## Interactive BIOS simulator

## HP Pavilion Gaming Laptop 15-dk0xxx

## Welcome to the interactive BIOS simulator for the HP Pavilion Gaming Laptop 15-dk0xxx

#### Here's how to use it...

**<u>BIOS Utility Menus:</u>** (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** 



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

Serial Number UUID System Board CT Number Factory Installed OS **Primary Battery SN** 

**Build ID** Feature Byte HP Pavillion Gaming Laptop 15-dk0xxx **HP** Pavillion FPC5201#ABA 85FA 00/00/0000 Intel(R) Core(TM) i5-9300H CPU @ 2.40GHz 12 GB Insyde V.08.TPDL2

CND907545P 2000FE00-A22D-E911-8BB6-B00CD1E7209D PXXXXA61WBXRU4 Win10 01074 01/17/2019

19WW1CPT6ah@SABA#DABA 3K3Q 6b7B 7K7W aBap agas awbC bhcb dUdp dpfP fdhZ j6 .Fn



System Time			[16:52:34]		
System Date		[05/06/2019]			
Product Name			HP Pavillion Gaming Laptop 1		
System Family			HP Pavillion		
Product Number			FPC5201#AB	BA	
System Board ID	)		85FA		
Born On Date			00/00/0000		
Processor Typ		System	lime		-9300H CI
Total Memory	15	52	23		
BIOS Vendor	16	53	24		
BIOS Revision	17	5.4	25		
➡ <u>Device Firr</u>	17	54	25		
Serial Number			CND907545F	,	
UUID			2000FE00-A	22D-E	911-8BB6
System Board CT Number		PXXXXA61WBXRU4			
Factory Installed OS		Win10			
Primary Battery SN		01074 01/17/2019			
➡ System Log					
Build ID			19WW1CPT6	ah@S	SABA#DABA
Feature Byte		3K3Q 6b7B 7K7W aBap aqas dUdp dpfP fdhZ j6 .Fn			

I 5-dk0xxx PU @ 2.40GHz

#### 5-B00CD1E7209D

Α awbC bhcb



System Time		[1	6:52:34]	
System Date			)5/06/2019]	
Product Name		Н	P Pavillion Gam	ing Laptop 15-dk0xxx
System Family	,	Н	P Pavillion	
Product Numb	er	FI	PC5201#ABA	
System Board	ID	8	5FA	
Born On Date <mark>a</mark>		Suctor Dat		
Processor Typ		System Da		-9300H CPU @ 2.40GHz
Total Memory	04	05	2018	
BIOS Vendor	05	06	2019	
BIOS Revisior	06	07	2020	
➡ <u>Device Firr</u>	00	07	2020	
Serial Number		CI		
UUID		2	000FE00-A22D-	-E911-8BB6-B00CD1E7209D
System Board	CT Number	P	XXXXA61WBXR	U4
Factory Install	ed OS	W	/in10	
Primary Batter	ry SN	0	1074 01/17/20 <sup>-</sup>	19
➡ System Log	I			
Build ID		19	9WW1CPT6ah@	SABA#DABA
Feature Byte 3K3Q 6b7B 7K7W a dUdp dpfP fdhZ i6		/ aBap aqas awbC bhcb 6 .Fn		



**Device Firmware Revision** 

Embedded Controller
Intel ME (Management Engine)
GOP (Graphic Output Protocol)
Discrete GOP (Graphica Output Protocol)
Discrete VBIOS Version
USB Type-C Controller(s)

42.14 12.0.30.1406 9.0.1085 3000F 86.07.6C.00.0A F7.07.10.9C.06





System Log

Result

Time:

- No Data



#### Security



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





Administrator Password Power-On Password Intel Software Guard Extensions (SGX) TPM Device TPM State Clear TPM [Restore Security settings to Factory Default]

#### [Clear]

[Clear] [S/W Controller] [Available] [Embedded] [No]

#### Set Administrator Password

Enter New Password

**Confirm New Password** 



## Item Specific Help

Administrator Password prevents unauthorized access to the Setup Utilities. To disable the audible password prompt (beeping sound), set the POST Hotkey Delay (sec) option to 0. This also disables the audible prompt for Power-On Password.





Administrator Password Power-On Password Intel Software Guard Extensions (SGX) TPM Device TPM State Clear TPM [Restore Security settings to Factory Default] [Clear] [Clear] [S/W Controller] [Available] [Embedded] [No]

Set Power On I	Password
Enter New Password	[
Confirm New Password	[
Enter New Password Confirm New Password	L



## Item Specific Help

Power-On Password prevents unauthorized access to the Setup Utilities. To disable the audible password prompt (beeping sound), set the POST Hotkey Delay (sec) option to 0. This also disables the audible prompt for Administrator Password.





