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# Technologies for 3D Devices and Circuits Through Wafer Bonding with Submicron Alignment Accuracy

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## Personnel

H. Verma, M.A. Schmidt, S.M. Spearing, and C.V. Thompson

## Sponsorship

Semiconductor Research Corporation (SRC)

Stacking of device layers and interconnection through metal-metal bonds that also serve as electrical interconnects, will allow fabrication of 3D integrated circuits as well as integration of device layers of different materials. To reap maximum benefit from this technology, it is important to be able to align interconnects to be bonded with sub-micron accuracy. We are investigating a number of approaches for the development of new high-accuracy alignment techniques. These include the use of surface-tension alignment via liquid drops that can be subsequently removed via evaporation.

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