



Cable Testers

Quickly identify bad cables, unusual pinouts and poor quality data links

Quarch
Data Sheet



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Highlights

- Map high speed links, accounting for unusual cross-over
- Identify broken wires
- Train the link at full data speeds
- Track bit error rates (BERT)
- Calculate eye height and view synthetic eye diagrams
- Decode EEPROM data

Use cases

Screening	Identify and reject failed cables quickly
Comparison	Comparing quality between batches and suppliers
Characterisation	Gain detailed insight into a cables performance
Identification	See exactly what a cable is reporting its self to be





Simple, fast testing

With this simple product, you can quickly ensure that any cable you have is both functional, and of a high quality.

From basic standalone testing, to detailed reports and advanced custom features, the tester is easy and fast to use. Testing a wide range of cables, including some custom configurations and non-compliant designs is now easy.

Link mapping ensures you know exactly how the cable is wired and the high speed BERT and eye measurement tests allow you to see the actual performance of the cable in a real world situation.

Control and automation

Basic pass/fail testing can be run with a standalone unit.

For more complete testing and detailed reporting, a cross-platform application is provided.

Our Python API allows full automation where more advanced control is required.

The screenshot shows the software interface with 'Lane Status' and 'Link Speed' sections. Below these is a list of test results with green checkmarks for 'Cable Present', 'Link Mapped', 'Link Trained', 'Eye Measurement', 'Eye Scan', and 'Cable Grading'. A table below displays test results for links A0 through B1.

Link	Bits Sent	Errors	BER	Eye Height
A0	1.4 Tb	0	< 7.1E-13	180.8
A1	1.4 Tb	0	< 7.1E-13	244.8
A2	1.4 Tb	0	< 7.1E-13	252.8
A3	1.4 Tb	0	< 7.1E-13	220.8
B0	1.4 Tb	0	< 7.1E-13	196.8
B1	1.4 Tb	0	< 7.1E-13	222.4

Supplied Parts

- Cable Tester** - The main unit
- Power Supply** - External 12v power supply, with multi-region plug
- USB Cable** - 2 meter USB cable

Also Required

- Downloads** - Our website contains many useful downloads to help you get started: www.quarch.com
 - USB Drivers
 - Technical Manuals
 - Quick Start Guides
 - Example Scripts
 - Cable Tester Application





Technical Information

Connections	QTL2250
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Supply Voltage	12V DC
Form Factor	Desk Unit
Control Ports	USB, LAN
Cable Ports	SFF-8644
Tx Clock Port	100MHz Tx clock
Rx Clock Ports	Recovered Rx clocks

Test Parameters	QTL2250
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Max Line Rate	24Gb/s
Additional Rates	2.5G, 3G, 5G, 6G, 8G, 12G, 16G, 22.5G
Cables Supported	SAS, PCIe, Custom*
Test patterns	PRBS7, 9, 15, 23, 31
Bert Resolution	1 bit