Administrator Password **Power-On Password** Intel Software Guard Extensions (SGX) **TPM Device TPM State Clear TPM** [Restore Security settings to Factory Default] [Clear] [Clear] [S/W Controller] [Available] [Embedded] [No]

Intel Software Guard Extensions (SGX)





#### Item Specific Help

Enable/Disable Intel Software Guard Extensions (SGX).





Administrator Password **Power-On Password** Intel Software Guard Extensions (SGX) **TPM Device TPM State Clear TPM** [Restore Security settings to Factory Default] [Clear] [Clear] [S/W Controller] [Available] [Embedded] [No]

**TPM Device** 





#### Item Specific Help

If the Item is set to "Hidden", the TPM device is not visable in the Operating System.



Administrator Password **Power-On Password** Intel Software Guard Extensions (SGX) **TPM Device TPM State Clear TPM** [Restore Security settings to Factory Default] [Clear] [Clear] [S/W Controller] [Available] [Embedded] [No]





#### Item Specific Help

If the TPM device is hidden, this option is hidden. When the TPM device is changed to Available, this option is shown without the need to restart the computer. The TPM state is saved if the TPM device is changed to Hidden. The next time the TPM device is changed to Available, the previous setting will be restored.



**Administrator Password Power-On Password** Intel Software Guard Extensions (SGX) **TPM Device TPM State Clear TPM** [Restore Security settings to Factory Default] [Clear] [Clear] [S/W Controller] [Available] [Embedded] [No]





## Item Specific Help

If the TPM device is hidden, this option is hidden.

A confirmation message will be displayed during the next system startup to confirm you want to clear the TPM.

For TPM 1.2 the BIOS sends the TPM\_Force-Clear command to clear the TPM.

For TPM 2.0, the BIOS sends the TPM2\_Clear command to clear the Storage and Endorsement Hierarchy.

Once the TPM is cleared, the BIOS disables **TPM Power-On Authentication.** 

After the BIOS clears the TPM or you reject clearing the TPM during the physical presence check in POST, the setting is reverted back to No.

The setting of the TPM State shall stay the same before and after the "Clear TPM" operation. Clear TPM is also set to No without any action taken if the user selects No for the Physical Presence prompt.



Administrator Password **Power-On Password** Intel Software Guard Extensions (SGX) **TPM Device TPM State Clear TPM** [Restore Security settings to Factory Default]

[Clear] [Clear] [S/W Controller] [Available] [Embedded] [No]

Security Feature Reset Request

A request to Reset Security Defaults is pending. Please enter the pass code displayed below to complete the change. If you did not initiate this request, press the ESC key to continue without accepting the pending change.

Reset Security Defaults (023)

2866 - ENTER - to complete the change

ESC - continue without changing

For more information, please visit www.hp.com/go/techcenter/startup





#### Item Specific Help

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



Language Virtualization Technology Fan Always On Action Keys Mode USB Charging Battery Remaining Time **Battery Care Function** 



#### Configuration



Language
Virtualization Technology
Fan Always On
Action Keys Mode
USB Charging
Battery Remaining Time
Battery Care Function
UEFI HII Configuration

English
[Enabled]
[Enabled]
[Enabled]
[Enabled]
[Disabled]
[100%]





#### Item Specific Help

Select the display language for the BIOS.

#### Configuration



Language	
Virtualization Technology	
Fan Always On	
Action Keys Mode	
USB Charging	
Battery Remaining Time	
Battery Care Function	
UEFI HII Configuration	

[English] [Enabled] [Enabled] [Enabled] [Enabled] [Disabled] [100%]

Virtualization Technology

## Item Specific Help

Hardware VT Enables a processor feature for running multiple simultaneous Virtual Machines allowing specialized software applications to run in full isolation of each other. HP recommends that this feature remain disabled unless specialized applications are being used.

#### Configuration



Language
Virtualization Technology
Fan Always On
Action Keys Mode
USB Charging
Battery Remaining Time
Battery Care Function
UEFI HII Configuration

[English] [Enabled] [Enabled] [Enabled] [Enabled] [Disabled] [100%]

Fan Always On



#### Item Specific Help

Set the Fan Always On (or Off).

#### Configuration



Language
Virtualization Technology
Fan Always On
Action Keys Mode
USB Charging
Battery Remaining Time
Battery Care Function
UEFI HII Configuration

[English] [Enabled] [Enabled] [Enabled] [Enabled] [Disabled] [100%]

Action Keys Mode



#### Item Specific Help

Set the Fan Always On (or Off).

#### Configuration



Language	[Er
Virtualization Technology	[Er
Fan Always On	[Er
Action Keys Mode	[Er
USB Charging	[Er
Battery Remaining Time	[Di
Battery Care Function	[10
UEFI HII Configuration	

nglish] nabled] nabled] nabled] nabled] isabled] 00%]

**USB** Charging



#### Item Specific Help

Allow the systen to charge the USB device such as mobile phones in S4 (Hibernation) or S5 (off) state.

