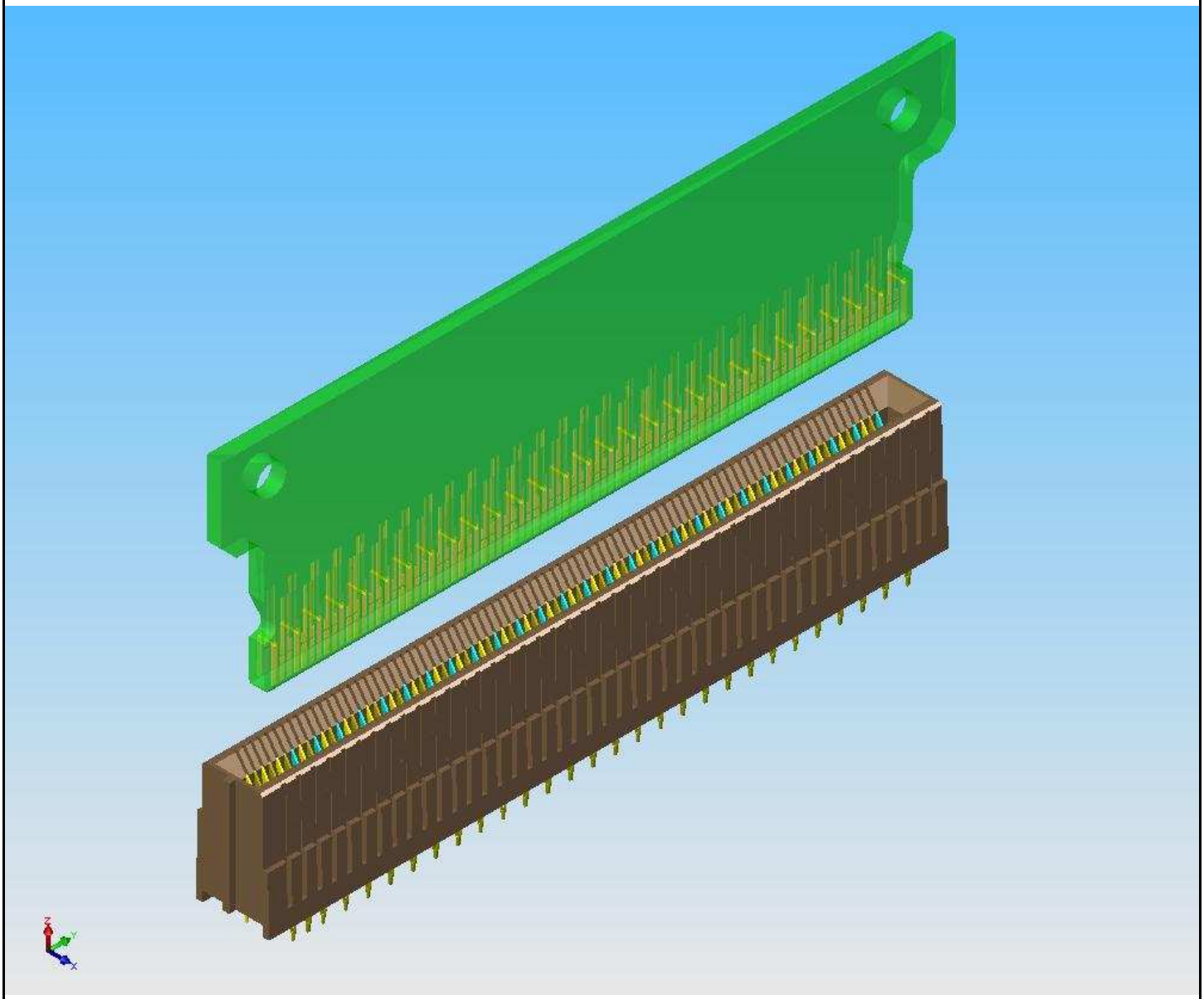
PRELIMINARY APPLICATION SPECIFICATION

10 Gb/s EDGE CARD CONNECTOR INTERCONNECT SYSTEM 75594-0000



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A	EC No: UCP2008-1098 DATE: 12-Nov-2007	PRELIMINARY APPLICATION SPECIFICATION FOR 75594-0000 HIGH SPEED EDGE CARD	1 of 10

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1.0 SCOPE

This document is NOT intended to be the final process definition nor is it intended to constrain design. This document contains general guidelines. Settings will vary according to the actual process and equipment used. The document addresses the manufacturing techniques and end-usage considerations for Molex's 75594-0000 High Speed Edge Card interconnect system. This system consists of 170 circuits on 0.75mm pitch. Various circuit sizes may be developed. Attachment to the Mother Board is (press-fit) compliant pin. No soldering is required. The customer is encouraged to contact Molex with any questions regarding the application of this product.

