

Interactive BIOS simulator

HP Z2 SFF G4 Workstation

Welcome to the interactive BIOS simulator for the
HP Z2 SFF G4 Workstation

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



Item Specific Help

Suppress POST Errors



BASIC SYSTEM INFORMATION

Product Name	HP Z2 SFF G4 Workstation
Processor 1	Intel(R) Core(TM) i5-8600 CPU@3.10GHz
Memory Size	16384 MB DDR4@2667 MHz
System BIOS	Q50Ver.00.3101 02/12/2018

SERVICE -----

Serial Number	
SKU Number	2YW30AV
Universally Unique Identifier (UUID)	CBC30D91-CF91-15E7-4FAC-6870B2C947DF
Asset Tracking Number	

Item Specific Help

Help



ADVANCED SYSTEM INFORMATION

Product Name HP Z2 SFF G4 Workstation
Memory Size 16384 MB DDR4@2667 MHz

PROCESSOR 1 -----

ProcessorType Intel(R)Core(TM) i5-8600 CPU@3.10GHz
Cache Size (L1/L2/L3) 384 KB / 1536 KB / 9 MB
Processor Speed 3100 MHz
MicroCode Revision 84
Processor Stepping A
Memory Speed 2667 MHz
DIMM1 16 GB Micron
DIMM2 Empty
DIMM3 Empty
DIMM4 Empty

Item Specific Help

Help



FIRMWARE -----

System BIOS	Q50Ver.00.31.01 02/12/2018
ME Firmware Version	12.0.0.1059
ME Firmware Mode	Enable
Video BIOS Version	Intel(R) GOP Driver [9.0.1074]
Reference Code Revision	7.0.1C.58
Super I/O Firmware Version:	7.8.5
USB Type-C Controller(s) Firmware Version:	Onboard PD Rear1 :5.13.0

Item Specific Help

Help



SERVICE -----

Serial Number	
SKU Number	2YW30AV
Universally Unique Identifier (UUID)	CBC30D91-CF91-15E7-4FAC-6870B2C947DF
Asset Tracking Number	
Feature Byte	
Build ID	
Product Family	103C_53307F HP ProDesk
System Board ID	83F2
System Board CT Number	PGVQTXACYAJC1A

COMMUNICATION -----

Integrated MAC Address 1	3C-52-82-66-28-F4
--------------------------	-------------------

Item Specific Help

Help



HP PC Hardware Diagnostics UEFI

Please select a Language.

English

Cestina

Dansk

Deutsch

Nederlands

Espanol

eesti keel

Suomi

Francais

Hrvatski

Magyar





Update System BIOS

Current System BIOS Version:	Q50Ver.0031.01
Current BIOS Release Date:	02/12/2018
Installation Date of Current BIOS:	03/16/2018
Most Recent Update Check:	Never Checked

1

BIOS Rollback Policy

Allow BIOS Updates Using a Network 2

3

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. Allow BIOS Updates Using a Network

Enable/Disable automatic BIOS updates through the network in a scheduled basis.

3. BIOS Update Preferences

Sets the configurations to perform BIOS updates through the network.



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.



Minimum BIOS Version

Current Minimum BIOS Version: 00.00.00

Minimum BIOS Version:



BIOS Update Preferences

Check for Update on Next Reboot **1**

BIOS Source

2

Automatic BIOS Update Setting

3

BIOS Update Frequency

4

Help

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.



Configure Update Source

There is no custom URL configured.

BIOS Update source can be changed to a CUSTOM URL instead of HP.com.
This is only recommended for systems in a managed IT environment.

Examples:

`http://www.host.com/path`

`ftp://ftp.host.com/path`

`ftp://user:password@ftp.host.com/path`

`http://192.168.0.1/path`

Press ESC to CANCEL

Type the System MAC Address and press ENTER to SAVE



Network Configuration Settings

Proxy Server **1**

2

IPv4 Configuration

➔ [IPv4 Subnet Mask](#)

➔ [IPv4 Gateway](#)

3

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.

Test Network Connection

Your network server connection is working.

