

Torridon Mini SAS Cable Pull Module



Hot-Swap automation for Mini SAS Cables



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 Cable Pull Modules:

Automated solution for Cable Pull / Push and Fault Injection. Cable Pull Modules vastly reduce test duration 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 integrates 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 Mini SAS Cable Pull Module

Interface Specification

Power

- ▶ Supplied from Torridon Interface Card or Array Controller

Comms

- ▶ USART Serial - DB9
- ▶ USART Serial - RJ45(RS232D)
- ▶ USB

Cable Compatability

Sizes

- ▶ Compatible with 4 lane 26 pin Mini SAS cables (SFF8088).

Speeds

- ▶ Supports 3Gb and 6Gb* data rates

Switching

Switches

- ▶ High Speed RF switches
- ▶ Low insertion loss

Switched Pins

- ▶ All 16 SAS Data Pins may be switched individually

Physical Dimensions

QTL1253

- ▶ Length 84.0 mm
- ▶ Width 63.5 mm
- ▶ Height 30.0 mm

Timing Specification

Timers

- ▶ 6 Independent timers for multi stage hot-swap

Timing resolution

- ▶ 1mS

Pin-bounce resolution

- ▶ 10uS

Pin-bounce modes

- ▶ Constant Frequency
- ▶ User defined 100 bit pattern

Manual Mode

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

Glitching

Timing

- ▶ Glitch any combination of signals with pulses down to 50nS

Sequences

- ▶ Run glitches in sequences and PRBS patterns

Fault Injection

SAS Errors

- ▶ Create Framing Errors
- ▶ Force SAS Identify Sequence
- ▶ Fault one side of a pair
- ▶ Fault entire lanes
- ▶ Create random disruption

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

QTL1253 - Single Unit
QTL1285 - Quad Unit in 19in Rack Panel

Single units

- ▶ Ideal for bench testing, debugging and evaluation

Multiple units

- ▶ Run from a Torridon Array Controller for synchronized testing of large disk arrays

Quarch Technology Ltd

UK Sales / Technical Enquiries
+44 1343 508 140
enquiries@quarch.com

US Sales Office
+1 617 245 0528
us_enquiries@quarch.com

<http://www.quarch.com>

*For long cable lengths at 6Gb, system performance should be verified before purchase