

NVMe Plugfest testing

Be ready for mandatory UHN-IOL Plugfest tests



Quarch has worked with the team at the University of New Hampshire's InterOperability Laboratory (UHN-IOL) for many years. We run hot-plug test stations at the UHN-IOL's Plugfest events, performing tests that all PCIe SFF devices need to pass. This document lists what you'll need to [run the tests in your own lab](#) so you can be confident your device will meet the specification.

UHN-IOL hot-plug testing

Hot-plugging a PCIe device is a complex test scenario. Each U.2 drive tested at Plugfest must pass a series of different hot-plug tests, simulating everything from a very fast hot-plug (the drive being slammed quickly into the enclosure), to a slow plug. Five different speeds of hot-plug are tested, making a total of 50 hot-plug events.



The device must correctly enumerate on the system every time, and the link speed and width must be the same every time. Potential failures include:

- The drive does not enumerate
- The drive connects at a lower speed
- The drive connects at a lower lane width
- The host PC crashes, shuts down or presents an error message.

If you're not currently part of the Plugfest, get in touch with the [UNH team](#).

Be ready—run your own tests before you get to Plugfest

The best way to ensure a pass at Plugfest is to do plenty of testing in advance. Here's what you'll need to run the tests in your own lab:

- ▶ [QTL1260 - Interface kit](#)
- ▶ [QTL1743 - Gen3 PCIe HS Drive Module](#)
- ▶ [TestMonkey GUI](#) (free download).

Plus, download our **free** application note, [AN-003 - NVMe Plugfest testing](#), for:

- ▶ Detailed descriptions of the mandatory tests
- ▶ The latest scripts for running the Plugfest tests automatically in your lab
- ▶ Recommendations for additional industry-standard testing you should carry out to ensure your device is compliant.

Tech tip: The number of test scenarios required for a pass at future Plugfests is likely to increase year-on-year. For advance notice of changes to these hot-plug tests, [sign up](#) for the Quarch Technical Updates.

Find out what users say about Quarch tools

Find out [why test labs, drive reviewers and test equipment manufacturers use Quarch tools](#).

Technical specifications

- ▶ [Torridon Interface Kit](#)
- ▶ [Gen3 PCIe HS Drive Module](#).

Arrange a free evaluation or a quote

Depending on your requirements, we can normally supply you with free evaluation kit for a short period of time. To apply, or to arrange a quote, email sales@quarch.com or contact one of our skilled [regional resellers](#).

Need more information?

- ▶ [Get in touch](#) with us for answers to your questions
- ▶ Find out about [support available from our website](#)
- ▶ Download more information from the list below.

Downloads

[AN-003 - NVMe Plugfest testing](#)

[M.2 testing](#)

[USB testing](#)