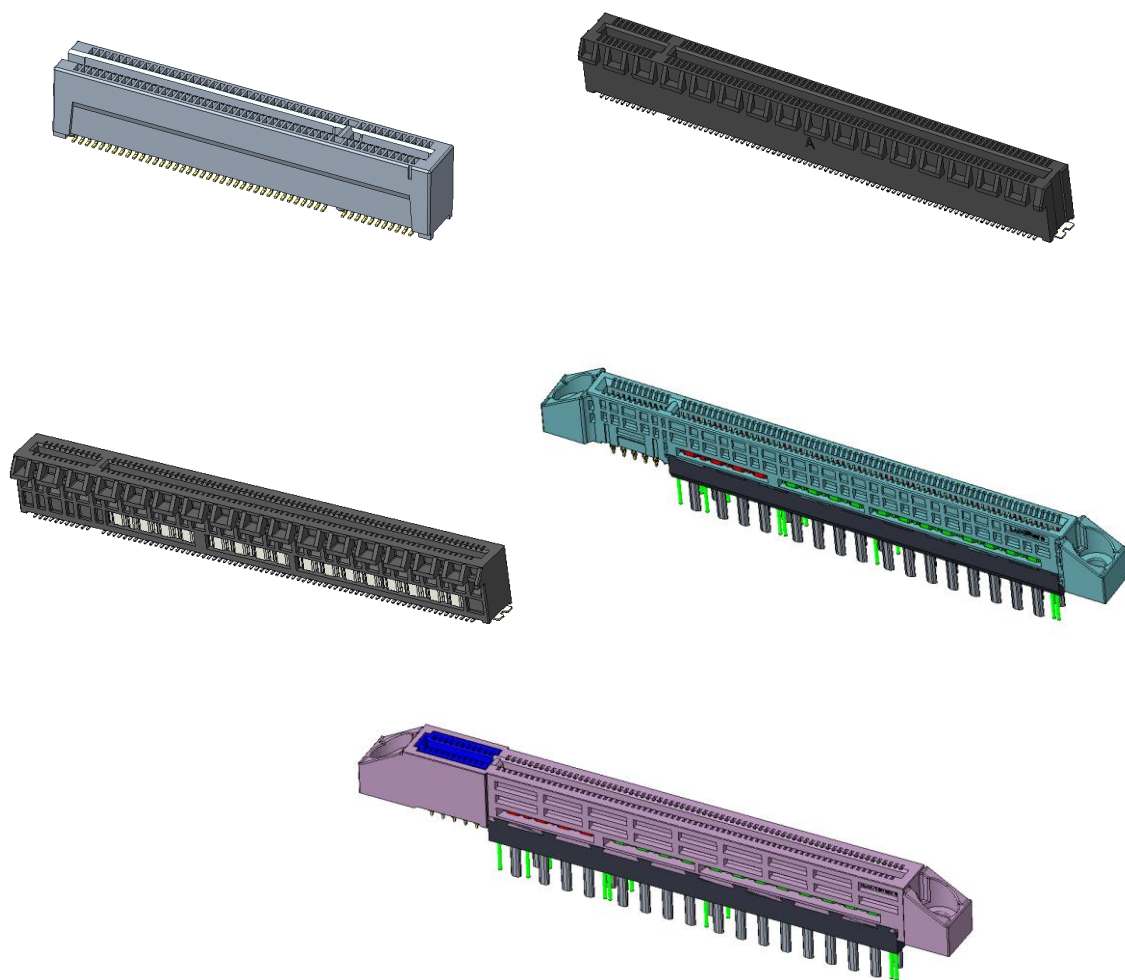


Product Application Specification

For PCIe CEM Connector



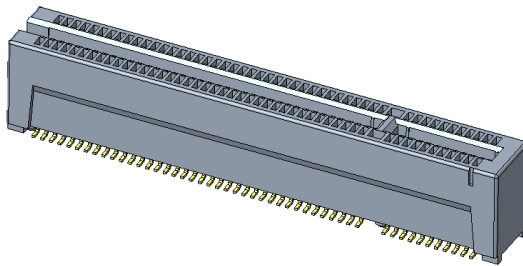
	APPROVED	CHECKED	PREPARED	DCC ISSUE
Name	Hongji Chen	Hengshan Cheng	Jianhao li	