IPV4 Configuration: Automatic

IPV4 Address: 192.168.0.106

IPV4 Subnet Mask: 255.255.255.0

IPV4 Gateway: 192.168.0.1

DNS Configuration: Automatic

Primary DNS: 75.75.75.75

Secondary DNS: 75.75.76.76

MAC Address: 88-88-88-88-87-88

Current Proxy:

Current Custom Source URL: HP.COM



Change Date And Time

Set Date (MM/DD/YYYY)

03 / 23 / 2018

Set Time (HH:MM):

04 : 08

Item Specific Help

Help

Main



HP Computer Setup

Item Specific Help

Help



Feature Byte

Current Setting: 3P3X476J656b7B7H7M7R7W7m7saBapaqauawb8bhcAdUdpdqfXgdhk.d3



Build ID

Current Setting: 17WWC6AT6aq#SABA#DABA

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



Serial Number

Current Setting: 000748006B

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



SKU Number

Current Setting: 123456#ABA

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



Product Family

Current Setting: 103C_53307F HP ProDesk

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



System Board CT Number

Current Setting: PGUKBX30Z9626N

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



Product Name

Current Setting: HP Z2 SFF G4 Workstation

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



Main

HP Computer Setup

System IDs

Item Specific Help

Help



Asset Tracking Number

Current Setting:

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

Main



HP Computer Setup

Replicated Setup

Item Specific Help

Help

Replicated Setup

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



Are you sure you want to save custom defaults and exit?

Item Specific Help



Are you sure you want to apply custom defaults and exit?

Item Specific Help



Main

HP Computer Setup

Are you sure you want to apply factory defaults and exit?

Item Specific Help



Are you sure you want to ignore changes and exit?

Item Specific Help



Main

HP Computer Setup

Are you sure you want to save changes and exit?

Item Specific Help



Administrator Tools

1

Security Configuration

Physical Presence Interface 2

Trusted Execution Technology (TXT)

TXT cannot be enabled unless VTx, VTd and TPM are enabled first.

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

Sure Start Security Event Boot Notification

3

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 in 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 the 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



Security

HP Computer Setup

HP Secure Platform Management (SPM)

HEP Current State: Inactive

SPM Current State: Not provisioned

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 be prompted to choose whether to restore GPT.

Help



Security

HP Computer Setup

Select a Drive

Item Specific Help

- 1. SATA0: ST500LX025-1U717D-SSHD**
Set HDD Password

Help



Security

HP Computer Setup

Select a Drive

Item Specific Help

Help



Security

HP Computer Setup

Are you sure you want to restore settings to default?

Item Specific Help



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 Hardware Diagnostics

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



Advanced

HP Computer Setup

Display Language

Select Language

Select Keyboard Layout

Item Specific Help



Advanced

HP Computer Setup

Scheduled Power-On

Sunday **1**

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Hour 0

Minute 0

Item Specific Help

1. Days

Enable the days of the week to turn the system on. This feature wakes the system up from a powered off state.



Advanced

Boot Options

Startup Delay (sec.)

- Fast Boot
- CD-ROM Boot
- USB Storage Boot
- Network (PXE) Boot
- MemQual BIOS(For Test)

After Power Loss

- Prompt on Memory Size Change
- Prompt on Fixed Storage Change
- Audio Alerts During Boot
- NumLock on at boot

UEFI Boot Order

- SATA0: Windows Boot Manager
- USB: Generic USB Storage 201801270019
- SATA CD: hp PLDS DVDRW DU8AESH
- Network Boot:IPV4 Network - Intel(R) Ethernet Connection (7) I219-LM
- Network Boot:IPV6 Network - Intel(R) Ethernet Connection (7) I219-LM

Legacy Boot Order

- USB
- SATA CD:

1

Item Specific Help

1. After Power Loss

Determine the system's state after power is lost to the unit.



Advanced

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.



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 Password to be configured and Secure Boot to be enabled.

1

Item Specific Help

1. Ready BIOS for Device Guard Use

When set to “Configure on Next Boot”, the BIOS will change the feature listed below to their suggested Device Guard states, on the boot after saving changes and exit.

Virtualization features will be enabled.

Removable and network boot devices will be disabled (for example, USB boot, CD-ROM boot, Thunderbolt boot, etc.).