2.0 PRODUCT DESCRIPTION

2.1 Product Names and Series Numbers

Product Name and Series Number

High Speed Edge Connector

Part number: 75594-000

2.2 Dimensions, Materials, Platings, and Markings

(See applicable sales drawings for information)

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

Product Specification:	PS-75594-999
Sales Drawing:	SD-75594-001
Test Summary	TS-75594-001
SI Guideline	TS-75594-002
PCB Footprint :	SD-75594-001
Packaging:	PK-75594-999
Insertion Tool:	ATS-622018626
Extraction Tool:	ATS-621005200

4.0 Header Application to Mother Board (Backplane)

Figure 1
Base Plate Fixture

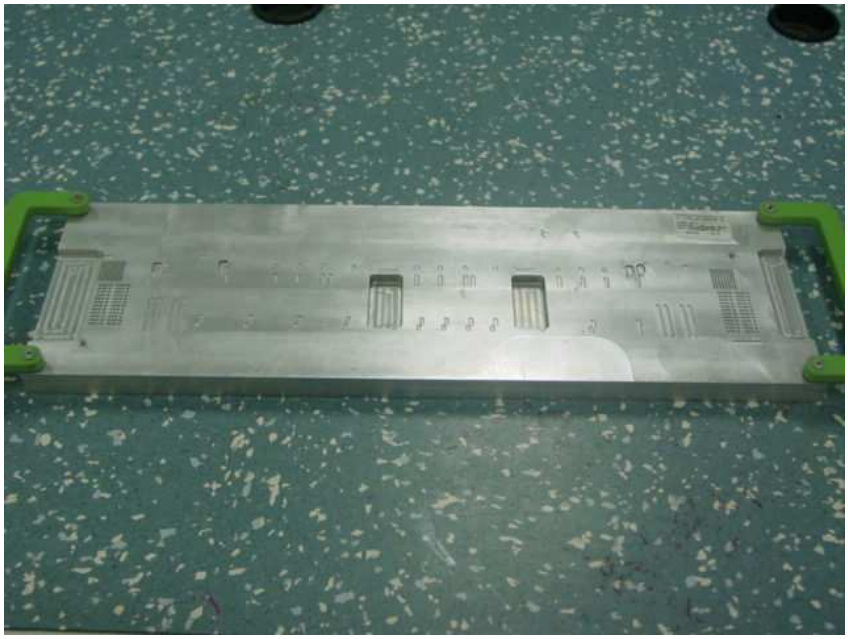


Figure 2
Backplane on Baseplate

P.C. Board Holes

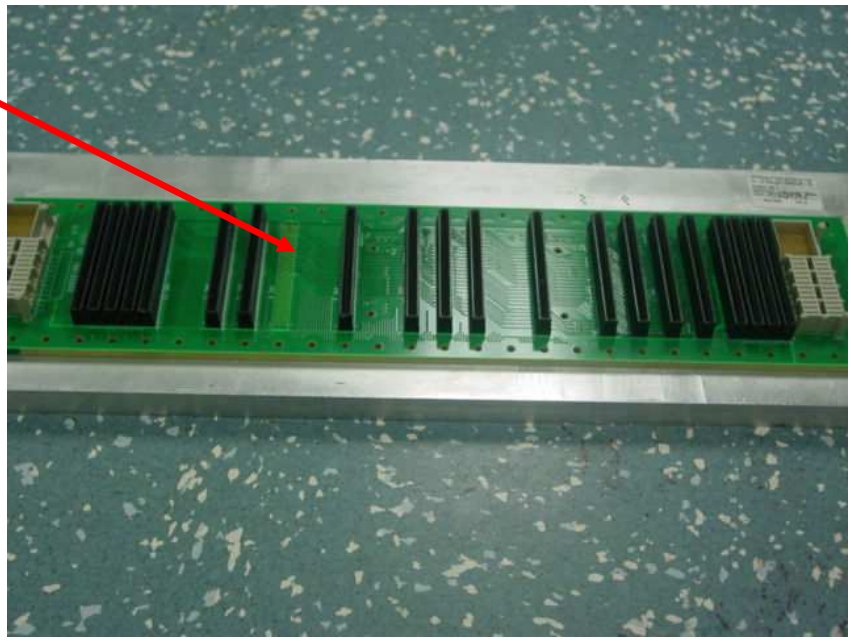


Figure 3
P. C. Board Hole Pattern
See Sales Drawing

P.C. Board Holes
0.46 ± 0.05 mm dia.
(finished)

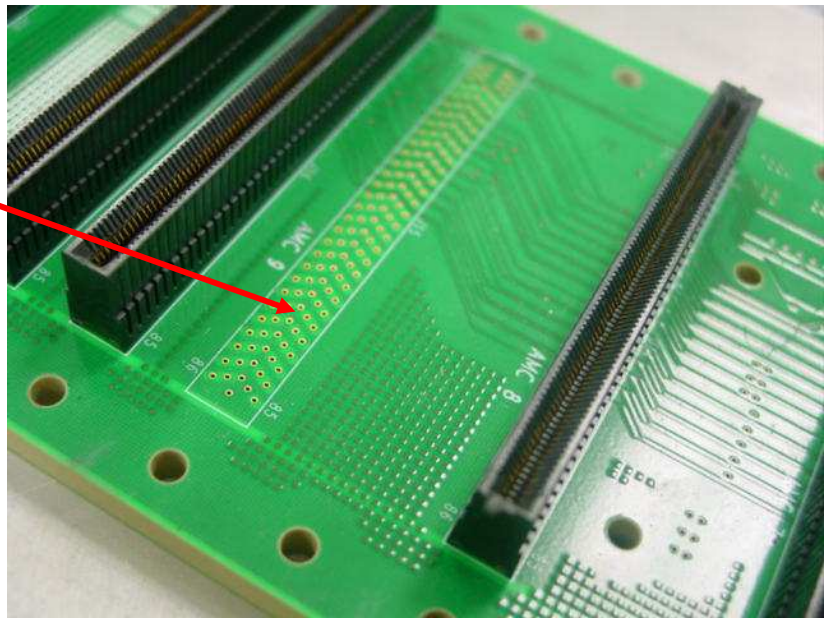


Figure 4
Header Placement on P. C. Board

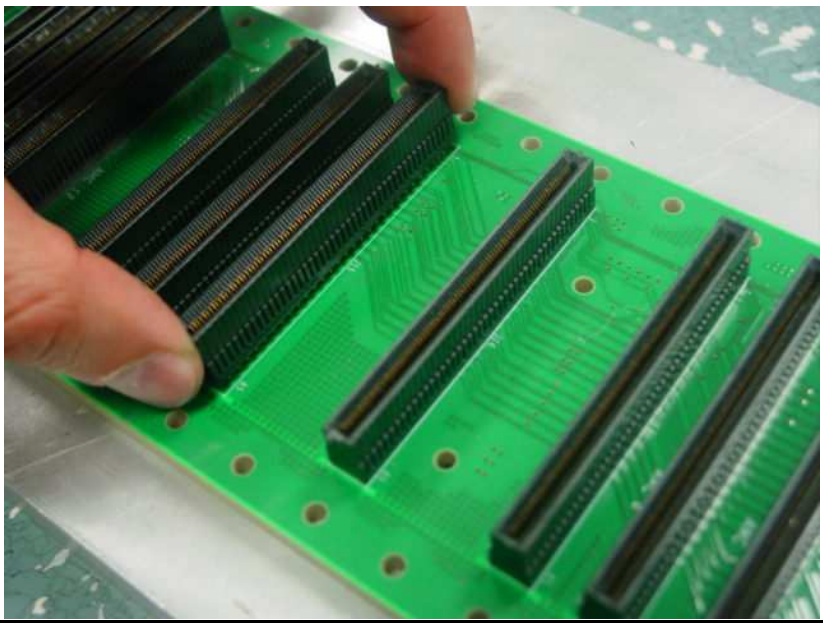


Figure 5
Insertion Tool Placement on Header
See Insertion Tool Doc. ATS-622018626

