

5.2 x 7.6 UltraSoM+ ST5 and SS5 B2B Connectors

5.2 x 7.6 cm UltraSoM+ modules use four Samtec Razor Beam LP Terminal Strip ([ST5](#)) on the bottom side.

- 4x REF-192552-02 (160-pins)
 - ST5 Mates with SS5

5.2 x 7.6 cm UltraSoM+ carrier use four Samtec Razor Beam LP Socket Strip ([SS5](#)) on the top side.

- 4x REF192552-01 (160-pins)
 - SS5 Mates with ST5

Features

- Board-to-Board Connector 160-pins, 80 contacts per row
- Ultrafine .0197" (0.50 mm) pitch
- Narrow body design saves space on board
- Lead style -03.5
- Samtec 28+ Gbps Solution
- Mates with: ST5
- Insulator Material: Liquid Crystal Polymer, schwarz
- Operating Temperature Range: -55°C bis +125°C
- Lead-Free Solderable: Yes
- RoHS Konform: Yes

Connector Stacking height

When using the standard type on baseboard and module, the mating height is 5 mm.

Other mating heights are possible by using connectors with a different height:

Order number	REF number	Samtec Number	Type	Contribution to stacking height	Comment
27219	REF192552-01	SS5-80-3.50-L-D-K-TR	Baseboard connector	3.5mm	Standard connector used on carrier
27018	REF-189545-02	SS5-80-3.00-L-D-K-TR	Baseboard connector	3 mm	Assembly option on request
27220	REF-192552-02	ST5-80-1.50-L-D-P-TR	Module connector	1.5 mm	Standard connector used on modules
27017	REF-189545-01	ST5-80-1.00-L-D-P-TR	Module connector	1 mm	Assembly option on request

Connectors.

The module can be manufactured using other connectors upon request.

Current Rating

Current rating of Samtec Razor Beam LP Terminal/Socket Strip ST5/SS5 B2B connectors is 1.5 A per pin (1 pin powered per row).

Connector Speed Ratings

The connector speed rating depends on the stacking height:

Stacking height	Speed rating
4 mm, Single-Ended	13GHz/26Gbps
4 mm, Differential	13.5GHz/27Gbps
5 mm, Single-Ended	13.5GHz/27Gbps

5 mm, Differential	20GHz/40 Gbps
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Speed rating.

The SS5/ST5 series board-to-board spacing is currently available in 4mm (0.157"), 4.5mm (0.177") and 5mm (0.197") stack heights.

The data in the reports is applicable only to the 4mm and 5mm board-to-board mated connector stack height.

Manufacturer Documentation

File	Modified
PDF File hsc-report-sma_st5-ss5-04mm_web.pdf	30 05, 2017 by Susanne Kunath
PDF File hsc-report-sma_st5-ss5-05mm_web.pdf	30 05, 2017 by Susanne Kunath
PDF File REF-192552-01.pdf	13 11, 2017 by John Hartfiel
PDF File REF-192552-02.pdf	13 11, 2017 by John Hartfiel
PDF File ss5.pdf	13 11, 2017 by John Hartfiel
PDF File ss5-st5.pdf	13 11, 2017 by John Hartfiel
PDF File ss5-xx-x.xx-x-d-k-tr-mkt.pdf	13 11, 2017 by John Hartfiel
PDF File st5.pdf	13 11, 2017 by John Hartfiel
PDF File st5-xx-x.xx-x-d-p-tr-mkt.pdf	13 11, 2017 by John Hartfiel

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