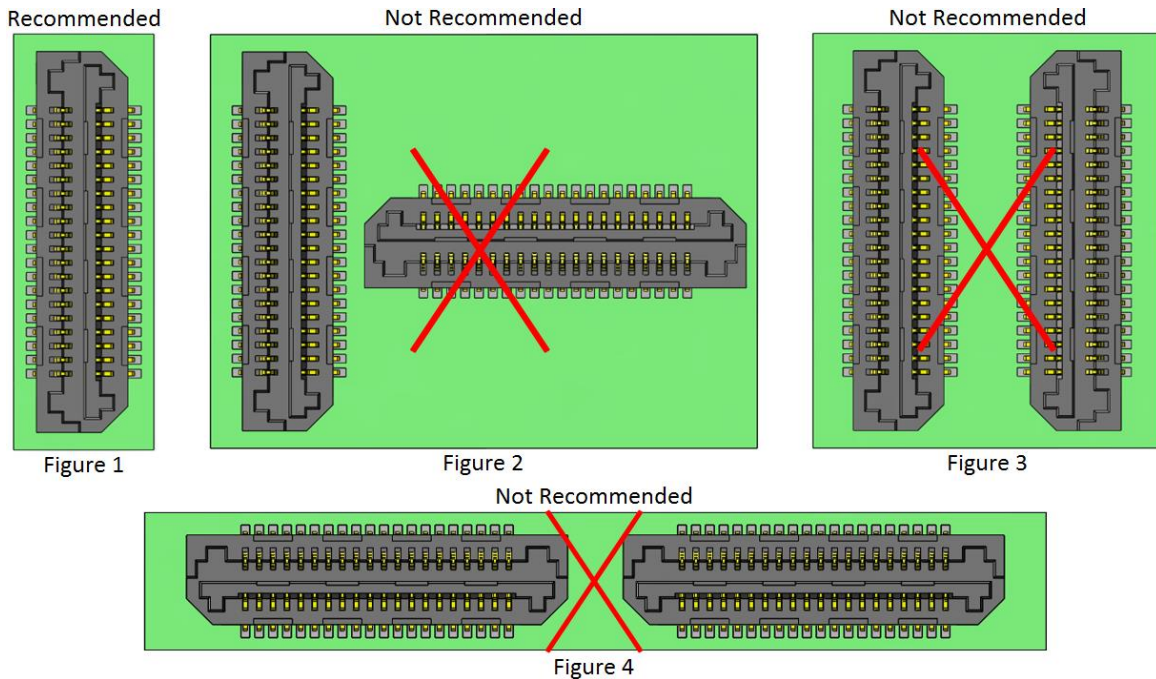


Multiple LSXX Connector Applications

The majority of Samtec's board-to-board connectors are capable of being used in applications where multiple connectors are placed on a single board and mated simultaneously. However, due to the interlocking features and fine pitch of the LSXX (LSEM, LSS or LSHM) connectors, maintaining proper linear and angular alignment during mating and unmating is essential to minimize the potential for connector damage. As a result, Samtec highly recommends against the use of multiple LSXX connectors, mated simultaneously, per board.



If multiple LSXX connectors per board are required, the below recommendations must be followed:

- Closely follow the Samtec recommended footprint and stencil designs
- Ensure a good solder print
- Machine place the components
- Hold the drill diameter tolerances for the alignment pin holes to $\pm .002$ [.050mm]
- Allow the connectors to mate and dictate their own alignment prior to the boards being rigidly fixed. Furthermore, it is important to ensure that tightening the mounting hardware does not alter the alignment.

Each LSXX connector pair may be rigidly misaligned by no more than $.002$ [.050mm] in the X direction and $.002$ [.050mm] in the Y direction to ensure a good mate. Also, the LSXX connectors must be mated and unmated axially only, as zippering angles may damage the connector(s) and/or the solder joints.

The above specifications can be found in the [LSEM](#), [LSS](#) and [LSHM](#) product specifications sheets.

The LSXX connectors have inherently high unmating forces, which increases the likelihood of lateral and longitudinal angles being introduced during unmating. To aid in the unmating process, Samtec recommends the use of the [Jack Screw Standoff \(JSO\)](#). Please see the [Jack Screw Standoffs Application Video](#) for a demonstration.

For more information, please contact the Samtec Interconnect Processing Group at IPG@Samtec.com.