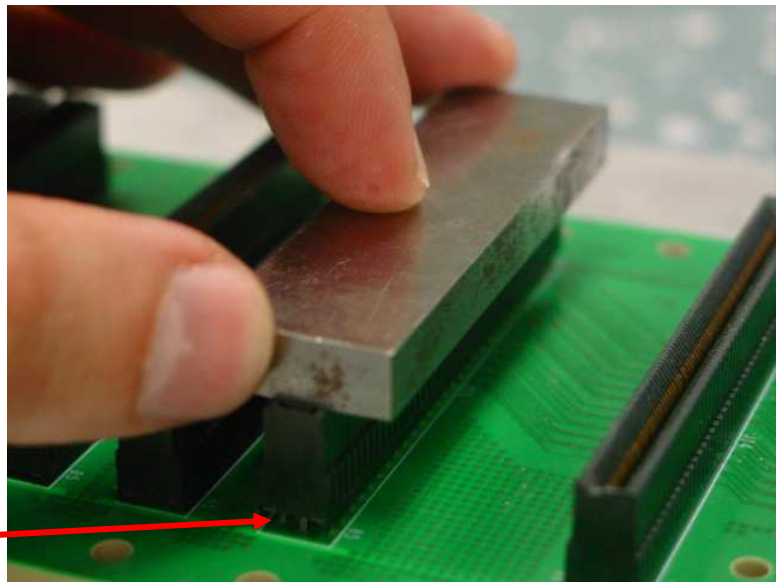


Figure 6
Backplane in Press

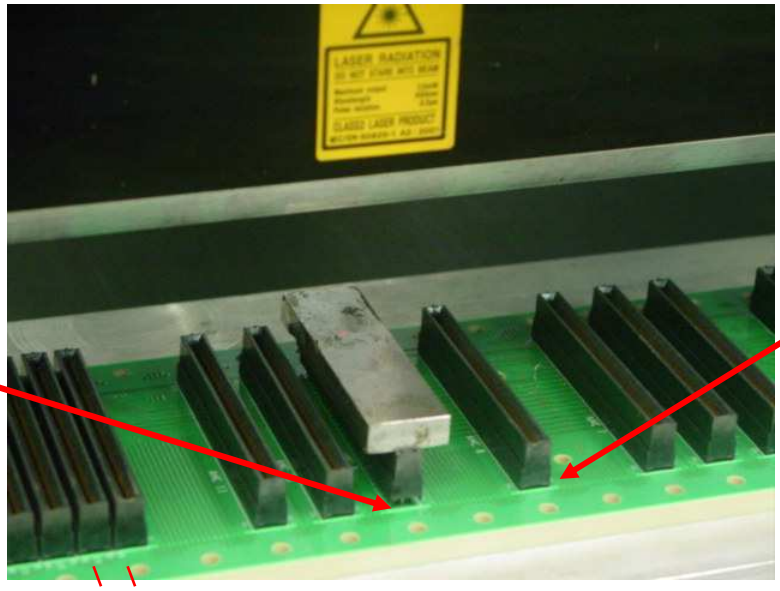
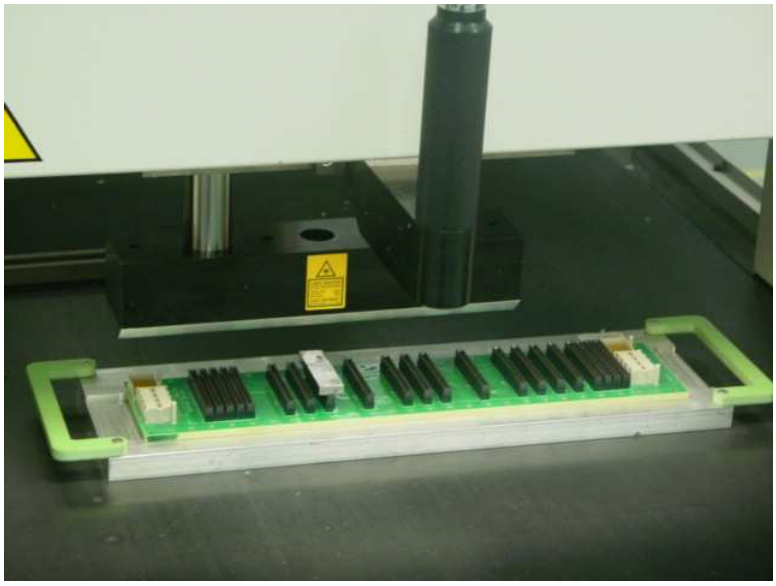


