

T10/05-389r0 SAS-2 Channel Models (4-Connector, Board-to-Board)

To: T10 Technical Committee
From: Barry Olawsky, HP (barry.olawsky@hp.com)
Date: 19 October 2005
Subject: T10/05-389r0 SAS-2 Channel Models (4-Connector, Board-to-Board)

Revision History

Revision 0 (19 October 2005) first revision

Related Documents

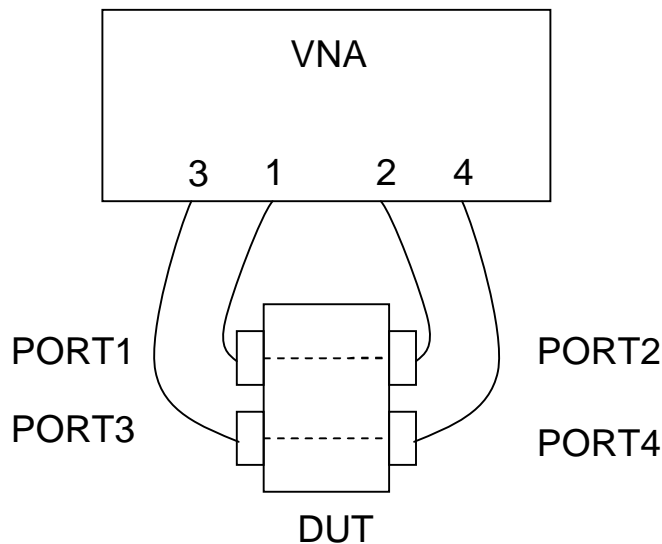
05-357r0 - SAS-2 External Cable Electrical Specification (Alvin Cox, Seagate)

Overview

Provide sample channel models to the storage industry. Each of the enclosed channel designs consist of four connector interfaces with a total of 18 to 20 inches of FR-4. All four connector interfaces are grid array board-to-board designs.

