

Reworkable Edgebond Adhesive Improves CBGA and BGA Thermal Cycle Performance and Eliminates Underfill

March 31, 2011

EAST HANOVER, NJ – Zymet Inc. has introduced a reworkable edgebond adhesive, **UA-2605**, that improves thermal cycle performance of CBGAs and plastic BGAs. In one trial, **UA-2605** tripled the 0°C to +100°C performance of a CBGA, to nearly 2500 cycles. Previously, an underfill was needed to achieve this level of performance.

The edgebond adhesive is much easier to process than an underfill. When applying underfill, the board is preheated to facilitate capillary flow, and multiple dispense passes are used to deposit sufficient material. With **UA-2605**, only four beads of the adhesive are required, one at each corner (Figure 1). There is no need to preheat the board, no need to wait for underfill flow, no need for multiple dispensing passes.

Reworking an underfilled BGA is a time consuming and delicate task. Underfill residues (Figure 2) must be removed and, for fine pitch BGAs, the risk of pad damage is high. With **UA-2605**, BGA rework is simple and straightforward. The temperature is raised and the adhesive is scraped away; then, the BGA is reflowed and lifted from the board. Little site cleaning is necessary.

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.

For more information, contact Zymet, Inc., East Hanover, NJ. Requests for information may also be submitted by e-mail to info@zymet.com

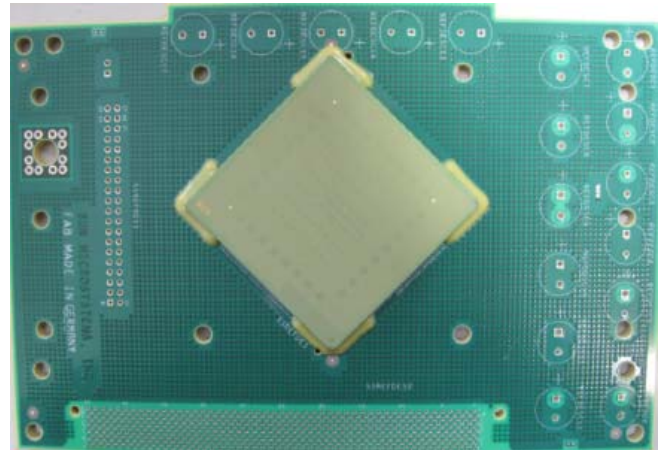


Figure 1. Edgebonded CBGA.

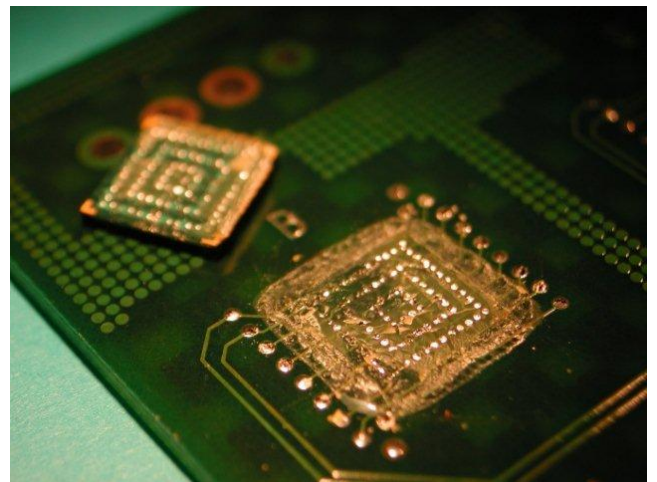


Figure 2. After removal of underfilled BGA, underfill residues must be removed.