ABSTRACT

METHOD TO PREVENT DIE ATTACH ADHESIVE CONTAMINATION IN STACKED CHIPS

The present invention provides methods and apparatus related to preventing adhesive contamination of the electrical contacts of a semiconductor device in a stacked semiconductor device assembly. The methods and apparatus include providing a first semiconductor device with an adhesive flow control dam located on an upper surface thereof. The dam is positioned between electrical contacts and a substrate attach site on the upper surface of the first semiconductor device. The dam is rendered of a sufficient height and shape to block applied adhesive from flowing over the electrical contacts of the first semiconductor device when a second substrate is mounted onto the upper surface of the first device. The semiconductor device assembly may be encapsulated, with the dam in place or with the dam removed. The adhesive flow control dam thus protects the electrical contacts of the first semiconductor device from contamination by excessive adhesive, which can result in unusable electrical contacts.

[Fig. 3]