Figure 7
Backplane in Press – Full View



5.0 Inspection and Rework

5.1 Inspection

Figure 8
Bent Tails After Insertion Step – Header Side
(Scrap Part)

Header Shifted During Insertion
To Backplane - Bending Tails

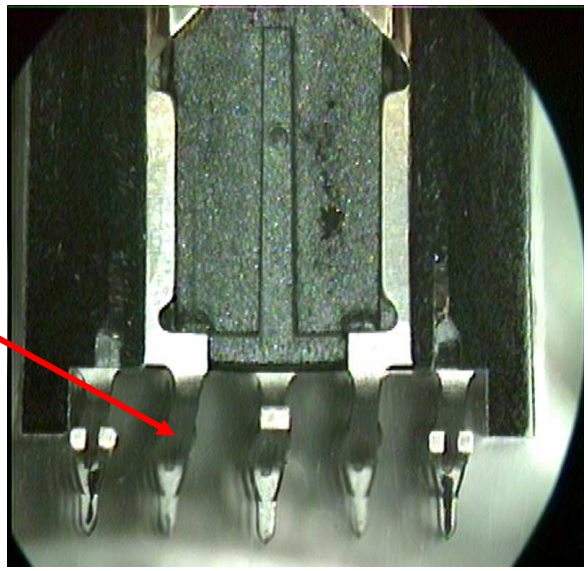
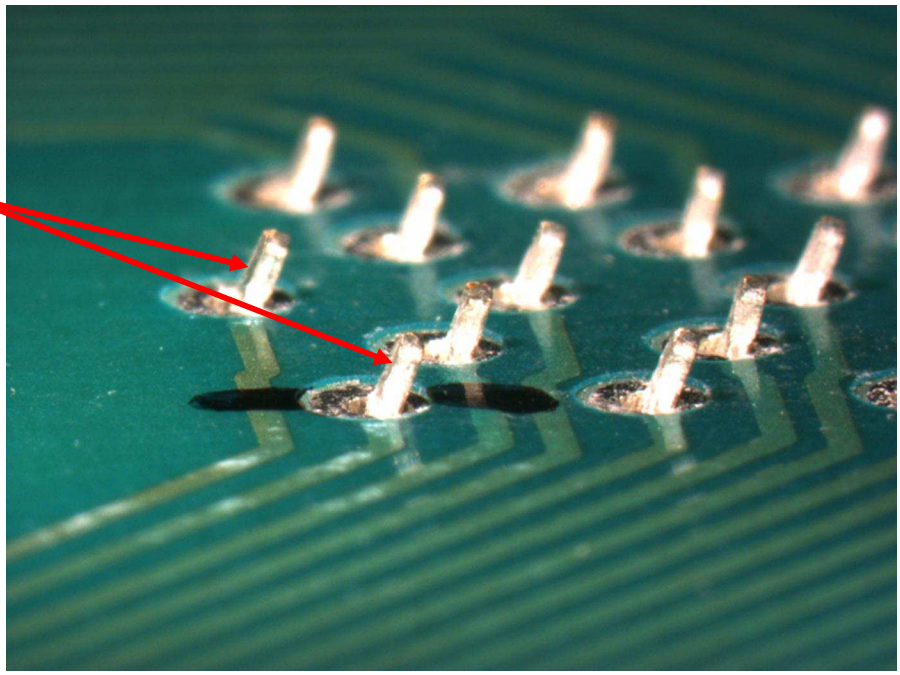


Figure 9
Bent Tails After Insertion Step – Bottom Side
(Scrap part)

Header Shifted During Insertion To PCB
(.062 inch / 1.60mm thick PCB shown, thicker boards may be used)



5.2 Rework:

5.2.1. Carefully remove header from PC Board using Molex Extraction Tool. See document ATS-621005200 for tooling and procedure.
5.2.2. Any terminals remaining in the PC Board after Header removal may be easily pulled out with a pair of needle-nose pliers.
5.2.3. Follow steps to insert a new Header.
5.2.4. PC Board hole integrity will withstand up to three Header insertions.

