

Series: RU8-SE and RU8-DP Riser Card Kits

Description: Parallel Board-to-Board, 0.8mm Pitch, 25mm (0.9843") Stack Height

Connector Overview

The RU8 series Riser Card Kit includes 2 HSEC8 series (0.8mm (.031") pitch) high speed edge card connectors, mated with a FR4-based riser card, creating a standard board-to-board spacing of 25mm (0.9843"). The RU8 series is available with up to 120 I/Os. The data in this report is applicable only to this alternative 25mm (0.9843") board-to-board stacking system.

This report presents data for single-ended and differential-pair signaling. The following table presents the RU8 series part numbers used for each test:

<u>Signaling</u>	<u>RU8 Series P/N</u>	<u>HSEC8 P/N</u>	<u>Riser Card P/N</u>
Single-Ended	RU8-150-25-SE-x-DV	HSEC8-150-01-X-DV-A	PCB-100256-RU8-050-25-SE
Differential	RU8-150-25-DP-x-DV	HSEC8-150-01-X-DV-A	PCB-100256-RU8-050-25-DP

Connector System Speed Rating

RU8 Series, Parallel Board-to-Board, 0.8mm Pitch, 25mm (0.9843") Stack Height

<u>Signaling</u>	<u>Speed Rating</u>
Single-Ended:	7.5 GHz / 15 Gbps
Differential:	7.5 GHz / 15 Gbps

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.