Mil1394 Signal Integrity Test Fixtures and Adaptors

Trusted IEEE-1394b Signal Integrity Test Accessories

Applications

TPA/TPB Signal Monitoring

Signal Integrity Measurements

Cable to Cable Interface

Cable Extension

Connector Type and Gender Changer

Crossover or Straight Through Adaptor

Benefits

Enables signal monitoring without breaking into cables

Enables signal integrity measurements to be taken with standard oscilloscope

Provides end of transmission line termination and test points for high quality signal integrity measurements

Longer cable lengths can be achieved using multiple short cables

Enables connections between cables with different connector types or genders

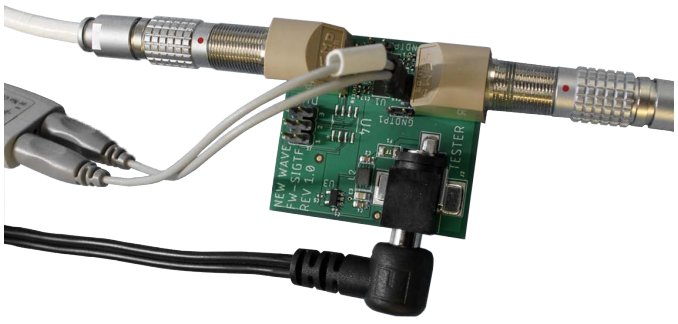
Enables odd number of crossovers required for 1394 connections

Features

Signal Integrity Test Fixtures provide end of net transmission line termination and test points making them ideal for IEEE-1394b and AS5643/1 signal integrity measures.

Mid-cable test fixtures allow IEEE-1394 signals to be monitored with minimal signal disruption. Additionally, they provide the opportunity to couple together multiple cables to extend cable length for experimentation.

Removable plastic enclosures protect boards and prevent electrical shorts.



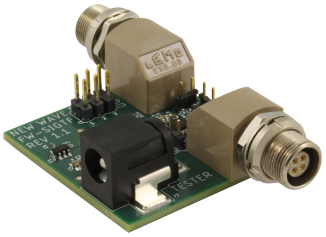
Overview

New Wave DV provides a variety of signal integrity test fixtures, cable couplers, connector adapters and gender changers. Additionally, New Wave DV can customize these products along with cables to meet our customer's specific requirements.

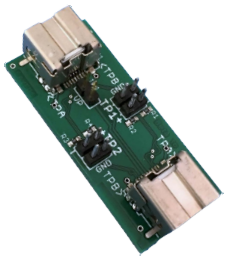
Signal Integrity Test Fixtures

To make high fidelity signal integrity measurements such as rise/fall times, amplitude, jitter, skew, eye diagrams, etc., the New Wave DV test fixtures provide 110 ohm impedance matched traces. Also includes end of net termination and oscilloscope probe test points to reduce reflections and other discontinuities that affect signal integrity measurements.

Specifically, our FW-SIGTF product provides a differential signal re-driver allowing the Device Under Test (DUT) transmitted signals to be measured at either the near-end, output connector of the DUT, or the far-end, after the DUT cable. The re-driver allows the DUT and tester devices to make and maintain a valid IEEE-1394 Beta 8b10b connection allowing COTS oscilloscopes to make the measurement without expensive external equipment or post processing. The FW-SIGTF uses latching Lemo connectors to provide good signal quality and secure connections.



Signal Integrity Test Fixture (FW-SIGTF)



9-Pin to 9-Pin Cable Coupler (FW-929-CC)

Cable Couplers and Adapters

New Wave DV's cable couplers and adapters allow similar or dis-similar cables to be connected to one another enabling signal monitoring, cable length extension, gender changes and crossover/straight-through adaption. Specifically, our FW-929-CC, FW-926-CC, FW-9238999-CC Cable Couplers/Adapters series allow standard IEEE-1394-2008 9-pin and 6-pin cables to be coupled together to create longer cable runs for test as well as adapting 9-pin to 6-pin if needed. Our FW-9238999-CC enables standard 9-pin IEEE-1394-2008 cables to be connected to a 38999 cable.

