Press release
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Henkel’s Conductive Die-Attach Films Enable Leadframe Package Scalability at STMicroelectronics

Irvine, California – Henkel today announced that it has worked with STMicroelectronics, one of the world’s largest semiconductor companies and advanced chip packaging technology developers, to validate the performance of Henkel’s Ablestik C100 conductive die attach film materials for production of very small package configurations in a process called ScalPack, which incorporates dies with extremely small dimensions.

Commercialized in early 2011 following process testing at ST, Henkel’s Ablestik C100 materials – available in 15 micron and 30 micron thicknesses – are now extending the proven advantages of film-based materials to leadframe applications. Notable among the benefits of Ablestik C100 conductive films are the elimination of die tilt, the ability to process thinner die and the facilitation of greater bondline control. Providing a high level of manufacturing latitude, the workability of the new Henkel materials has been established on die sizes ranging from 0.2 mm x 0.2 mm up to 6 mm x 6 mm for multiple package types, including both QFNs and QFPs. These benefits, along with Ablestik C100’s thermal and electrical performance and ability to enable scalable package design, offer a distinct competitive advantage for leadframe packaging specialists.

“Because of the importance of electrical and thermal conductivity, we’ve worked with Henkel to develop a die placement process using its conductive die attach films, as moving to tape-based adhesive materials will guarantee even better workability and in-process control than we currently offer,” says Laura Ceriati, STMicroelectronics Corporate Package Development Director for leaded package platforms. “Our efforts with Henkel will further enable and extend package scalability for the medium-power applications that are a key part of ST’s product portfolio.”

For leadframe package designers and manufacturers, conductive die attach films provide much more design latitude and greater process control as compared to traditional die attach pastes. Because film-based die attach materials eliminate the fillet inherent with paste-based mediums and offer a lower die to paddle clearance, Ablestik C100 extends much greater design freedom, allowing a single leadframe design to be used for multiple package types. In addition, Henkel’s new conductive film formulations have excellent wetting ability and a lower bonding temperature, which enables stable adhesion on all leadframe surface finishes for even greater packaging flexibility.

“STMicroelectronics is one of the premiere packaging technology innovators in the world and we are delighted to work together on a new conductive film-based production process,” comments Shashi Gupta, Henkel Global Marketing Manager for the Wirebond Segment.
“Incorporating Henkel’s film into their manufacturing portfolio has allowed ST to realize a more scalable, design-friendly solution for various die and package sizes and configurations.”

For more information on Henkel’s Ablestik C100 conductive die attach films or any of the company’s advanced semiconductor packaging materials, call 714-368-8000 or log onto www.henkel.com/electronics.

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About Henkel

Henkel operates worldwide with leading brands and technologies in three business areas: Laundry & Home Care, Cosmetics/Toiletries, and Adhesive Technologies. Founded in 1876, Henkel holds globally leading market positions both in the consumer and industrial businesses with well-known brands such as Persil, Schwarzkopf and Loctite. Henkel employs about 48,000 people and reported sales of $20.07 billion and adjusted operating profit of $2.27 billion in fiscal 2010. Henkel’s preferred shares are listed in the German stock index DAX and the company ranks among the Fortune Global 500.

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