Quantum Ultra320 SCSI Test Configurations

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Introduction

- The following slides are a compilation of the pictorial representations and the schematic for the configurations used by Quantum to test solutions for Ultra320 as presented in several T10 documents.
- These are provided so that others may duplicate the testing performed by Quantum to validate Quantum’s testing and to insure correlation of other test data presented to T10.
- The system components used for this testing were selected because they were available or made available by their manufacturers or their representatives and are considered to be representative of commonly available parallel SCSI components. The selection of these components is not meant to imply an endorsement of those components by Quantum.
- Additional information about the test set-ups for these configurations may be found in T10/00-214r0.doc.
10 meter cable assembly using Madison 28AWG round shielded cable†, plus a fully populated 6-slot backplane.

†Supplied by Amphenol Interconnect
- 2.25 meter cable assembly using Hitachi 32AWG twisted-flat cable†, plus a fully populated 6-slot backplane

†Supplied by Hitachi & Circuit Assembly
Ultra320 Test Configuration 3

- 10 meter cable assembly using Hitachi 32AWG twisted-flat ribbon cable† with 9 loads at 25 cm spacing beginning at 7.25 meters from the driver, plus a fully populated 6-slot backplane.

†Supplied by Hitachi & Circuit Assembly
• 10 meter cable assembly using Hitachi 32AWG twisted-flat ribbon cable† with 9 connectors (no receivers installed) with 25 cm spacing beginning 7.25 meters from the driver, plus a fully populated 10-slot backplane

†Supplied by Amphenol Interconnect
"25 Meter" Test Configuration

- This configuration was used for testing at both Ultra320 and Ultra640 data transfer rates
- 25 meter cable assembly using Madison 28AWG round shielded cable†, plus a fully populated 6-slot backplane

†Supplied by Amphenol Interconnect
Test Schematic

50 Ω aggressor XTALK source 1†

50 Ω random data source*

50 Ω aggressor XTALK source 2‡

* TEK AWG2041
† H-P 81130A
‡ TEK P6247 into LeCroy DDA120 or TEK P6247 into TEK TDS694C

Perfect terminators of the test equipment

Perfect terminators

100Ω ± 1% resistors located at end of backplane

Differential probe on victim lines‡