MS UEFI CA Key will be disabled.

When set to “Clear Configuration on Next Boot”, the BIOS will set the listed features to their Custom Default state if custom defaults have been saved. If custom defaults have not been saved, the BIOS will restore the listed features to their factory default states.



Advanced

System Options

- Configure Storage Controller for RAID
- POST Prompt for Raid Configuration
- RST Remapping

To support Intel RST Remapping, please set Option ROM launch Policy to ALL UEFI or ALL UEFI Except Video.

- Turbo-Boost
- Multi-processor
- Virtualization Technology (VTx)
- Virtualization Technology for Directed I/O (VTd)
- Allow PCIe/PCI SERR# Interrupt

Power Button Override

Item Specific Help



Advanced

HP Computer Setup

Built-In Device Options

Embedded LAN Controller

Wake On LAN

Dust Filter

Dust Filter Reminder (Days)

Video memory size

Audio Device **1**

Microphone

Internal Speakers

Increase Idle Fan Speed(%)

M.2 USB / Bluetooth

LAN / ALAN Auto Switching

Wake on WLAN

Item Specific Help

1. Audio Device

Hides the Audio device from OS



Advanced

HP Computer Setup

Port Options

Front USB Ports

Front USB Port 1

Front USB Port 2

Rear USB Ports

Rear USB Ports 1

Rear USB Ports 2

Rear USB Ports 3

Rear USB Ports 4

Rear USB Ports 5

Rear USB Ports 6

SATA 0

SATA 1

SATA 2

Restrict USB Devices

Item Specific Help



Advanced

HP Computer Setup

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**

SS Maximum Power Savings **3**

SATA Power Management

PCI Express Power Management **4**

Power On from Keyboard Ports **5**

Unique Sleep State Blink Rates

Item Specific Help

1. Runtime Power Management

Enables Runtime Power Management.

2. Extended Idle Power States

Increases the OS's Idle Power Savings.

3. SS Maximum Power Savings

Enabling this feature reduces the power of this system as much as possible in the SS state. Power is removed from the wake up circuit, the expansion slots and any management features while in SS.

4. PCI Express Power Management

Enabling this option permits the PCI Express links to use Active State Power Management (ASPM) to enter low power states while not in use.

5. Power On from Keyboard Ports

To wake up system from Hibernate/Shutdown via keyboard



Remote Management Options

Active Management Technology (AMT) **1**

USB Key Provisioning Support

USB Redirection Support

Unconfigure AMT on next boot **2**

SOL Terminal Emulation Mode

Show Unconfigure ME Confirmation Prompt

Verbose Boot Messages

Watchdog Timer **3**

OS Watchdog Timer (min.) **4**

BIOS Watchdog Timer (min.) **4**

CIRA Timeout (min)

Item Specific Help

1. Active Management Technology (AMT)

This option allows for a user to enable Intel Active Management Technology, which is tied to all ME-regulated remote management functions. Disabling AMT will still allow for ME firmware updates, which are recommended for receiving platform stability fixes.

2. Unconfigure AMT on next boot

Perform AMT/ME unconfigure without password operation.

3. Watchdog Timer

Enable/Disable WatchDog Timer.

4. OS & BIOS Watchdog Timer

Set OS Watching timer (Minutes).



Advanced

HP Computer Setup

Slot Settings

- SLOT1 PCIe3 x16
- SLOT2 PCIe3 x4(1)
- SLOT3 PCIe3 x4(1)
- SLOT4 PCIe3 x16(4)
- M.2 WLAN
- M.2 SSD 0
- M.2 SSD 1

Item Specific Help



Advanced

HP Computer Setup

Settings

Diagnostics Download URL

➔ [Custom Download Address](#)

Diagnostics Logs Upload URL

- 3
- 4
- 2

Scheduled Execution

Frequency

Execute On Next Boot

1

5

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

Remote HP PC Hardware Diagnostics Result

Remote HP PC Hardware Diagnostics was never executed.

Remote HP PC Hardware Diagnostics Execution

Status of last attempt to execute: Could not detect network link or network cable is unplugged



UEFI Drivers

HP Computer Setup

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