ZYMET

Zymet Announces Highly Crack Resistant Underfill for Thin, Flexible Assemblies, CN-1751-4

February 7, 2013

EAST HANOVER, NJ – Zymet has introduced a new reworkable underfill encapsulant, **CN-1751-4**, that is extraordinarily crack resistant, to withstand flexing experienced by flexible printed circuitry or drops and shocks of very thin printed circuit assemblies.

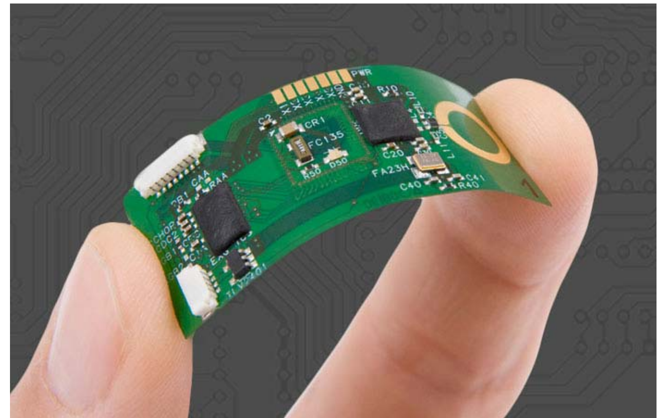

Figure 1. IMEC's Ultra Thin Chip Package (UTCP) with embedded microcontroller chip. Courtesy of IMEC.

With ever thinner and lighter products being designed, such as smartphones and tablets, the assembly of advanced packages, such as WL-CSP's and CSP's, on flexible circuitry or on very thin rigid boards (Figure 1) has rapidly expanded. This has created a need for an underfill that can withstand more flexing or bending, to prevent underfill fillet cracks and pre-mature device failure. **CN-1751-4** is a reworkable underfill that can withstand extraordinary deformation without cracking, yet has a modulus that is higher than that of traditional reworkable underfills.

CN-1751-4 has a low CTE, 48 ppm/°C for superior thermal cycle performance. Its viscosity is only 900 cps, so it can flow quickly across large BGA's and POP's. And, it is very easily reworked.

Rework is accomplished by use of elevated temperature, 170°C to 180°C, to remove the underfill fillet. Then, the BGA is lifted from the board after heating it to reflow temperature. Underfill residue is easily scraped off, again at 170°C to 180°C.

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, visit us at **Booth 2821** at **APEX EXPO 2013**. Requests for information may also be submitted by Email to info@zymet.com

ZYMET, INC.
7 Great Meadow Lane
East Hanover, NJ 07936
Tel: (973) 428-5245
Fax: (973) 428-5244
info@zymet.com