



Installing multiple HP Z Turbo Drives or HP Z Turbo Quad Pro Drives (and likely also the Z Turbo Dual Pro Drives)

Configuring the drive addresses

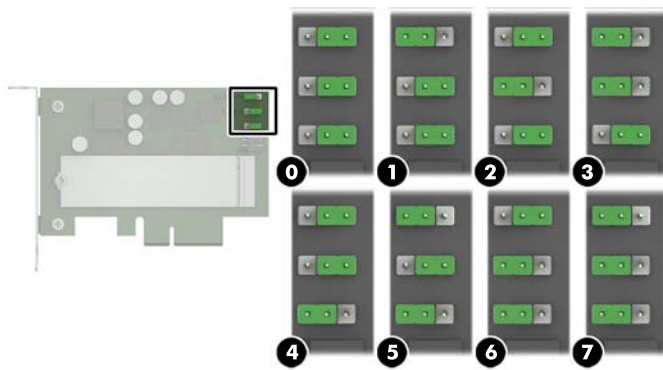
If more than one of any of the following drives are to be installed in a system, a unique address for each drive must be configured before installation:

- HP Z Turbo Drive
- HP Z Turbo Drive G2
- HP Z Turbo Quad Pro




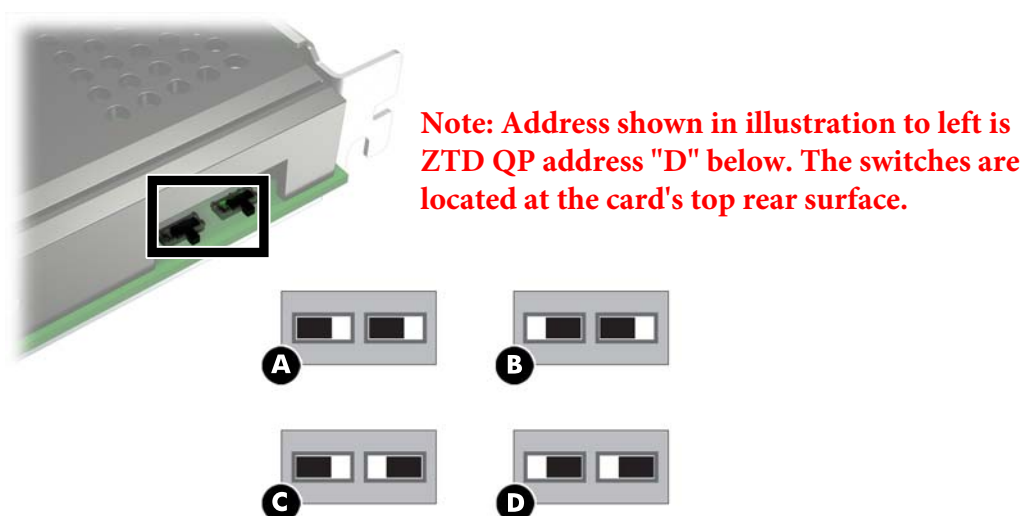
NOTE: A second HP Z Turbo Quad Pro can be installed on an HP Z840 with a second CPU only.

The HP Z Turbo Drive and HP Z Turbo Drive G2 both support a single M.2 module and have jumpers that can be set to **eight unique addresses**. Each HP Z Turbo Drive and HP Z Turbo Drive G2 must have a unique address. For possible jumper configurations and corresponding labels, see the following diagram (**0 = default**).




The HP Z Turbo Drive Quad Pro has switches that can be set to **four unique addresses**. Each HP Z Turbo Drive Quad Pro must have a unique address. For possible switch configurations and corresponding labels, see the following diagram.

 **TIP:** The black rectangle indicates the switch position.



Some of the HP Z Turbo Drive Quad Pro and HP Z Turbo Drive solutions addresses overlap. To prevent configuration of identical addresses, see the following chart.