#### Configuration



Language	[English]
Virtualization Technology	[Enabled]
Fan Always On	[Enabled]
Action Keys Mode	[Enabled]
USB Charging	[Enabled]
Battery Remaining Time	[Disabled]
Battery Care Function	[100%]
UEFI HII Configuration	

Battery Remaining Time

#### Item Specific Help

This item enables or disables the reporting of battery remaining time from the BIOS to the operating system. If disabled, the operating system displays battery life in a percentage only.

#### Configuration

Virtualization Technology [	Enabled]
Fan Always On [	Enabled]
Action Keys Mode [	Enabled]
USB Charging [	Enabled]
Battery Remaining Time [	Disabled
Battery Care Function	100%]

[Enabled] [Enabled] [Enabled] [Enabled] [Disabled] [100%]

**Battery Care Function** 

#### Item Specific Help

Battery Care Function (100%): The battery charge stops at 91-100%. Battery Care Function (80%): The battery charge stops at 76-80%. Battery Care Function (50%): The battery charge stops at 46-50%.



#### Configuration



**UEFI HII Configuration** 



#### Item Specific Help

This format allows the user to manage RAID volumes on the Intel(R) RAID Controller



#### Configuration

#### Intel(R) RST 17.0.0.3808 RAID Driver

**Optane Volume** 



#### Item Specific Help

Select to see more information about the Intel Optane Volume



# 

Optane Volume Info

Optane Mode Size

Safe 931.5GB

Volume member disks



#### Item Specific Help

Disable Optane Volume



#### DISPLAY OPTANE VOLUME

Preserve user data

Enabled

Configuration

Are you sure you want to disable

➡ Disable



#### Item Specific Help

Select whether to preserve user data



#### DISPLAY OPTANE VOLUME

Preserve user data

#### Configuration

Press Link "Disable" To Confirm

Are you sure you want to disable

[Yes]



## Item Specific Help

Select whether to preserve user data

Configuration



#### PHYSICAL DISK INFO

Port
Model Number
Serial Number
Size
Status
Controller Type
Controller Interface

0.0 ST1000LM049-2GH1.72 WGS3J023 931.5GB Non-RAID AHCI SATA



Configuration



#### PHYSICAL DISK INFO

Port Model Number Serial Number Size Status Controller Type Controller Interface 1.0 Intel MEMPEK1J016GAH PHBT845507Y1016N 13.4GB Cache NVMx PCle





**POST Hotkey Delay** USB Boot Network Boot Network Boot Protocol Legacy Support Security Boot **Platform Key Pending Action** 

Load HP Factory Default Keys Load MSFT Debug Policy Keys

**UEFI Boot Order** 

USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive 1 Network Adaptor

Legacy Boot Order **Internal Hard Drive** USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive **1** Network Adaptor

Enrolled None

# **Boot Options**





POST Hotkey Delay USB Boot Network Boot Network Boot Protocol Legacy Support Security Boot Platform Key Pending Action [Clear All Secure Boot Keys] Load HP Factory Default Keys Load MSFT Debug Policy Keys

**UEFI Boot Order** 

OS Boot Manager
 USB Flash Drive/USB Hard Drive
 USB CD/DVD ROM Drive
 1 Network Adaptor

Legacy Boot Order Internal Hard Drive USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive 1 Network Adaptor [Enabled]
[Disabled]
[IPv4+IPv6 (UEFI)]
[Disabled]
[Enabled]
Enrolled
None

POST Hotkey Delay (sec)

## lity otions

#### Item Specific Help

POST Hotkey Delay (sec) Controls the amount of time given to press the function key to enter the Setup Utilities when the system starts. To disable the audible password prompt (beeping sound) for both the Administrator Password and Power-On Password, set the POST Hotkey Delay (sec) option to 0.





POST Hotkey Delay USB Boot Network Boot Network Boot Protocol Legacy Support Security Boot Platform Key Pending Action [Clear All Secure Boot Keys] Load HP Factory Default Keys Load MSFT Debug Policy Keys

UEFI Boot Order ➡ <u>OS Boot Manager</u> USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive 1 Network Adaptor

Legacy Boot Order Internal Hard Drive USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive 1 Network Adaptor

# [Enabled] [Disabled] [IPv4+IPv6 (UEFI)] [Disabled] [Enabled] Enrolled None

USB Boot

### lity otions

#### Item Specific Help

Enable/Disable USB Boot.





