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## SAS 2.0 Transmitter Test Load

### Electrical Model

(Based on Empirical Measurements)

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By Galen Fromm  
Electrical Project Engineer  
[galen.fromm@molex.com](mailto:galen.fromm@molex.com)  
ph: (630) 718-5270  
fx: (630) 512-8620

*Disclaimer: Molex does not guarantee the performance of the final product to the information provided in this document.*

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## I. Model Description

Model Type: Touchstone (S-Parameter)

Bandwidth: 10MHz to 20GHz

Ports: (Motherboard) Port 1 through to Port 2 (Motherboard)  
(Motherboard) Port 3 through to Port 4 (Motherboard)

Model Basis: Empirical Measurements

Equipment: Agilent E8364B PNA series network analyzer  
Agilent N4421B s-parameter test set

Calibration: SOLT 10MHz to 20GHz, 1 MHz step

Data acquisition: Agilent Physical Layer Test System (PLTS) version 3.01  
Molex 26-circuit External iPass™ Test Fixture (PCB 73931-2540)

### Model Description:

The models provide for simulating pairs B5-B6 to A5-A6. These models are of corresponding terminals on the Molex iPass™ connector and associated 24AWG cable conductors.

Data representing cable assemblies of ten meters length, with four inches of 7-mil trace-width single-ended-route stripline printed circuit board trace (two inches on each of the signal launch and recovery test fixtures) in 4000-13 material environment.

The reference plane for the models is located at the SMA connectors.

Filename: SAS2\_transmittertestload.s4p (through measurement)

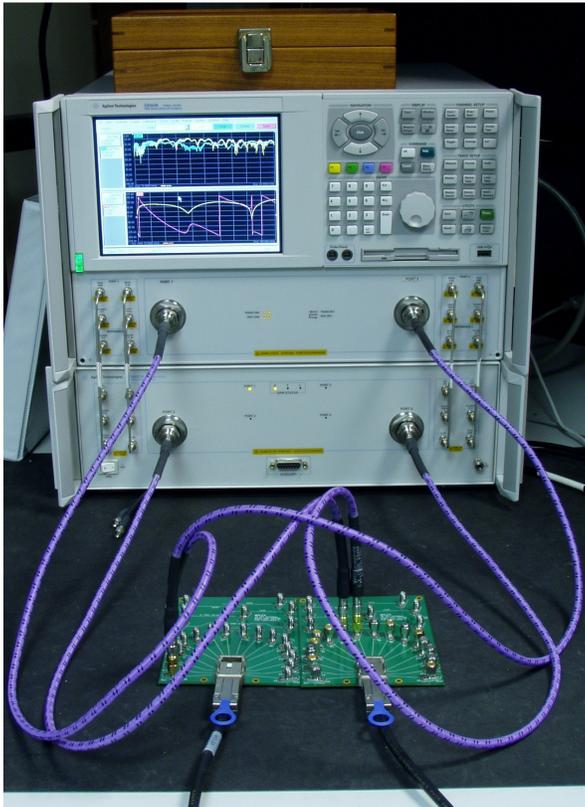


Figure 1. Agilent 8364B/4122 PNA and iPass cable assembly test fixtures

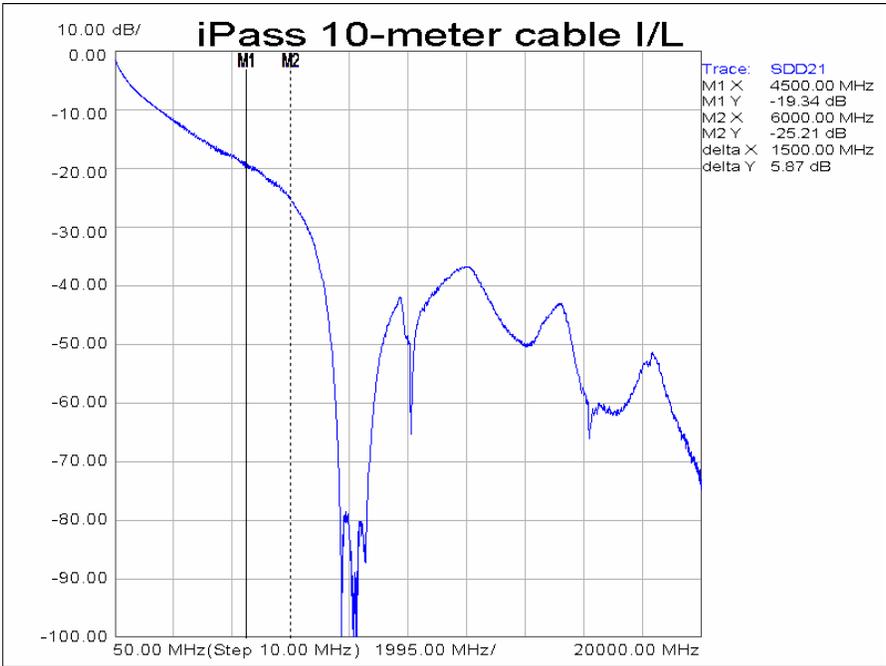


Figure 2. Differential cable insertion loss