 **NOTE:** HP recommends setting the addresses of any HP Z Turbo Drive Quad Pros, and then setting the addresses of any HP Z Turbo Drive solutions. If using a combination of solutions, HP recommends using Address C or Address D for the HP Z Turbo Drive Quad Pro and Address 0, Address 1, Address 2, or Address 3 for the HP Z Turbo Drive solution.

HP Z Turbo Drive and HP Z Turbo Drive G2 address	HP Z Turbo Drive Quad Pro address	Instructions
0	A	If an HP Z Turbo Drive Quad Pro is configured at Address A, the HP Z Turbo Drive solutions must not be at either Address 0 or Address 1.
1		
2	B	If an HP Z Turbo Drive Quad Pro is configured at Address B, the HP Z Turbo Drive solutions must not be at either Address 2 or Address 3.
3		
4	C	If an HP Z Turbo Drive Quad Pro is configured at Address C, the HP Z Turbo Drive solutions must not be at either Address 4 or Address 5.
5		
6	D	If an HP Z Turbo Drive Quad Pro is configured at Address D, the HP Z Turbo Drive solutions must not be at either Address 6 or Address 7.
7		

Note: From the information above a single M.2 SSD ZTD G1 or G2 set to address 0 or 1 is equal to A, set to 2 or 3 is equal to B, set to 4 or 5 is equal to C, or set to 6 or 7 is equal to D. The same A-D 4 unique addressing scheme likely holds true for a ZTD Dual Pro because it appears to also have only 2 sets of addressing jumpers (3 pins each) which allows only 4 addresses.

Configuring the LED cables

If more than one of any of the following drives are to be installed in a system, you must configure the LED cables between the drives and the system board as follows.

To configure the LED cables on a system with two HP Z Turbo Drive Quad Pros:

1. Connect an LED cable to the HDD activity header on the first PCI drive that is marked HDDACT_OUT.
2. Connect the other end of this LED cable to the HDD activity header on the second PCI drive that is marked HDDACT_IN.
3. Connect an LED cable to the HDD activity header on the second PCI drive that is marked HDDACT_OUT.
4. Then, connect the other end of this LED cable to the HDD LED connector on the system board.



NOTE: To locate the HDD LED connector on the system board, see the *System Board Overview* on the service panel.

To configure the LED cables on a system with an HP Z Turbo Drive Quad Pro and an HP Z Turbo Drive:

1. Connect an LED cable to the HDD activity header on the HP Z Turbo Drive that is marked HDDACT1.
2. Connect the other end of this LED cable to the HDD activity header on the HP Z Turbo Drive Quad Pro that is marked HDDACT_IN.
3. Connect an LED cable to the HDD activity header on the HP Z Turbo Drive Quad Pro that is marked HDDACT_OUT.
4. Then, connect the other end of this LED cable to the HDD LED connector on the system board.



NOTE: To locate the HDD LED connector on the system board, see the *System Board Overview* on the service panel.

Completing the installation

1. Reinstall the access panel.
2. Reconnect the AC power cord and turn on the workstation.

Configuring the computer

The HP Z Turbo Drive Quad Pro is an NVMe device. NVMe devices require a driver for proper detection and operation. Windows® 8 and higher have this driver by default. To download the driver for Windows 7, go to <http://www.hp.com/go/workstationsupport>.

For Linux®, an NVMe driver was merged into version 3.3 of the Linux kernel.

When powering up the computer after installation, a new hard drive identifies itself as uninitialized storage. See the operating system documentation for information about how to set up the new drive.



CAUTION: If you are installing an operating system image on the drive, remove all other storage devices. Verify that you installed this drive in the primary PCIe slot indicated for your workstation, and then install the operating system image before installing a second drive of the same type or reinstalling the other storage devices. The preferred slots are noted in the installation instructions for each computer. If you are using the drive as a data drive, you do not need to remove the other storage devices.



NOTE: Some operating systems automatically schedule defragmenting sessions. This offers no benefit for an SSD; therefore, the user can remove the automatic scheduling. This will also save energy.