1. OBJECTIVE

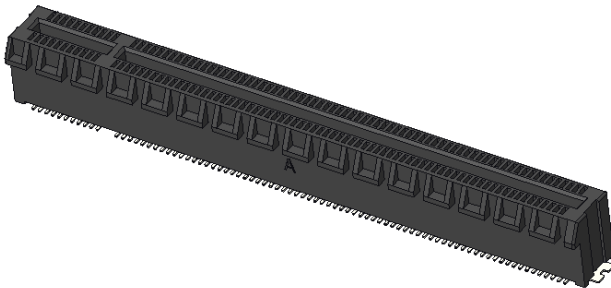
This specification provides information and requirements regarding customer application of the PCIe CEM SERIES. This specification is intended to provide general guidance for application process development. It is recognized that no single application process will work under all customer scenarios and that customers will develop their own application processes to meet their needs. However, if the application process differ greatly from the one recommended, Luxshare cannot guarantee results.

2. SCOPE

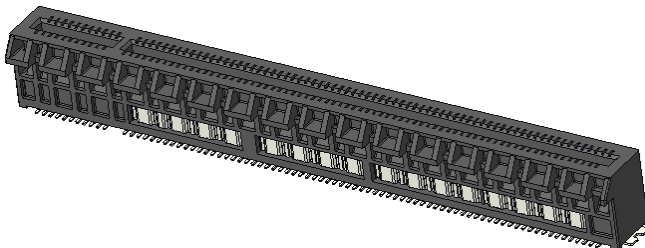
This specification provides information and requirements regarding customer installation and reworking process of the PCIe CEM SERIES Connector.



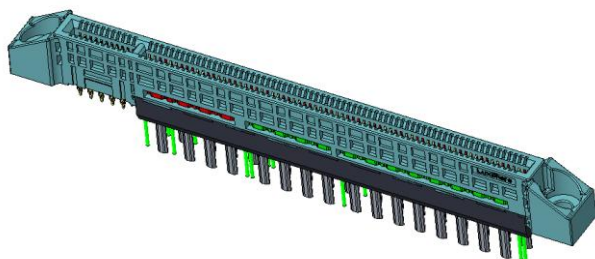
PCIe CEM X8 Gen4.0



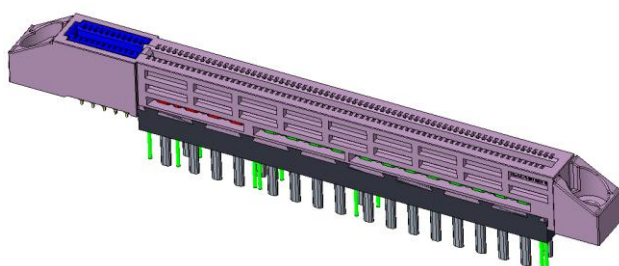
PCIe CEM Gen4.0



PCIe CEM Gen5.0/6.0



PCIE DA-CEM Wire Version



Split PCIE DA-CEM Wire Version

3. DRAWING AND APPLICABLE DOCUMENTS

- Luxshare Product Specification:
- Application Luxshare Customer Drawings;
- Luxshare Application Specification:

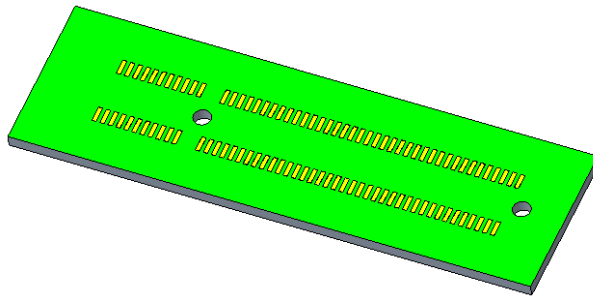
In the event of a conflict between this application specification and the drawing, the drawing will take precedence. Customers are advised to refer to the latest revision of Luxshare product drawings for appropriate details.

