



Press Release

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High thermal automotive grade die attach adhesives, die attach film solutions, and leading-edge underfill materials enable package design innovation

Henkel highlights portfolio of enabling materials for next-gen semiconductor devices at SEMICON Taiwan 2023

Taipei, Taiwan – At this week’s SEMICON Taiwan, Henkel brings its extensive range of semiconductor packaging material solutions to customers in a collaborative setting designed to foster discussions that will help address application challenges. With recently launched innovations for high-reliability advanced packaging and wirebond devices, the company will showcase its enabling impact on some of the most demanding package designs used in the automotive, industrial, and high-performance computing sectors.

“As the SEMICON Taiwan show organizers have emphasized,” comments Henkel Global Market Segment Head for Semiconductor Packaging Materials, Ramachandran Trichur, “the semiconductor industry is central to nearly all technology development and to solving some of the world’s biggest challenges. Henkel is a key contributor to this progress, delivering cutting-edge semiconductor packaging materials for high reliability automotive packaging, AI and high-performance computing, and evolving industrial applications.”

As a leader in die attach pastes and films and having engineered several groundbreaking advanced packaging formulations, Henkel’s objective at SEMICON Taiwan is to introduce invited guests to materials that are helping semiconductor technologists respond to microelectronics advancement, including:

Automotive Electrification, Responsiveness, and Reliability– From power ICs to microcontrollers to sensors, the devices that make modern vehicles more electrified, safe, and connected require materials with robust processing capability and exceptional in-field performance. Henkel high thermal die attach adhesive [Loctite Ablestik 6395T](#) and pressure-less

sintering material [Loctite Ablestik 8068TI](#) deliver the highest standard automotive grade 0 reliability and are compatible with various leadframe finishes, including Cu.

In addition, Henkel's pioneering work in conductive die attach film materials is embodied in two of its top products, [Loctite Ablestik CDF 200P](#) and [Loctite Ablestik CDF 600P](#). Both formulations offer the inherent benefits of conductive die attach film – tight bondline control, consistent fillet formation, no die tilt, and no resin bleed – and are distinguished by their different thermal and electrical conductivities, as well as die size compatibility. Henkel's conductive die attach film materials are widely used for automotive microcontroller unit packages such as QFPs and TSSOPs.

High-Performance Computing and Mobile Processing Solutions– Next-generation processors are integrating the most advanced Si node flip chips, and protecting them against thermomechanical stress is vital to their reliability. Last year, Henkel introduced a breakthrough capillary underfill, [Loctite Eccobond UF 9000AG](#), that balances high filler loading and fast flow capability. This combination helps packaging specialists meet volume production while ensuring excellent protection of chip interconnects. Lid and stiffener attach materials, also part of the Henkel portfolio, further protect high-value 2.5D and 3D packages by securing lids and peripheral stiffeners to reduce warpage, maintain coplanarity, and in some cases, may provide grounding and shielding capability.

“The converging demands of miniaturization, high performance, functionality, and extremely high reliability make semiconductor device innovation more complex than ever. We are helping our customers meet the challenges head-on with materials that allow them to confidently push the reliability envelope.” comments Ramachandran Trichur.

To learn more about Henkel's semiconductor packaging materials, the company's global R&D capabilities, and its application engineering expertise, visit [this resource](#).

About Henkel

With its brands, innovations and technologies, Henkel holds leading market positions worldwide in the industrial and consumer businesses. The business unit Adhesive Technologies is the global leader in the market of adhesives, sealants and functional coatings. With Consumer Brands, the company holds leading positions especially in hair care and laundry & home care in many markets and categories around the world. The company's three strongest brands are Loctite, Persil and Schwarzkopf. In fiscal 2022, Henkel reported sales of more than 22 billion euros and adjusted operating profit of around 2.3 billion euros. Henkel's preferred shares are listed in the German stock index DAX. Sustainability has a long tradition at Henkel, and the company has a clear sustainability strategy with concrete targets. Henkel was founded in 1876 and today employs a diverse team of more than 50,000 people worldwide – united by a strong corporate culture, shared values and a common purpose: "Pioneers at heart for the good of generations." More information at www.henkel.com

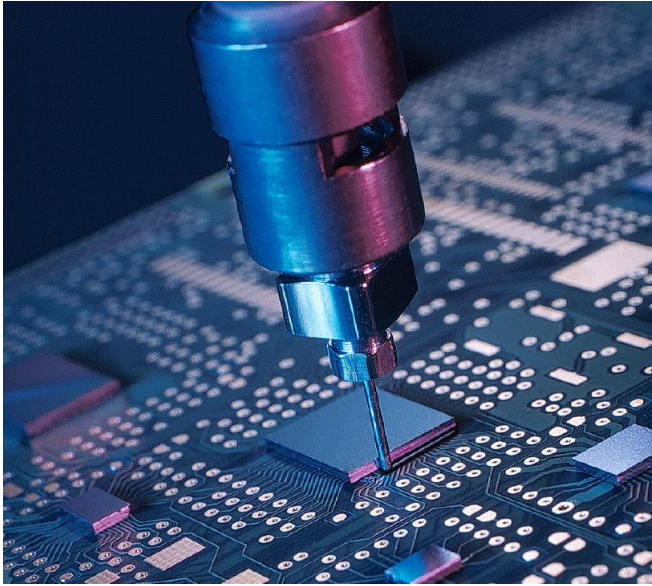
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Henkel's portfolio of die attach solutions and underfill materials enables package design innovations for semiconductors.