Electrical Models

(Based on Empirical Measurements)

i-Pass 26-circuit
for SAS

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

I. Model Description

Model Type: Touchstone (S-Parameter)

Bandwidth: 50MHz to 20GHz

Rise-time: 25ps (20-80%) is the maximum recommended rise time for sources when using these models in time-domain simulations

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 50MHz to 20GHz, 10 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 A5-A6 to B5-B6, with the crosstalk combinations to the adjacent pair, A2-A3. These models are of corresponding terminals on the Molex iPass™ connector and associated cable conductors.

Data representing cable assemblies of length one-half, one, three and six meters, with four inches of printed circuit board trace, is included.

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

Filenames: (cablelength)_A5A6B5B6.s4p (through measurement)
(cablelength)_A5A6A2A3NE.s4p (near-end crosstalk)
(cablelength)_A5A6A2A3FE.s4p (far-end crosstalk)

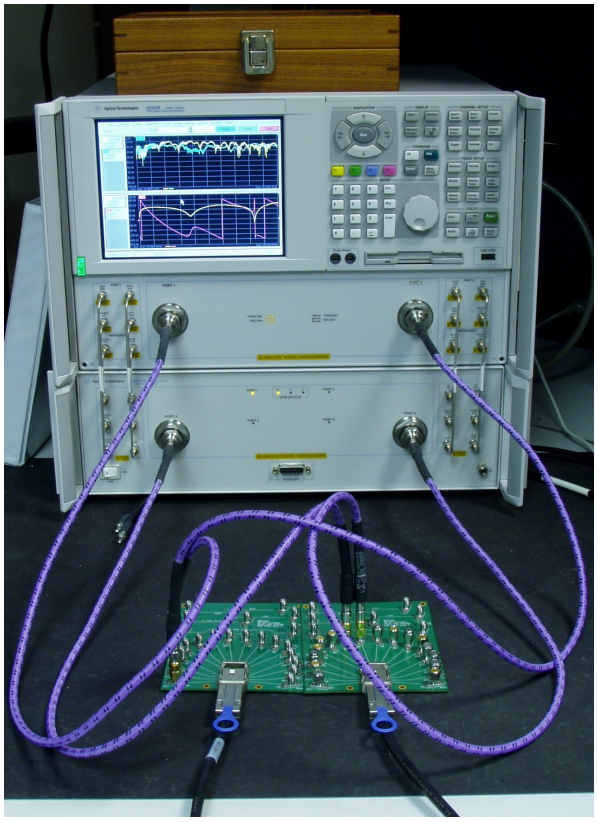

Figure 1. Agilent 8364B/4122 PNA and iPass cable assembly test fixtures

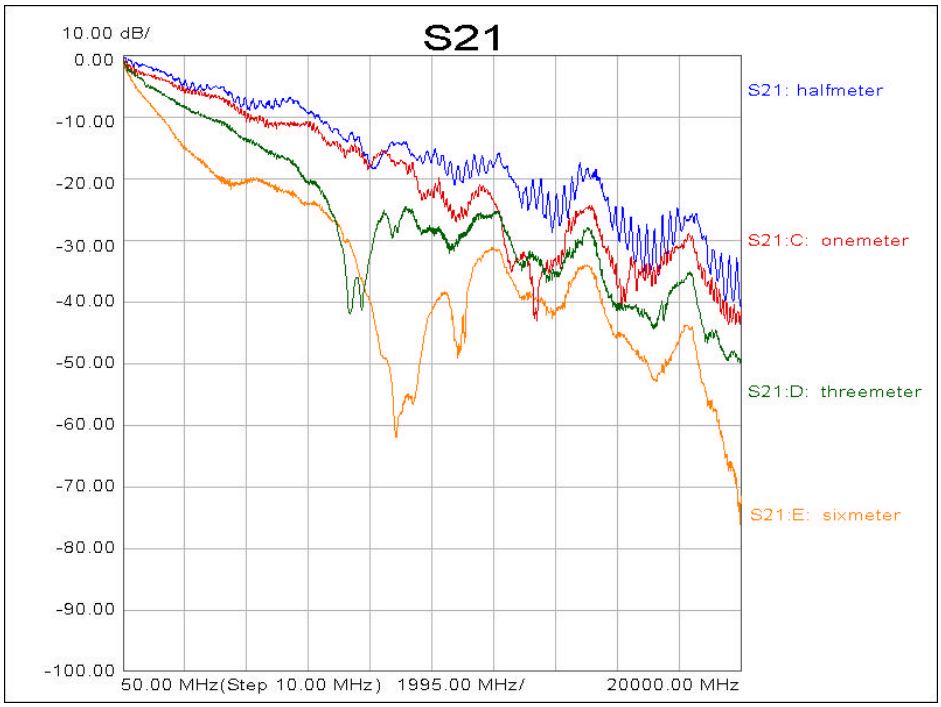

Figure 2. Single-ended cable insertion losses