



PROPHESÉE Joins IRT NANOelec 3D Integration Program

Will Work with CEA-Leti, STMicroelectronics, Mentor, EVG, and SET to Develop New 3D Event-Based Vision System

GRENOBLE, France – Oct. 14, 2019 – PROPHESEE, the inventor of the world's most advanced neuromorphic vision systems, joins the IRT NANOelec consortium to help broaden the field of potential applications for 3D hybrid wafer-to-wafer bonding with fine interconnect pitches.

3D integration brings, under a single roof, expertise and equipment addressing the entire 3D integration value chain: technology, circuit architecture, EDA tools, packaging and test. STMicroelectronics (IDM), Mentor (EDA), a Siemens business, EVG and SET (equipment suppliers), and CEA-Leti (RTO) are the current members of the consortium. Among other successes, they have developed the first 3D stack imager at a 1.44 μ m pitch using wafer-to-wafer direct hybrid technology.

Séverine Chéramy, director of IRT NANOelec's 3D integration program, said the objective is to demonstrate the value of wafer-to-wafer technologies, using fine-pitch, direct hybrid bonding, for a new use case.

"I'm particularly proud to welcome PROPHESEE, a French SME, to the program. This is a real success of IRT NANOelec's previous work, and the first goal of our programs: to develop technologies for new uses and new applications, and to provide them with added value to our industrial partners," Chéramy said. "PROPHESEE will also bring to the consortium some additional challenges for automotive or Internet of Things applications. I'm convinced of all the potential of this collaboration. I wish it fully fruitful in very near future!"

Jean-Luc Jaffard, vice president sensor engineering and operations of PROPHESEE, said, "We are very enthusiastic to join IRT NANOelec's 3D integration consortium, which is comprised of key industry leaders, and gain access to so many advanced technologies. This new partnership will be very valuable to further expanding Prophesee's product offering in coming years."

About IRT-NANOelec Research Technological Institute (IRT)

NANOelec Research Technological Institute (IRT), headed by CEA-Leti conducts research and development in the field of information and communication technologies (ICT) and, specifically, micro- and nanoelectronics. Based in Grenoble, France, IRT NANOelec leverages the area's proven innovation ecosystem to create the technologies that will power the nanoelectronics of tomorrow, drive new product development and inspire new applications – like the Internet of Things – for existing technologies. The R&D conducted at IRT NANOelec provides early insight into how emerging technologies such as 3D integration, silicon photonics and power devices will affect integrated circuits. Visit www.irtnanoelec.fr.

IRT Nanoelec benefits from French Government aid under the "Programme Investissements d'Avenir" bearing reference ANR-10-AIRT-05.

About PROPHESEE

Prophesee is the inventor of the world's most advanced neuromorphic vision systems. Prophesee's patented sensors and AI algorithms, introduce a new computer vision paradigm based on how the human eye and brain work. Like the human vision, it sees events: essential, motion information in the scene, not a succession of conventional images. This event-based method allows for unprecedented speed (>10 000fps), dynamic range (>120dB), data volume (10x to 1000x less) and power efficiency (<10 mW). Prophesee bio-inspired revolution opens a new path to absolute efficiency and safety in autonomous driving, IoT and Industry 4.0. Website: <https://www.prophesee.ai/>

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