Given the large variety of 38999 connectors, New Wave DV offers customization services to change our standard product configurations to meet your specific requirements. Unterminated test point are available on these products, however because the oscilloscope probe location is mid-cable, they are typically only used for monitoring signals and not used to take signal integrity measurements.

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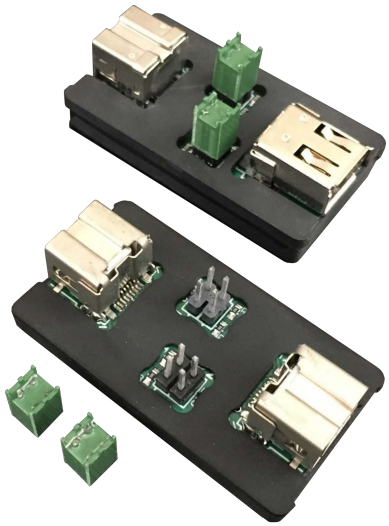
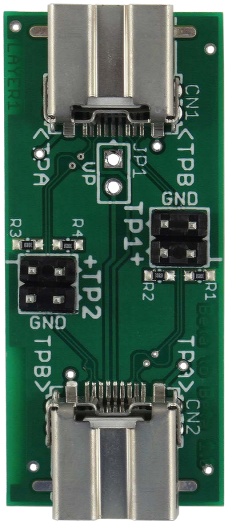
Enclosures

Depending on the application some customers require enclosures for the test fixtures, couplers or adapters. The enclosure option covers the otherwise exposed printed circuit board of the non-enclosure version. The –E options in the Ordering information section indicates the enclosure option (Example: FW-929-CC-E).





Ordering Information

FW-929-CC:
9-pin Bilingual to 9-pin Bilingual connector without Enclosure

FW-929-CC-E:
9-pin Bilingual to 9-pin Bilingual connector with Enclosure

FW-926-CC:
9-Pin Bilingual to 6-pin Alpha connector without Enclosure

FW-926-CC-E:
9-Pin Bilingual to 6-pin Alpha connector with Enclosure

FW-626-CC:
6-Pin Alpha to 6-pin Alpha connector

FW-9238999-CC:
Custom configuration
1 to n 9-pin Bilingual connectors to D38999 connector

FW-SIGTF:
IEEE-1394 Beta Signal Integrity Test fixture with Lemo connectors

Technical Specifications

CONNECTOR TYPES

- 9-pin IEEE-1394 Beta
- 6-pin IEEE- 1394 Alpha
- 4-pin Lemo
- D38999 - Various

SUPPORTED DATA RATES
S100B to S800B

INTEROPERABILITY
IEEE-1394 and AS5643 as appropriate

COMPLIANCE
IEEE-1394 beta signaling levels

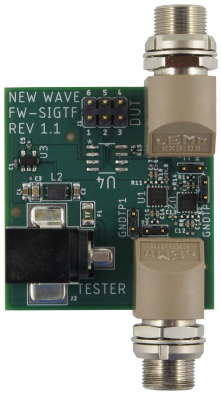
TEMPERATURE
Operating: 0°C to 70°C
Storage: -45°C to 85°C

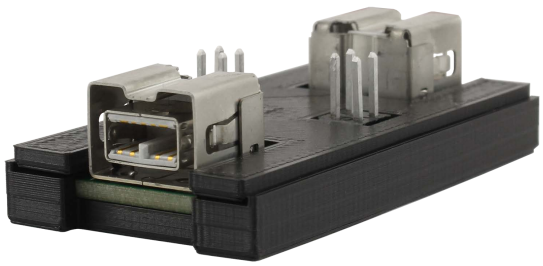
Complete Product Support Program

As our customers can attest, the New Wave DV team prides itself on excellent customer support. New Wave DV provides industry standard warranties on its products, but it is the human factor that makes our support so valuable to our customers. Our team takes the time and effort to ensure that the customer experience with our products is a positive one.

Our Commitment

New Wave DV is committed to providing the latest innovations in technology, architectures, and techniques to keep our customers one step ahead of the rest. Our products are intended to offer our customers an entirely unique out-of-the-box experience.





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