

## Asahi Kasei Develops Novel Photosensitive Polyimide Film for Advanced Panel-Level Semiconductor Packaging

**TOKYO – May 21, 2026 - Panel-level packaging has gained momentum in the semiconductor industry as manufacturers pursue higher efficiency and improved yield that can support next-generation packaging processes. In response to these market changes, Asahi Kasei, a diversified global company, has combined the features of its photosensitive polyimide (PSPI) and dry film photoresist (DFR) into a new photosensitive film. The PSPI film is currently under customer evaluation, with commercial availability expected in the near future.**

The new PSPI film was developed by combining Asahi Kasei's expertise in the manufacture of PIMEL™ liquid PSPI used for buffer coatings and passivation layers and SUNFORT™ dry film photoresist for temporary lithographic circuit patterning on substrates and wafers. It will improve productivity in semiconductor packaging manufacturing by enabling easy, uniform application of a lamination process to large square panels. In addition, the film is designed to accommodate an increased number of insulating layers. The PSPI film is expected to be applied to redistribution layers for semiconductor packaging and insulating layers for package substrates.

By combining the new PSPI film with the [SUNFORT™ TA series](#) (capable of forming 1.0 μm-wide circuits), both fine circuit patterns and insulating resin layers can be formed by film lamination. Asahi Kasei is also developing solutions that combine the PSPI film with the [SUNFORT™ CX series](#), enabling the formation of high-aspect-ratio copper pillars required for three-dimensional semiconductor packaging.

Nobuko Uetake, Senior Executive Officer of Asahi Kasei with responsibility for the Electronic Materials MBU, commented, "As the performance of AI semiconductors improves, advanced semiconductor packaging requires mounting technologies that cover larger areas and offer higher precision. Through our new PSPI film product, we aim to contribute to our customers' improved yield and productivity, while supporting the further evolution of advanced semiconductor packaging."

Electronics is positioned as a First Priority business in Asahi Kasei's medium-term management plan Trailblaze Together. Electronic materials such as PIMEL™ PSPI and SUNFORT™ dry film photoresist are used in advanced semiconductor packaging applications. Demand continues to rise as more chips are packaged at higher density and interposers become larger to meet the requirements of AI data centers. Wiring patterns are becoming finer and the number of layers is increasing as packaging transitions from wafer-level to panel-level, and becomes more 3-dimensional, further raising the performance requirements of packaging materials.

### About Asahi Kasei

Asahi Kasei is a diversified global company that contributes to life and living for people around the world. Since its foundation in 1922, with businesses in ammonia and cellulose fiber, Asahi Kasei has consistently grown through proactive portfolio transformation to meet the evolving needs of every age. With 50,000 employees worldwide, the company contributes to sustainability by providing solutions to the world's challenges across its three business sectors: Healthcare, Homes, and Material. For more information, visit <https://www.asahi-kasei.com/>.

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