

## Reworkable Underfill Encapsulant for BGA's and CSP's

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EAST HANOVER, NJ – Zymet has introduced a new reworkable underfill encapsulant, **CN-1703**, designed for CSP and BGA encapsulation. CSP's and BGA's are not normally encapsulated. However, it has been found that mobile phones and other handheld devices require encapsulation of these components to survive drop tests and repeated keypad actuations.

Removal of defective CSP's and BGA's is easily accomplished by heating the component and the underfill encapsulant to 220°C. Underfill encapsulant residues are easily scraped or brushed off.

**CN-1703** has a viscosity of 500 cps at room temperature, making it very easy to dispense. It is also fast flowing, capable of flowing a distance of 18 mm, with only a single-side dispense, in as little as 10 seconds.

The encapsulant exhibits excellent wetting. It self-fillets, eliminating the need for seal passes to create complete and symmetrical fillets. After flow is complete, **CN-1703** can be cured in an in-line oven, in 1 minutes at 150°C.

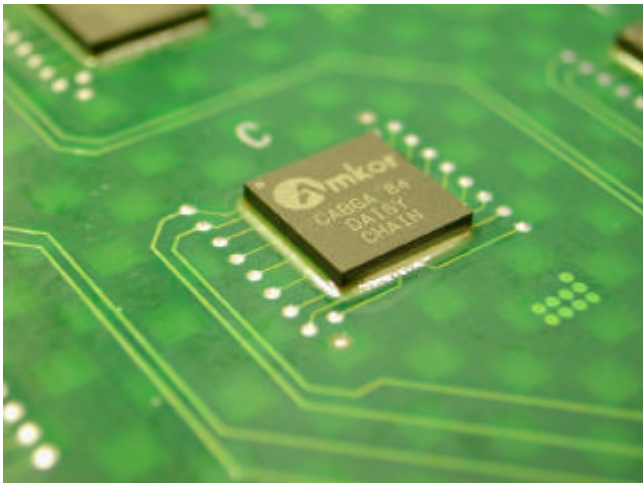


Figure 1. BGA underfilled with **CN-1703**.

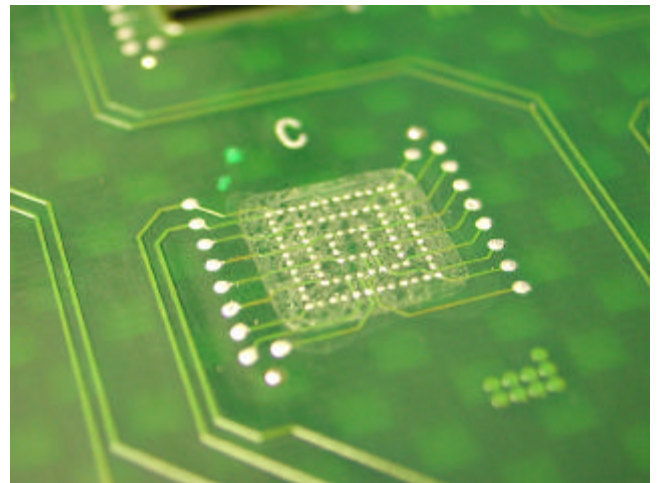


Figure 2. BGA removed from site, before removal of underfill residues.

The excellent processability of **CN-1703** makes it suited to high volume manufacturing of competitive consumer electronics, such as mobile phones and other handheld devices.

Zymet is a manufacturer of microelectronic and electronic adhesives and encapsulants. Its products include die attach adhesives, substrate adhesives, UV curable glob top and cavity-fill encapsulants, and underfill encapsulants.

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