POST Hotkey Delay USB Boot Network Boot Network Boot Protocol Legacy Support Security Boot Platform Key Pending Action [Clear All Secure Boot Keys] Load HP Factory Default Keys Load MSFT Debug Policy Keys

UEFI Boot Order ➡ <u>OS Boot Manager</u> USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive 1 Network Adaptor

Legacy Boot Order Internal Hard Drive USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive 1 Network Adaptor [Enabled] [Disabled] [IPv4+IPv6 (UEFI)] [Disabled] [Enabled] Enrolled None

**Network Boot** 

## lity otions

### Item Specific Help

Enable/Disable network boot during boot time.





POST Hotkey Delay USB Boot Network Boot Network Boot Protocol Legacy Support Security Boot Platform Key Pending Action [Clear All Secure Boot Keys] Load HP Factory Default Keys Load MSFT Debug Policy Keys

UEFI Boot Order ➡ <u>OS Boot Manager</u> USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive 1 Network Adaptor

Legacy Boot Order Internal Hard Drive USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive 1 Network Adaptor [Enabled] [Disabled] [IPv4+IPv6 (UEFI)] [Disabled] [Enabled] Enrolled None

Network Boot Protocol

## lity otions

#### Item Specific Help

Select Network Boot Protocol using IPv4, IPv6 or IPv4+IPv6. When IPv4+IPv6 is selected, BIOS will use IPv4 first.



**POST Hotkey Delay** USB Boot Network Boot **Network Boot Protocol** Legacy Support Security Boot Platform Key **Pending Action** [Clear All Secure Boot Keys] Load HP Factory Default Keys Load MSFT Debug Policy Keys

**UEFI Boot Order** ➡ <u>OS Boot Manager</u> USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive **1** Network Adaptor

Legacy Boot Order Internal Hard Drive USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive **1** Network Adaptor

[Enabled] [Disabled] [IPv4+IPv6 (UEFI)]

[Enabled] Enrolled None

**Legacy Support** 

# **Boot Options**

## Item Specific Help

When Legacy Support is enabled, BIOS will load Compatibility Support Module (CSM) to support Legacy OS such as Windows 7. Windows Vista, Windows XP and DOS. When Legacy Support is disabled BIOS will boot in UEFI Mode without CSM to support newer OS such as Windows 8. System might be unable to boot into operating system after changing this setting.





POST Hotkey Delay USB Boot Network Boot Network Boot Protocol Legacy Support Security Boot Platform Key Pending Action [Clear All Secure Boot Keys] Load HP Factory Default Keys Load MSFT Debug Policy Keys

UEFI Boot Order ➡ <u>OS Boot Manager</u> USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive 1 Network Adaptor

Legacy Boot Order Internal Hard Drive USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive 1 Network Adaptor

Changing this setting may make the system unable to boot the OS. Do you want to make this change?

[Enabled] [Disabled] [IPv4+IPv6 (UEFI)]

[Enabled] Enrolled None

### lity otions

#### Item Specific Help

When Legacy Support is enabled, BIOS will load Compatibility Support Module (CSM) to support Legacy OS such as Windows 7. Windows Vista, Windows XP and DOS. When Legacy Support is disabled BIOS will boot in UEFI Mode without CSM to support newer OS such as Windows 8. System might be unable to boot into operating system after changing this setting.



**POST Hotkey Delay** USB Boot Network Boot **Network Boot Protocol** Legacy Support Security Boot Platform Key **Pending Action** [Clear All Secure Boot Keys] Load HP Factory Default Keys Load MSFT Debug Policy Keys

**UEFI Boot Order** ➡ <u>OS Boot Manager</u> USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive **1** Network Adaptor

Legacy Boot Order **Internal Hard Drive** USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive **1 Network Adaptor** 

[Enabled] [Disabled] [IPv4+IPv6 (UEFI)]

[Enabled] Enrolled None

**Security Boot** 

# **Boot Options**

### Item Specific Help

When Secure Boot is enabled, BIOS performs cryptographic check during bootup, for the integrity of the software image. It prevents unauthorized or maliciously modified software from running.



**POST Hotkey Delay USB Boot** Network Boot **Network Boot Protocol** Legacy Support Security Boot Platform Key **Pending Action** [Clear All Secure Boot Keys] Load HP Factory Default Keys Load MSFT Debug Policy Keys

**UEFI Boot Order** 

OS Boot Mar USB Flash Drive USB CD/DVD RC 1 Network Ada

Changing all Secure Boot Keys will disable Secure boot. Please enter the pass code displayed below to complete the action or press the ESC key to cacel.

Legacy Boot Order Internal Hard Drive USB Flash Drive/USB Hard Drive USB CD/DVD ROM Drive **1 Network Adaptor** 

[Enabled] [Disabled] [IPv4+IPv6 (UEFI)]

[Enabled] Enrolled None

# **Boot Options**

## Item Specific Help

Clears all secure boot keys and certificates from secure boot databases. This option disables secure boot.



#### Security

Configuration

**Boot Options** 

#### Exit