Measurement Setup

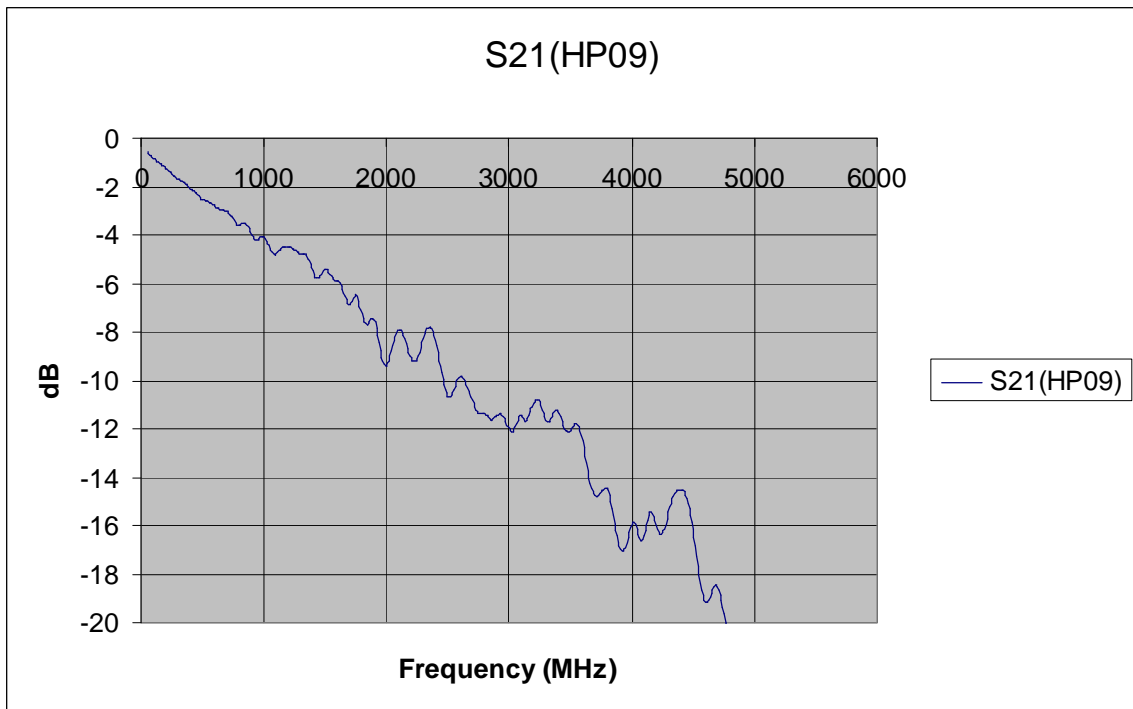
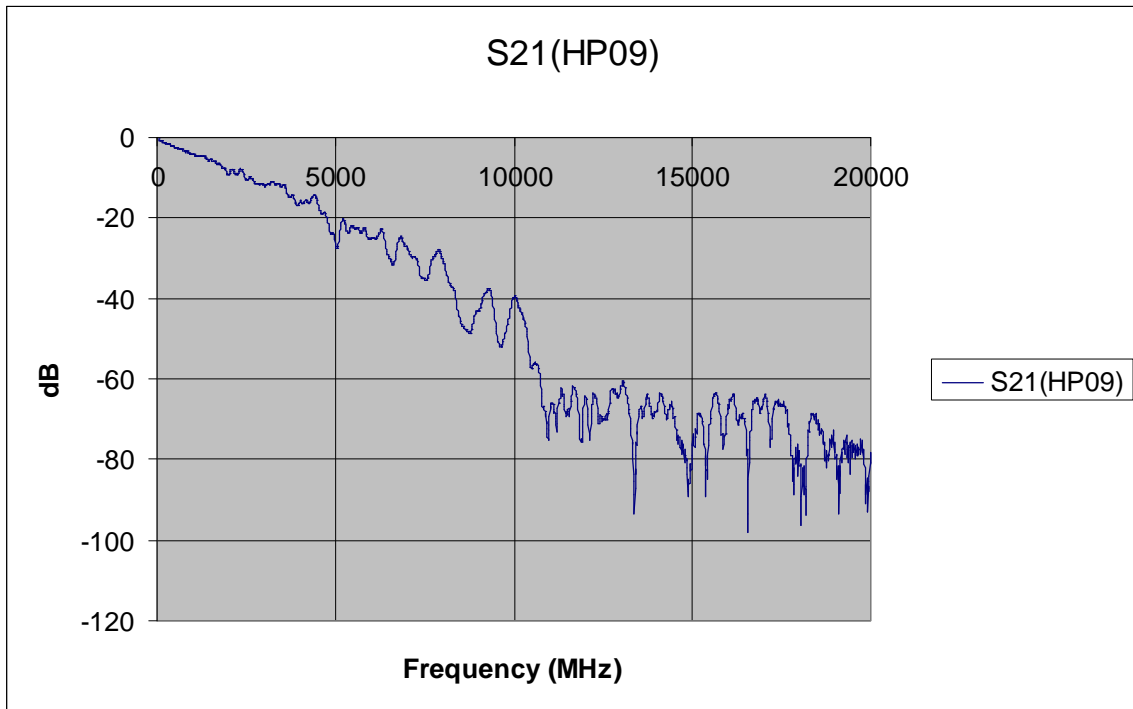
Measurements were performed with an E8362B Agilent VNA and N4419A test set. The frequency range is 50MHz to 20GHz with a 10MHz step size. The format of the data is (magnitude, angle) ... but not dB magnitude. Input to output port mapping through the DUT is shown in the following figure.



