

PRESS RELEASE

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Fraunhofer ISIT tops the customer acquisition list again!

For the second time in a row, Fraunhofer ISIT wins the competition for the highest customer acquisition in January! With the groundbreaking TROM2 chip, which is revolutionising semiconductor manufacturing, the team around Amit Kulkarni & Co. won an order worth €2.7 million from IMS Nanofabrication. A milestone for the industry - and clear proof of ISIT's innovative strength!

Fraunhofer ISIT wins 'Highest Customer Acquisition of the Month' competition for January

Fraunhofer ISIT has won the 'Highest Customer Acquisition of the Month' for January 2025 for the second time in a row. The award goes to the TROM2 project, which was successfully acquired by Amit Kulkarni, Martin Witt, Christian Eisermann, Sukhvinder Singh and Uwe Bott. The customer, IMS Nanofabrication - one of the world's leading manufacturers of electron multi-beam mask writers - has placed an order worth €2.7 million.

TROM2 chip: a milestone for the semiconductor industry

The TROM2 chip is a revolutionary technology for the production of high-resolution photomasks in semiconductor manufacturing. The chip is a key component of IMS Nanofabrication's electron multi-beam mask writer (MBMW) and enables a completely new dimension in miniaturisation.

The continuous development of the semiconductor industry requires more and more powerful technologies to produce structures in the nanometre range with high precision. This is where the TROM2 chip comes in: With its innovative CMOS and MEMS technology, it enables the simultaneous control of 262,144 electron beams to create complex mask structures in just a few hours - an unprecedented advance over conventional single-beam mask writers.

Technological excellence from Fraunhofer ISIT

The MEMS processing of the TROM2 chip was developed by Fraunhofer ISIT together with IMS Nanofabrication. The MEMS process comprises more than 200 individual steps and combines state-of-the-art manufacturing technologies, including special electroplating processes, the deep reactive ion etch (DRIE) process and anisotropic KOH etching of silicon. These high-precision processes guarantee defect-free and electrostatically optimised structures on the chips.

The outstanding scientific achievements of Fraunhofer ISIT have already been recognised with the prestigious Fraunhofer Prize in 2021. The current successes with the TROM2 project underline the institute's leading position in the field of micro- and nanotechnologies.

Looking to the future: the TROM3 chip

Fraunhofer ISIT and IMS Nanofabrication are already working on the successor project TROM3, which is designed for use in the next generation of multi-beam mask writers (MBMW-301). This new chip will enable the next technological leap beyond the 3nm node in semiconductor manufacturing and further extend the innovation leadership of IMS and ISIT. IMS also received a €1.6 million order for TROM3.

By winning the 'Highest Customer Acquisition of the Month' competition, Fraunhofer ISIT has once again demonstrated its ability to bring cutting-edge technologies to the market and to establish long-term collaborations with leading industrial partners thanks to the high level of commitment of its employees.



v.l.: Amit Kulkarni, Martin Witt, Uwe Bott