4. INSTALLATION PROCESS

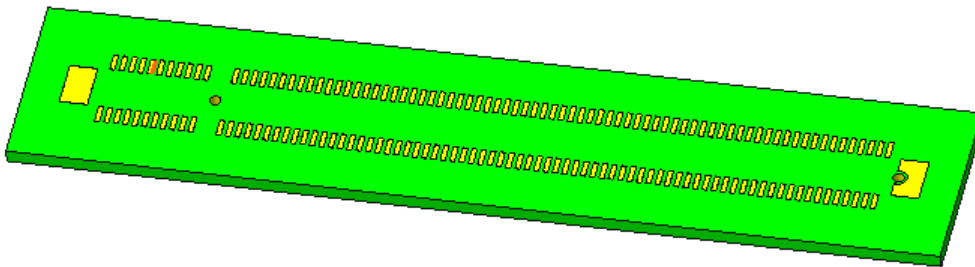
This document is meant to be an application guide. If there is a conflict between the product drawings and specifications, the drawings take precedence.

4.1. CONNECTOR SMT PROCESS

- 4.1.1 Brush solder paste: Apply an even layer of solder paste to the solder pad (terminals, PAD, etc.) of the connector to be soldered.

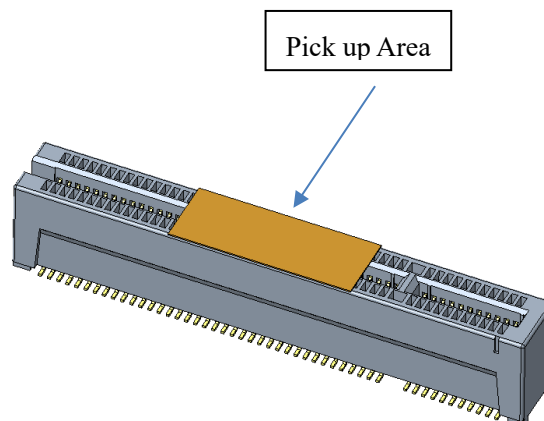


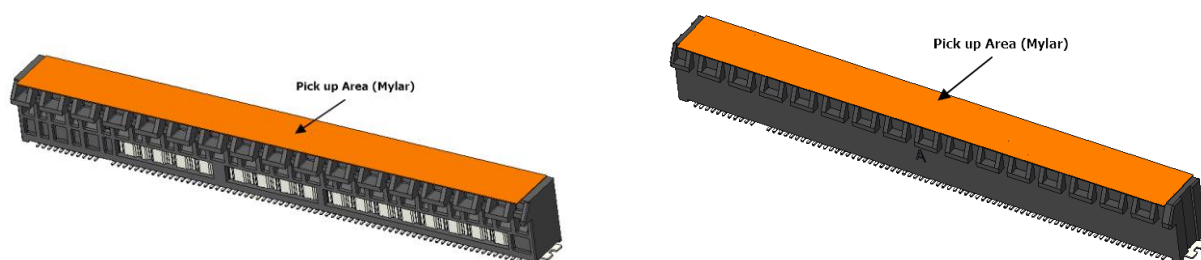
98P (X8) Vertical



164P (X16) Vertical

- a. Recommended soldering sequence: If soldering upside down, the first side must be protected from falling. (it is recommended that a fixture is used) Meanwhile, it is recommended that to use glue to fix the first side connector.
 - b. The stencil thickness is 0.20mm MIN
 - c. The stencil hole and PCB PAD width dimension 1.2:1, length dimension 1.2:1 (stencil hole>PAD)
- 4.1.2 Pick and place: When the connector is absorbed into the pad, the suctionnozzle shall be placed in the pick up area on the top of the connector.

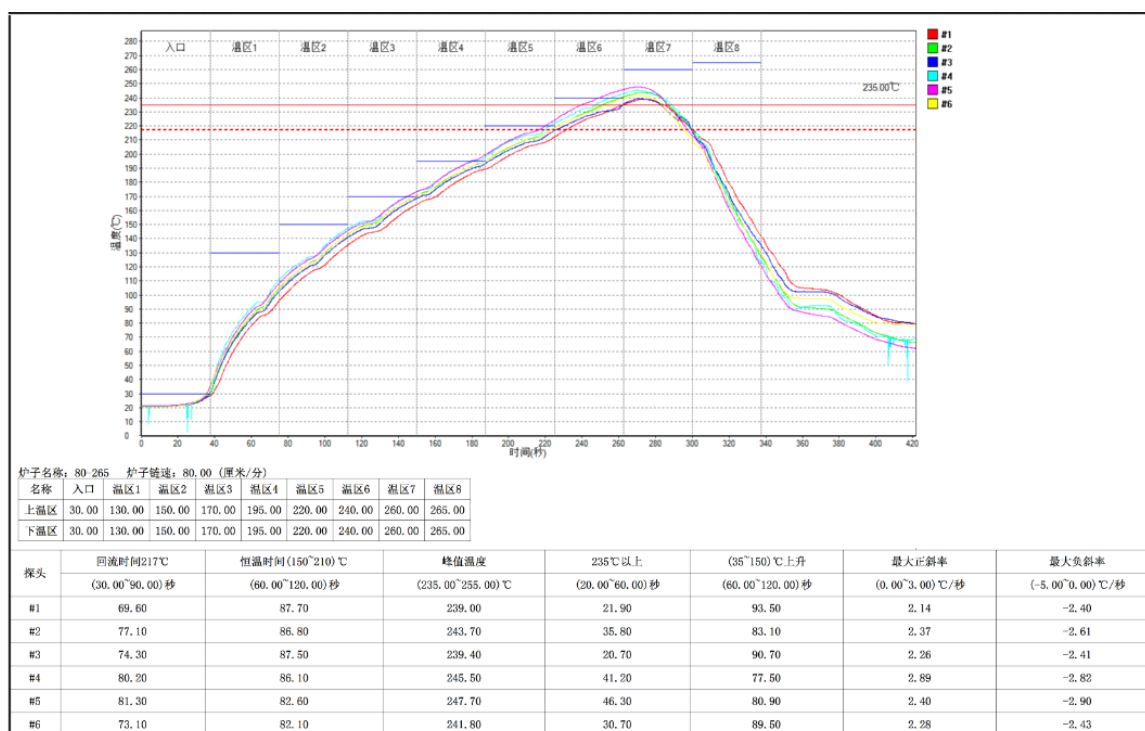




4.1.3 IR Reflow



a. Recommended reflow profile below



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Q-SPEC-A

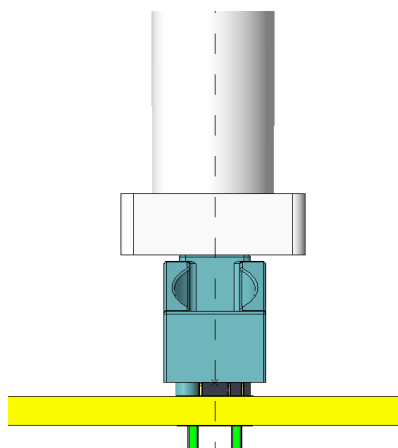
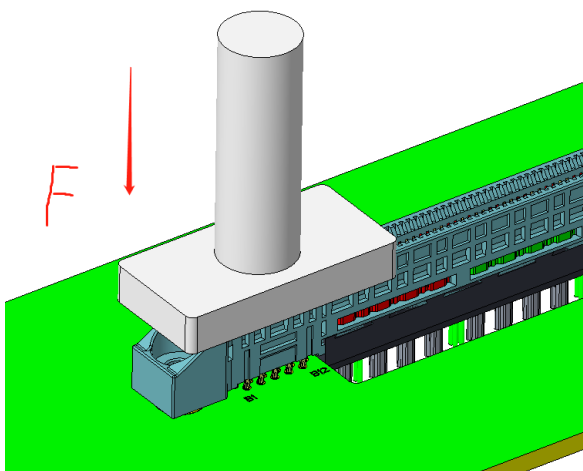
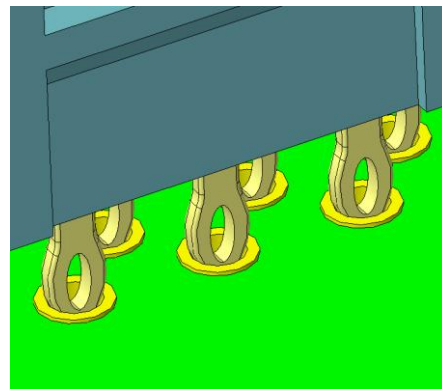
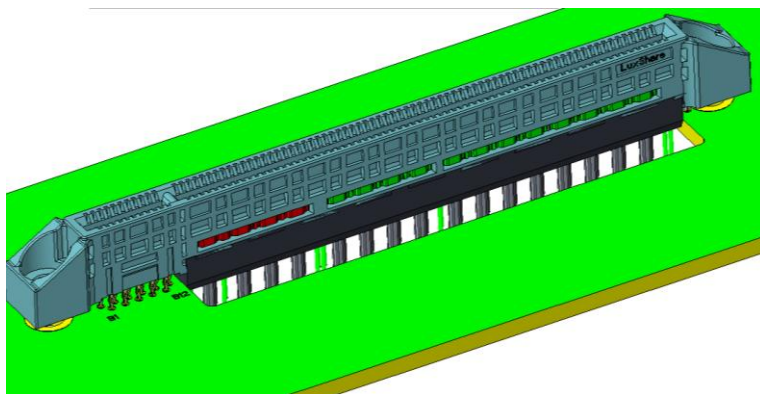
b. Recommended to use reflow welding furnace above 8 temperature zone (nitrogen protection measures are recommended)

c. The reflow process needs to use nitrogen, and the oxygen concentration is within 3000PPM

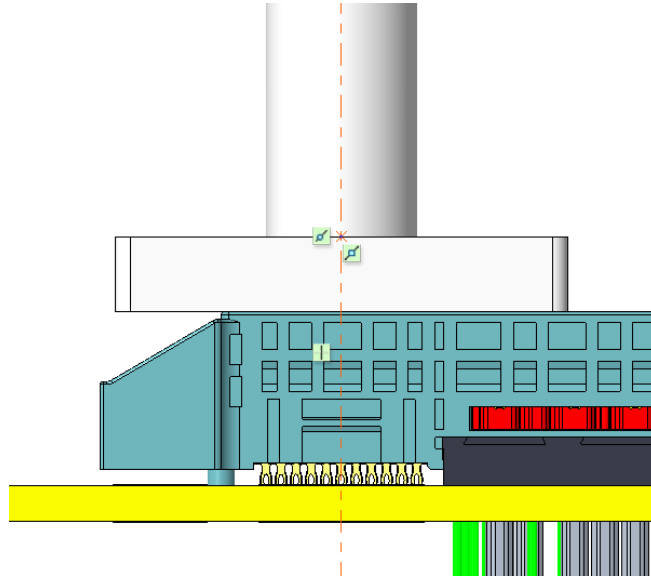
4.2. Installation of Connector (Wire Version) Press fit with PCB

4.2.1 Connector pressed into PCB

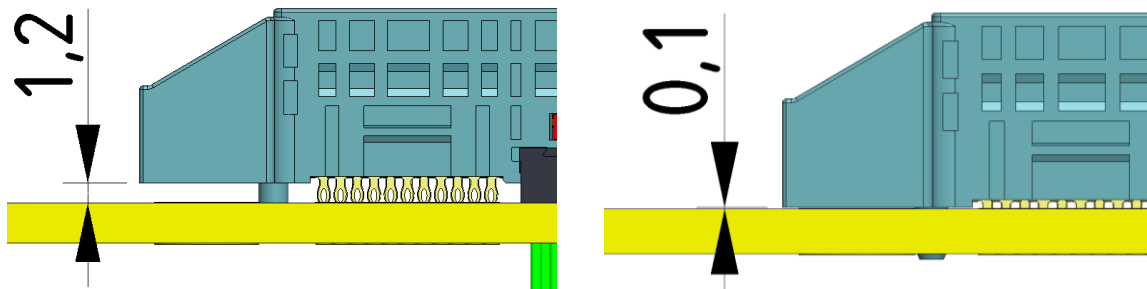
- a、 The press fit pre insertion into PCB with approximately 20N force. And then place the connector and PCB into the Pressure fixture. The pressure machine can provide at least 800N force。 The position of applying force should be at the center of the connector



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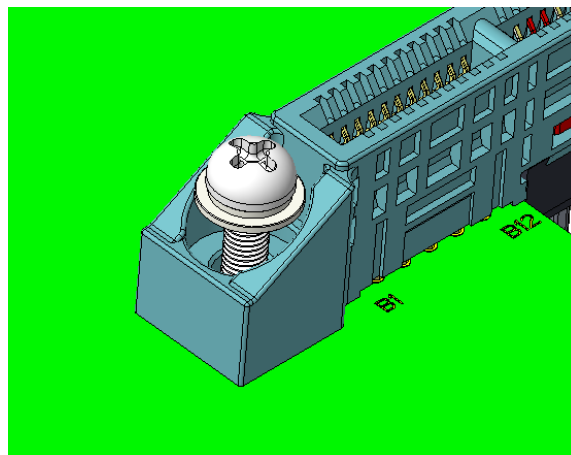


- b、 Apply force until the bottom surface of the HSG and the upper surface of the PCB are on the same plane or the gap between them is less than 0.1mm (and the movement distance of the pressure fixture is approximately 1.2mm)



4.2.2 Installing screws

Apply a torque of 2 kgf.cm Min using M2.5 screws to lock the connector onto the PCB.

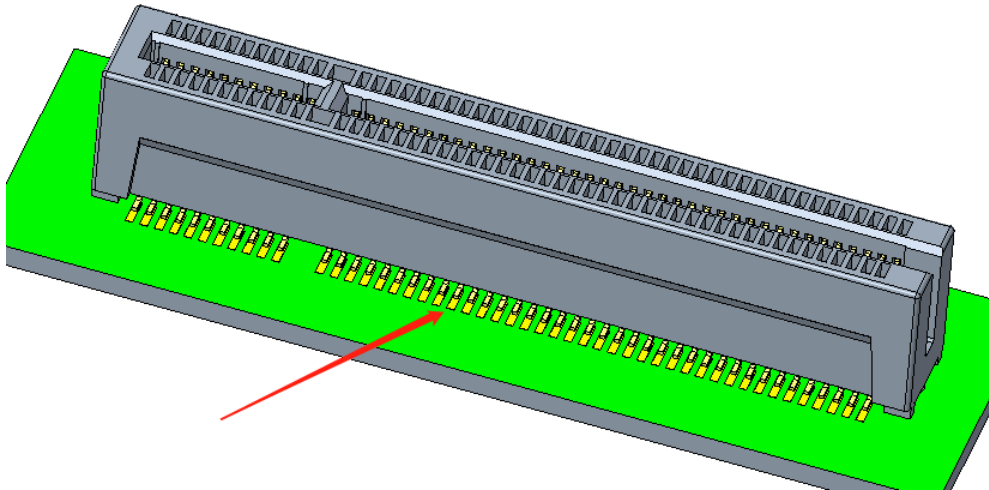


5. Rework Process

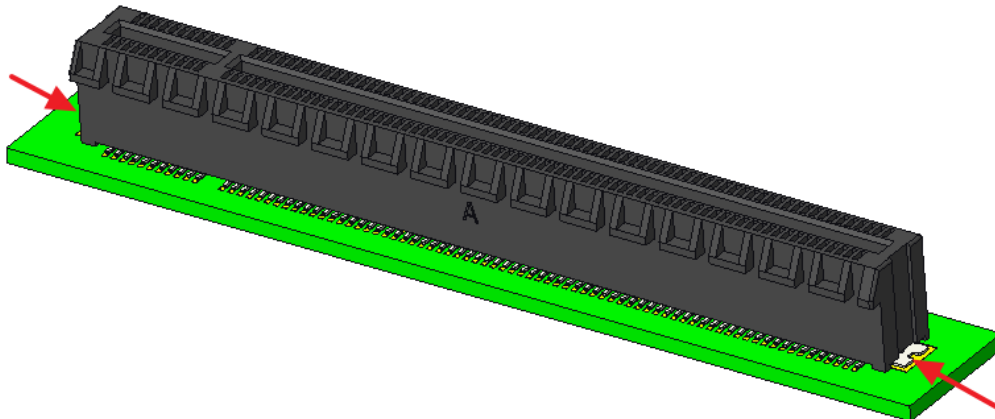
5.1 Connector unsoldering

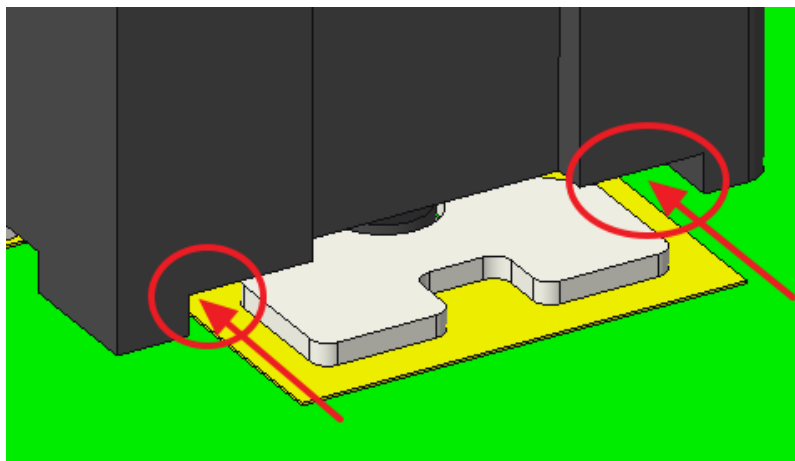
- Heat connector solder to molten state, then remove the connector lightly.
- To minimize damage to PCB and components, if allows, heat the connector from underneath.

PCIE CEM X8 Gen4.0

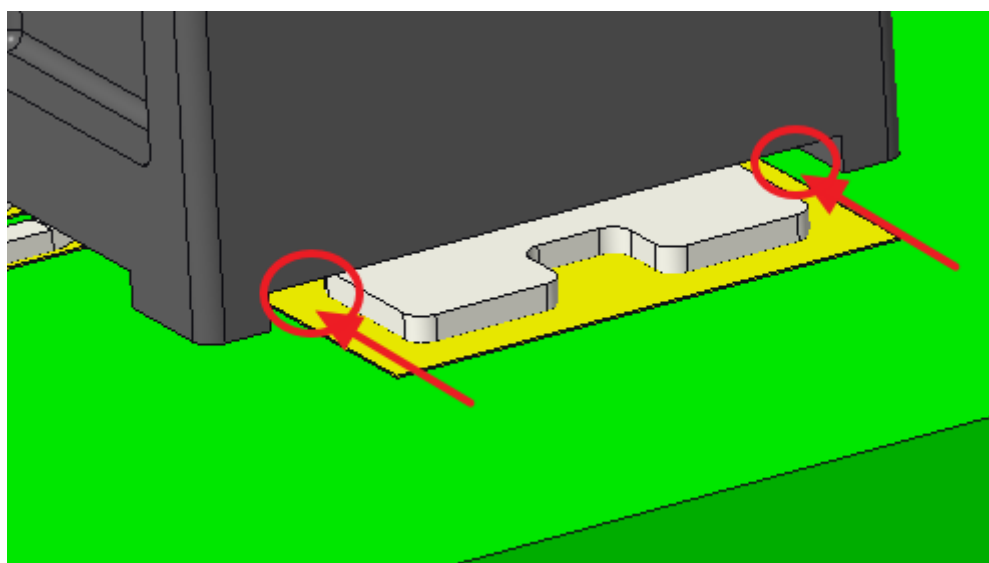
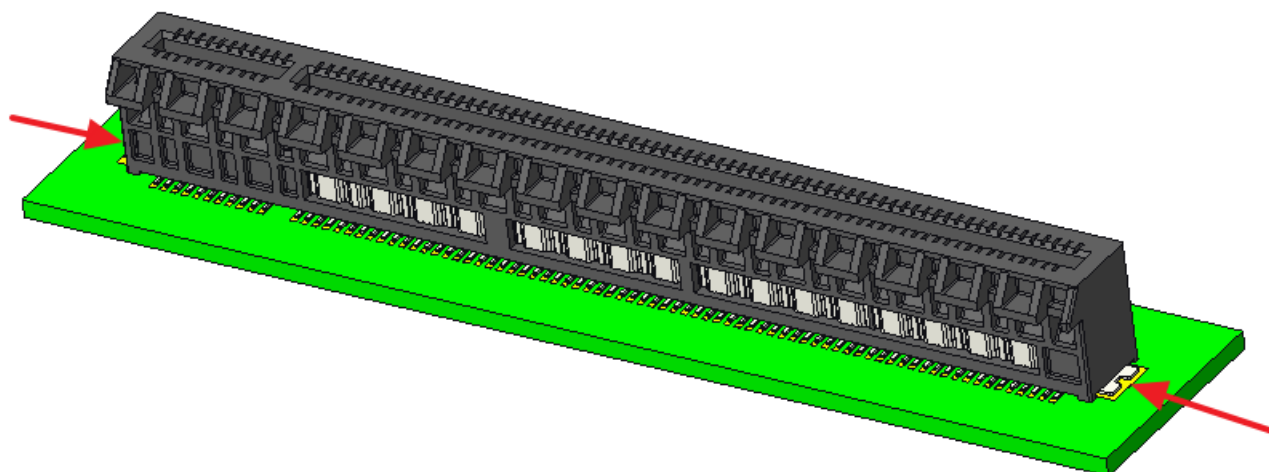


