Series: LPAM/LPAF
Description: Low Profile, Open Pin Field Array, 1.27mm x 1.27mm Pitch, 4mm Stack Height

Connector Overview

LPAM/LPAF is a low profile, 1.27mm x 1.27mm pitch array interconnect system for high-speed board-to-board applications. The open pin field design allows for dual signaling and is suitable for Fiber Channel, Rapid I/O, PCIe, SATA and Infiniband data rates.

The LPAM/LPAF Series has been designed in 4, 6, 8 ad 10 rows arrays. Positions per row options designed include 10, 20, 30, 40 or 50. This report presents the high-speed electrical characteristics specific to LPAM-1mm/LPAF-3mm 4mm mated stack height test system.

Connector System Speed Rating

LPAM/LPAF Series, 1.27mm x 1.27mm (.050" x .050") pitch interconnect, 4mm Stack Height.

Signaling	Speed Rating
Single-Ended: 1:1 S/G	**16.5 GHz/ 33Gbps**
Single-Ended: 2:1 S/G	**17.0 GHz/ 34Gbps**
Differential: Optimal Horizontal	**18.5 GHz/ 37Gbps**
Differential: Optimal Vertical	**17.5 GHz/ 35Gbps**
Differential: High Density Vertical	**17.5 GHz/ 35Gbps**

The Speed Rating is based on the -3 dB insertion loss point of the connector system. The -3 dB point can be used to estimate usable system bandwidth in a typical, two-level signaling environment.

To calculate the Speed Rating, the measured -3 dB point is rounded up to the nearest half-GHz level. The up-rounding corrects for a portion of the test board's trace loss, since a short length of trace loss is included in the loss data in this report. The resulting loss value is then doubled to determine the approximate maximum data rate in Gigabits per second (Gbps).

For example, a connector with a -3 dB point of 7.8 GHz would have a Speed Rating of 8 GHz/ 16 Gbps. A connector with a -3 dB point of 7.2 GHz would have a Speed Rating of 7.5 GHz/15 Gbps.