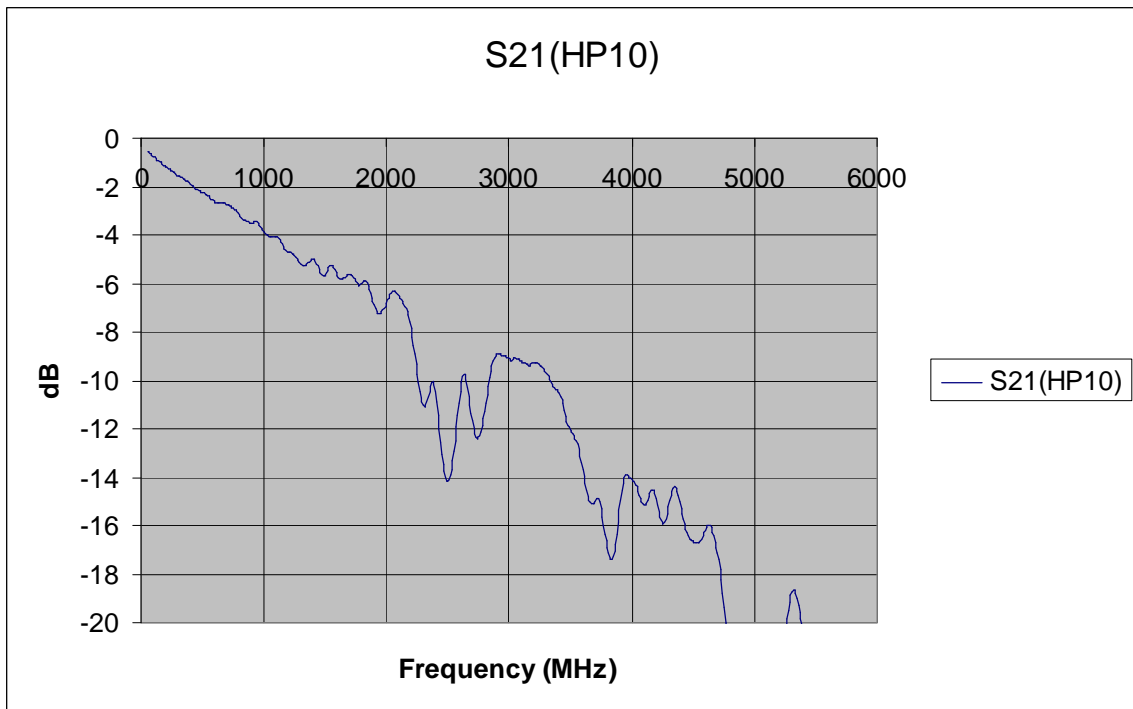
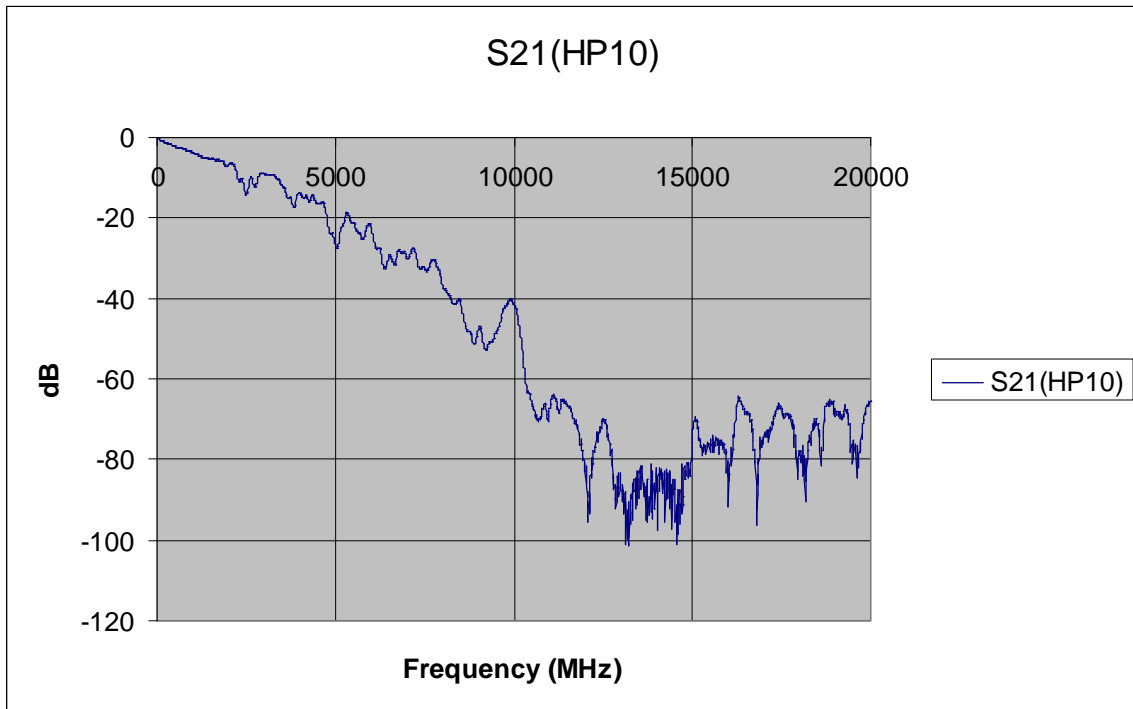
S21 Plots

S21 plots are provided below to assist in selecting sample channels to evaluate.

HP09_BtoB_4Connector:



HP10_BtoB_4Connector:



HP11_BtoB_4Connector:

