

Torridon PCIe SFF Drive Control Modules



Hot-Swap automation for Gen3 PCIe SFF Drives



Reduce Time to Market

Cut time to market by 20% for new products by automating manual test procedures

Reduce Capital Costs

Faster and more detailed testing with Torridon means fewer test systems are required in the lab

Reduce Human Error

Removing human intervention during tests increases consistency and results in far fewer mistakes. Test scripting provides logging and 100% repeatability

Increase Product Reliability

Advanced techniques, such as bounds testing and fault injection provide a higher level of confidence and reduced field returns

Torridon Drive Control Modules:

The industry's first automated solution for hot-swap testing. Drive Modules vastly increase the speed of testing and introduce a level of repeatability and precision that is impossible during manual tests.

Complete Automation:

Any test that requires manual intervention to pull or plug a drive can now be fully automated.

Simple Integration:

The Torridon System works with your existing automated test setup and integrate with minimal effort. A simple command set allows for easy scripting. Quarch provides full support as standard while you get started

Who Can Benefit?

Enclosure Manufacturers
RAID Developers
Storage System Integrators
Drive Qualification Labs
Silicon Manufacturers
Software/Driver Designers

Torridon PCIe SFF Drive Control Modules

Interface Specification

Power

- ▶ Supplied from Torridon Interface Card or Array Controller

Comms

- ▶ USB/Serial with Interface Kit
- ▶ Telnet/USB/Serial with an Array Controller

Drive Compatibility

Sizes

- ▶ 2.5" form factor (also compatible with 3.5" drives)

Drive Connections

- ▶ SFF-8639 and compatible

Speed

- ▶ Up to PCIe Gen 3

Switching

Switches

- ▶ High Speed FETs
- ▶ High Current, Low insertion loss

Switched Pins

- ▶ All precharge, power and high speed PCIe data pins. Also SM_BUS, Ref clocks, EPERST, DUALPORT_ENABLE and IF_DETECT.

Timing Specification

Timers

- ▶ 6 Independent timers for multi stage hot-swap

Timing resolution

- ▶ 1mS

Pin-bounce resolution

- ▶ 10uS

Pin-bounce modes

- ▶ Simple duty-cycle
- ▶ User defined 100 bit pattern

Manual Mode

- ▶ Full manual connection control for fault injection and bugged hardware generation

Line Glitching

Timing

- ▶ Glitch any line down to 50nS

Sequences

- ▶ Run glitches in sequences and PRBS patterns

Physical Dimensions

QTL1743

- ▶ 69.1mm x 15mm
- ▶ Drive offset by ~14mm

Support and Utilities

Phone and email support direct to the engineers as standard

'TestMonkey' GUI for rapid test prototyping, script generation and bench testing

Ordering Information

QTL1743

Single units

- ▶ Ideal for bench testing, debugging and evaluation
- ▶ Order with Torridon Interface Kit QTL1260

Multiple units

- ▶ Use with Torridon Array Controller (QTL1079, QTL1461) for synchronized testing of disk arrays

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