

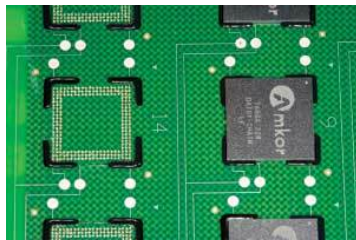
**APPLICATION:** Reworkable BGA Edgebond Adhesives, Zymet X19331

**DATE:** 7/25/08

**APPLICATION DESCRIPTION:**



In many applications, full underfill of BGA's provides more drop and bend test reliability than needed. For example, mainboards of notebook computers have BGA's that can be edgebonded. A notebook computer is dropped much less frequently than a handheld device, so drop tests are not as severe. However, they can be very thin, resulting in the mainboard bending during normal handling. Edgebonding BGA's provide the mechanical strength needed to survive repeated bending of the mainboard.



Edgebonding is lower cost than full underfill. Less material is used. Boards do not have to be preheated to achieve faster underfill flow. And, it is not necessary to wait for flow to be completed before placing the board into the curing oven.

**KEY REQUIREMENTS:**

- Adheres well to the BGA and the board
- Stays in place after dispensing and does not flow under the BGA
- Fast cure
- Good thermal cycle performance
- Reworkable

# APPLICATION NOTE

## **OFFERING: Zymet X19331**

### Features:

- Very fast cure. 1 minute at 150C.
- Long pot life. Good storage stability
- Reworkable

### Value to Customer:

- Capable of fast inline heat curing.
- Compared to UV, no risk of under-cured material in shadow areas.

## **COMPETITOR PRODUCT INFORMATION:**

Competitors are heat cure and UV cure adhesives from Loctite, Emerson & Cumming , Dymax. UV curable adhesives is often preferred. But, for a heat cure solution, X19331 is ideal.

## **CUSTOMER INFORMATION:**

Customers: Delphi (automotive electronics)

Potential Customers: Lenovo, ASUS, Dell, HP, Apple

## **MARKET TRENDS:**

As more and more electronic devices become lighter and thinner, more applications will arise for edgebond adhesives.