

**Series:** HDAM/HDAF Series (HDMezz)

**Description:** 1.2mm x 2mm grid interconnect system, high density array, 20mm Stack Height

## Connector Overview

HDAM/HDAF is a 1.2mm x 2mm grid interconnects system for elevated high-speed board-to-board applications. The high density array's open pin field design allows both single-ended and differential pair routing. The HDAM/HDAF Series is developed with 143, 195, or 299 signal routing selections. The series is available in 20mm, 25mm 30mm, and 35 mm stack heights. This report depicts the hi-speed electrical characteristics specific to a mated 20mm stack height HDAM/HDAF board-to-board test system.

## Connector System Speed Rating

HDAM/HDAF Series, 1.2mm x 2mm (.0472" x .0875") grid interconnect, 20mm Stack Height

<u>Signaling</u>	<u>Speed Rating</u>
Single-Ended:	<b>9.5 GHz / 19Gbps</b>
Differential:	<b>9.0 GHz / 18Gbps</b>

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 trace losses are 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.