6.0 Mating and Un-Mating of Daughter Card to Header

6.1 Recommendations for Mating:

Daughter Card mating occurs after the Edge Connector has been mounted to the Mother Board. A mechanical guide slot is recommended for mating the daughter card to facilitate improved alignment.

Figure 10: Housing Rough Alignment Features

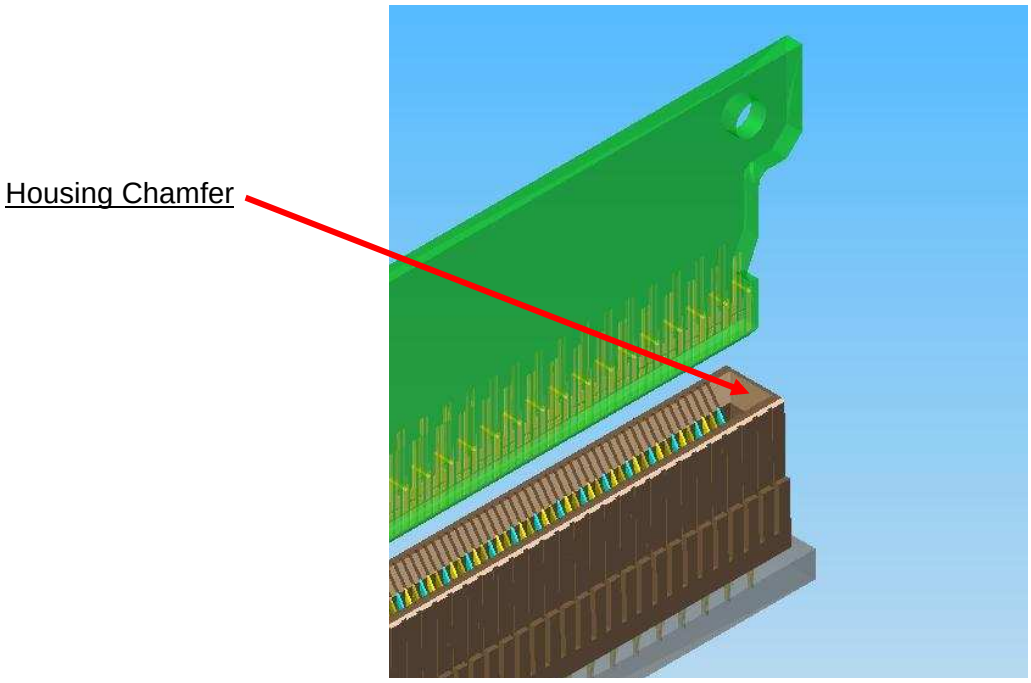
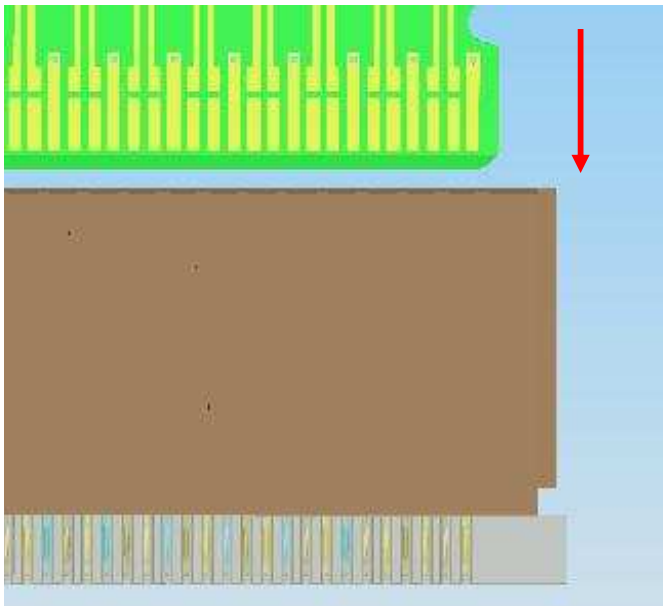


