## **Hybrid Assembly: Operator's Guide**

Lawrence Berkeley National Laboratory Rhonda Witharm Version 1.0, July 16 2002

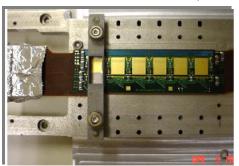
Revision History V1.0 Original Version 16-July-2002

In-coming bare hybrids are logged as received in the clean room hybrid logbook, then stored in the dry air cabinet behind the bonder.

- 1. Visually inspect hybrid and chips under microscope. List any irregularities.
- 2. Place hybrid on hybrid vacuum fixture. Use wire alignment tool to line up hybrid on fixture.



- 3. Mix glue (Adhesives Procedure document)
- 4. Place lay glue



Place glue here

glue mask tool on fixture and on all 12 chip positions.



- 5. Place chip gel-pak on vacuum to free chips.
- 6. Remove chip with plastic tweezers or vacuum pen. Make sure that cup on pen is clean and clear of debris. Place chip on chip chuck with the fan out pads facing away from the stops. Set vacuum.



7. Using chip placement tool, place tool over the chip on vacuum chuck, set vacuum for tool, release vacuum on chip chuck, pick up chip and place on hybrid. Align chip, release



vacuum and set chip using pressure so that glue spreads



only enough as in picture.

8. Heat in oven at 50C for 2 hours.