag will be disabled after the diagnostics have run.

Custom Upload URL

There is no Custom Upload URL configured.
Type a new Custom Upload URL and press ENTER to save.
Press ESC to CANCEL

Custom Server Username

There is no Username configured.
Type a new Username and press ENTER to save.
Press ESC to CANCEL

Custom Server Password

There is no Upload Server Password configured.
Type a new Upload Server Password and press ENTER to save.
Press ESC to CANCEL

UEFI Drivers

This will restart the system into the 3rd Party Option ROM Management application. You can get to this application directly by pressing F3 during startup.

Item Specific Help