Emulation Technology	Approved by: Dennis Smith
HiLo™ Socketing System, 1mm Pitch Application Specification	Revision: 2 Date: March 1, 2003
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1.0 Purpose

The objective of this specification is to provide information on product application of the HiLo™ socketing system. This specification is intended to provide general guidance for process development. It is recognized that no single process will work under all customer applications and that customers will develop processes to meet their needs.

2.0 Tooling

- Socket placement should be done with vision-based placement equipment such as high accuracy pick and place equipment or BGA rework stations.
- Kapton tape is provided in the center of each socket to allow placement with standard pick-and-place equipment.

3.0 Solder Paste Deposition

- Recommended pad diameter on PCB is 0.020” to 0.027”.
- Recommended stencil aperture is 0.024” to 0.031” (typically 0.004” greater than pad diameter)
- Recommended stencil thickness is 0.006” to 0.008”.

4.0 Socket Placement

- Socket should be placed so that J-leads are lightly pushed into solder paste.
- Ideally J-lead is inserted into wet solder .002” to .003”.
- Care should be taken to avoid dragging the socket into place, which could result in solder bridging/shorting.

5.0 Solder Reflow

- Recommended maximum time above solder liquid state is 90 seconds. Longer liquid state times may cause solder creep up the socket contact.
- Other than above, industry standard eutectic solder reflow profile should be used. Factors such as different board sizes, thickness, density and other component masses will vary actual solder process requirements. Actual solder process specifications should be developed based on individual requirements and capabilities.

6.0 Post Application

- Visual inspection of perimeter solder joints is recommended.
- X-Ray testing is recommended.
- Electrical testing can be performed with customer designed test equipment.
- Remove Kapton tape after inspection is completed.