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

Main

BASIC SYSTEM INFORMATION

Item Specific Help

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

Help

Main

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

Help

Main

Item Specific 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

Help

Item Specific 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

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:

Main

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

Main

Network Configuration Settings

    Proxy Server **1**

2

IPv4 Configuration   **3**

➡ IPv4 Subnet Mask
➡ IPv4 Gateway

DNS Configuration   **4**

            100

Data transfer timeout
    Force HTTP no-cache **5**

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.

Help

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

Item Specific Help

Change Date And Time

Set Date (MM/DD/YYYY)   03 / 23 / 2018
Set Time (HH:MM):   04 : 08

Help

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

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

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.

Main

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

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

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   **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

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 he prompted to choose whether to restore GPT.

Help

Select a Drive

Item Specific Help

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

Help

Item Specific Help

Select a Drive

Help

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 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

1. Days

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

Boot Options

Startup Delay (sec.)

    Fast Boot

    CD-ROM Boot

    USB Storage Boot

    Network (PXE) Boot

    MemQual BIOS(For Test)

After Power Loss   **①**

    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:

Item Specific Help

1. After Power Loss

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

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   **1**

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

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.

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

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

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

Option ROM Launch Policy

Configure Option ROM Launch Policy   **1**

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

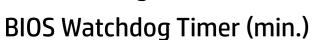Unconfigure AMT on next boot **2**

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).

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

Settings

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

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

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