Decapsulation techniques for polymer-encapsulated integrated circuits

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Abstract

Most integrated circuits in consumer electronics are encapsulated into a compound made of epoxy and silica spheres. Decapsulation is a sample preparation technique for failure analysis in micro-electronics that consists in removing the molding compound around the semiconductor die. The challenge is removing the molding compound while maintaining electrical integrity and not creating any new artifact. But new materials, such as copper, silver or polymer require developing new techniques.

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