Press release
Irvine, California, December 12, 2006

Henkel Develops New NCP Material for Flip Chip Image Sensor Applications

Extending the company’s non-conductive paste (NCP) underfill encapsulant product line to address the burgeoning image sensor market, Henkel today announced the commercial availability of Hysol® FP5110. The new material is specially formulated for flip chip image sensor modules and provides excellent adhesion to both 2- and 3-layer flexible printed circuits by bonding effectively to both polyimide and epoxy adhesive material.

Like other materials in Henkel’s NCP product portfolio, Hysol FP5110 technology provides an alternative to traditional, mechanical soldering by bonding bumps to the substrate through a lead-free compatible thermal compression process which simplifies flip chip assembly and eliminates the need for flux application, reflow and cleaning. For image sensor assembly in particular, Hysol FP5110 provides a viable, automated substitute for manual anisotropic conductive film (ACF) processes, which are supplied in reel form and are time and labor intensive.

“As image sensors are a key component of nearly half of all mobile phones produced today, efficient, automated processes are essential for high-speed, cost-effective manufacturing,” comments Robert Chu, Henkel’s Global Product Manager for CSP Underfills, Electronic Interconnect and Image Sensors. “Hysol FP5110’s dispensable formulation enables automated material deposition, tighter process control and exponentially faster cycle times than that of manual, operator-applied ACF materials. For flip chip image sensors being incorporated into modern mobile devices, NCP technology provides tremendous time and cost reduction benefits.”

In addition to its cycle time and cost saving advantages, Hysol FP5110 provides numerous other benefits including compatibility with thermal compression and ultrasonic bonding processes for maximum manufacturing flexibility, an energy saving, low temperature 10 second SnapCure at 180°C and storage requirements of -15°C which helps eliminate freeze thaw voids often associated with -40°C storage.

"As image sensor use within mobile phones continues to accelerate, manufacturers must stay competitive by seeking out process-enhancing assembly solutions to effectively increase UPH and reduce overall labor costs," concludes Chu. "Hysol FP5110 is the ACF replacement these firms have long needed."

For more information on Hysol FP5110 or any of Henkel's advanced NCP products, log onto www.henkelelectronics.com or call the company's Irvine, California headquarters at 949-789-2500.

About the electronics group of Henkel

Henkel is one of the world's leading and most progressive providers of qualified, compatible material sets for semiconductor packaging, board level assembly and advanced soldering solutions. Through its Hysol, Loctite and Multicore brands, and its global customer support infrastructure, the electronics group of Henkel delivers world-class materials products, process expertise and total solutions across the board to enable tomorrow's electronics industry.

Henkel, a Fortune Global 500 company, operates in three strategic business areas: Home Care; Personal care; and Adhesives, Sealants and Surface Treatments, which serves the transportation, electronics, aerospace, metal, durable goods, consumer goods, maintenance and repair and packaging industries, and offers a broad range of products for the craftsman and consumer. With brands and technologies, Henkel makes people's lives easier, better, and more beautiful. 50,000 employees work for Henkel worldwide. People in 125 countries around the world trust in brands and technologies from Henkel – "A Brand like a Friend".

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