PCIE CEM Gen4.0



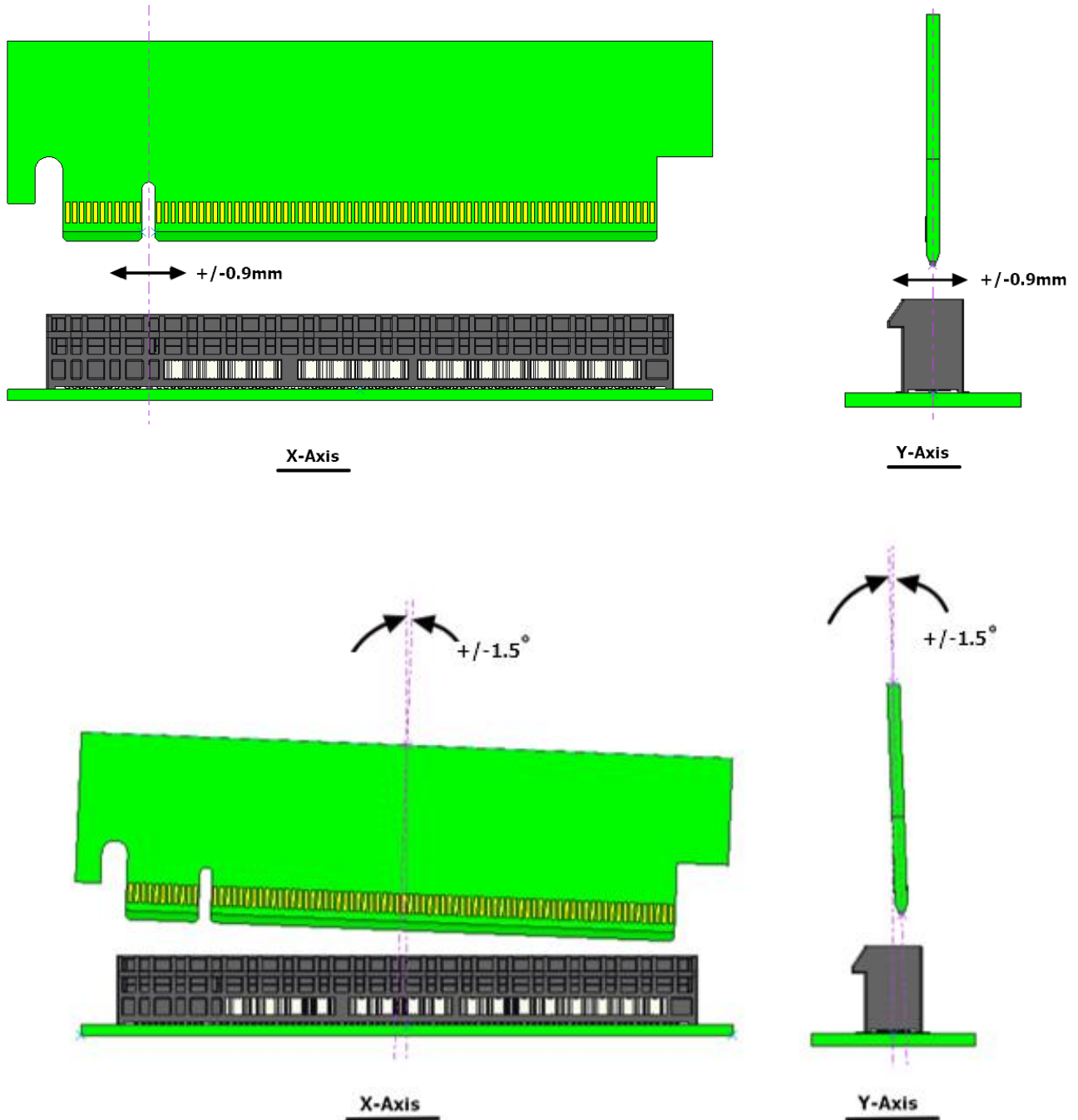


PCIE CEM Gen5.0/6.0



6. Gatherability (All PCIE Series)

The page show the linear and angular gatherability of the connector.



7. Note (All PCIE Series)

PCI Express Add-in Cards require additional card retention and support for Add-in Cards that are greater than 350 grams in mass. Testing has shown that using the connector retention

mechanism alone for Add-in Cards over 350 grams will cause connector and/or card damage.

