Series: GMI
Description: Low Profile One Piece Array, 1.0mm x 1.0mm Grid, 1.27mm Stack Height

Connector Overview

GMI is a low profile, 1.0mm x 1.0mm (.0394" x .0394") pitch one-piece interconnect system for high-speed board-to-board applications. The GMI is ideal for board stacking, module-to-board and LGA interfaces. It has been designed for up to 400 I/Os. This report reflects the hi-speed electrical characteristics specific to a mated 1.27mm stack height.

Connector System Speed Rating

GMI Series, 1.0mm x 1.0mm pitch interconnect, 1.27mm Stack Height.

Signaling	Speed Rating
Single-Ended: 1:1 S/G	**20 GHz/ 40Gbps**
Single-Ended: 2:1 S/G	**12 GHz/ 24Gbps**
Differential: Optimal Horizontal	**20 GHz/ 40Gbps**
Differential: Optimal Vertical	**20 GHz/ 40Gbps**
Differential: High Density Vertical	**16.5 GHz/ 33Gbps**

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.