

FRAUNHOFER INSTITUTE FOR RELIABILITY AND MICROINTEGRATION IZM

PRESS RELEASE

PRESS RELEASE

2020 March, 19 || page 1 | 2

Panel Level Packaging set to scale the next level: PLC 2.0

More than 50 international guests gathered at Fraunhofer IZM for the first kick-off meeting in mid of february to mark the great news: After the international Panel Level Consortium 1.0 achieved its ambitious goals for the project in 2019 with significant technical progress in the field of large-area Fan-Out Panel Level Packaging, a new consortium – consequently called PLC 2.0 – has been formed to continue on that trajectory, with special focus on ultra-fine-line routing, including an exploration of migration effects as well as warpage and die shift on large-area panels.

The PLC 2.0 project officially got under way on 1 February 2020 and is projected to pursue its goals over two years. The consortium currently consists of 17 international companies spread across the entire globe. Companies of all shapes and sizes can contribute, with consortium members ranging in size from 300 to more than 122,000 people, working as young actors in their field or long-established businesses with histories going back to 1832, or being located in one case at 1000 meters above sea level.

To date, the consortium includes: Ajinomoto Fine-Techno Co., Amkor Technology, ASM Pacific Technology Ltd., AT&S Austria Technologie & Systemtechnik AG, Atotech, BASF, Corning Research & Development Corporation, Dupont, Evatec AG, FUJIFILM Electronic Materials U.S.A., Hitachi Chemical Company, Ltd., Intel Corporation, Meltex Inc., Nagase ChemteX Corporation, RENA Technologies GmbH, Schmoll Maschinen and Semsysco GmbH. Other companies interested in joining the PLC 2.0 still have an opportunity to do so until summer 2020.

The research and development work of the PLC 2.0 consortium will continue the efforts of PLC 1.0, but focus on a set of specific targets. Breaking with the structure chosen for PLC 1.0, there will be only one corporate membership category, reflecting the successful implementation of the workflow. In addition, Fraunhofer IZM has further extended its Panel Level Packaging line to include several new facilities, such as a new high-speed assembly machine, new lithography tools breaking the 1 µm resolution barrier, and new plating and etching tools.

The investment for this equipment was made possible by funding support from the German Federal Ministry of Education and Research (Research Fab Microelectronics Germany).

More information will be published regularly over the course of 2020. First announcement: The 4th public PLP Symposium is planned for Juny, 30.



FRAUNHOFER INSTITUTE FOR RELIABILITY AND MICROINTEGRATION IZM

PRESS RELEASE

2020 March, 19 || page 2 | 2



PLC 2.0 consists of 17 international companies reaching for the next level in Fan-Out Panel Level Packaging. © Fraunhofer IZM

More information:

https://www.izm.fraunhofer.de/de/institut/netzwerk_weltweit/panel-level-consortium-2-0.html

Research of practical utility lies at the heart of all activities pursued by the Fraunhofer-Gesellschaft. At present, it maintains 72 institutes and research units. The majority of the 26,600 staff are qualified scientists and engineers, who work with an annual research budget of 2.6 billion euros. Of this sum, 2.2 billion euros is generated through contract research. More than 70 percent of the Fraunhofer-Gesellschaft's contract research revenue is derived from contracts with industry and from publicly financed research projects. Almost 30 percent is contributed by the German federal and state governments in the form of base funding, enabling the institutes to work ahead on solutions to problems that will not become acutely relevant to industry and society until five or ten years from now.

Fraunhofer IZM specializes in industry-oriented applied research. With four technology clusters, Fraunhofer IZM covers the entire spectrum of technologies and services necessary for developing reliable electronics and integrating new technology into applications. Our customers are as varied as the applications for electronics. We take on development projects for the automotive industry, healthcare and industrial electronics and even textile companies. Fraunhofer IZM has two sites in Germany. Apart from its headquarters near Berlin Mitte, the institute is also represented in Dresden, a strategically important centers for electronic development and manufacturing.