B. Flip-Chip Technology

B4. Level 4. References

B4.1 Recommended reading

G. Schiebel, "A very promising technology – COB and flip chip processing with SMD placement equipment – (II)", EPP Printed Circuit Board, October 1997, 32-36.

B4.2 Flip chip literature

Bumping


Reliability


Heat transfer and performance issues


Technologies and manufacturing issues


Markets

Flipped out over flip chip, IPC Review, January 1998, 1,15-16.


Flip chip joining using adhesives


B4.3 List of key conferences
Flip Chip Technologies Volume 1, 2 Day Tutorial, Munich, Germany, Nov. 11-12, 1996, Pac Tech - Packaging Technologies GmbH, Fraunhofer - Institut für Zuverlässigkeit und Mikrointegration.
1st Netpack Meeting, December 15 1993, Brussels.
2nd Netpack Meeting, June 7, 1994, Windsor.
4th Netpack Meeting, May 17, 1995, Copenhagen.
Netpack Who is who in European Packaging, Fraunhofer Einrichtung, Institut für Zuverlässigkeit und Mikrointegration, 1995, 56 pages + 18 appendices.
10th European Microelectronics Conference, Copenhagen, 14-17 May 1995.
Area Array Packaging Technologies, Workshop on Flip Chip and Ball Grid Arrays, November 13-15, 1995, Berlin, Fraunhofer- Institute for Reliability and Microintegration

B4.4 Standards

Pending ANSI Approval:
J-STD-012 Implementation of Flip Chip and Chip Scale Technology - Chair, Ray Prasad Consultancy Group, Jan 1996.

New Standards under development as defined in J-STD-012

Std No. 102: Mechanical Outline Standard for Flip Chip or Chip Scale Configurations.
Std No. 104: Test Methods for Flip Chip or Chip Scale Performance.
Std No. 105: Flip Chip/Chip Scale Carrier Tray Standard.
Std No. 106: Bare Dice as Flip Chip or Chip Scale Configuration Management Standard.
Std No. 111: Design Standard for Flip Chip/Chip Scale Assembly Configuration.
Std No. 112: Standard for Flip Chip/Chip Scale Assembly Performance Requirements.
Std No. 113: Test Methods for Qualification and Evaluation of Flip Chip/Chip Scale Assemblies.
Std No. 114: Standard for Flip Chip/Chip Scale Assembly Rework and Repair Techniques.
Std No. 115: Flip Chip/Chip Scale Assembly Reliability Standard.
Std No. 119: Qualification and Performance Standard for Adhesives Used in Flip Chip Assembly.
Std No. 120: Qualification and Performance Standard for Flux Used in Flip Chip Assembly.
B4.5 References