Figure 11: Straight Mating Condition



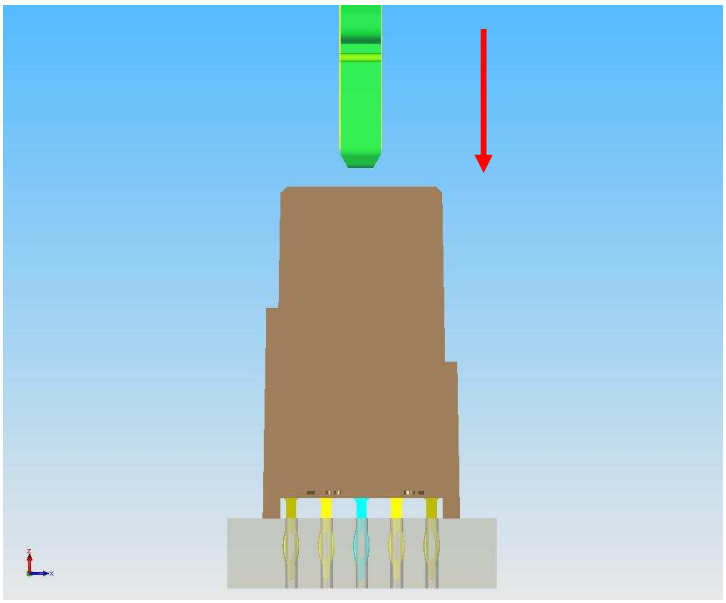
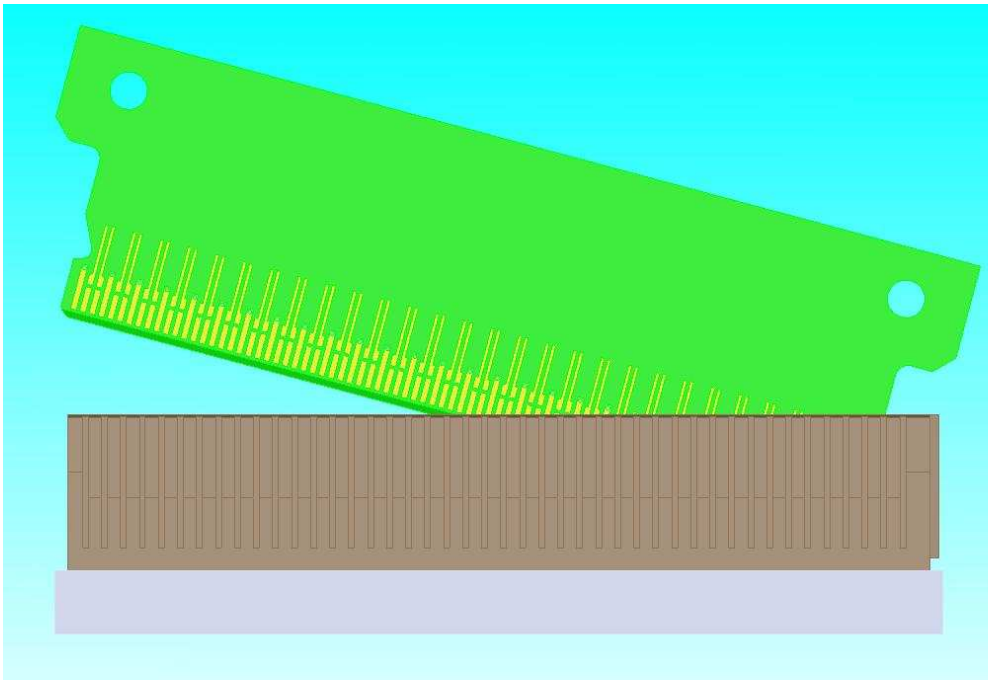


Figure 12: **NOT RECOMMENDED** Zipper Mating Condition



7.0 ELECTRICAL RECOMMENDATIONS

See product specification TS-75594-002 for electrical recommendations. Contact Molex if further assistance is required.