YOUR BENEFIT

One terabit per second at a latency of around 100 microseconds – the goals for 6G applications like industry 4.0, medical technology, driverless cars, and smart cities are quite ambitious.

But first we are facing major packaging challenges! Advanced system integration technologies, novel integrated terahertz MIMO antenna arrays, and novel high frequency design methods for constructing 6G frontend modules need to be developed.

Currently, Fraunhofer IZM is working on a concept that will form the basis for a powerful, miniaturized broadband D-band module. To turn these designs into actual hard-ware, the institute is employing its patented fan-out wafer-level packaging system integration platform with integrated antennas that have not even been built yet. Compared to existing package platforms, this enables excellent high frequency per-formance and makes the system smaller, more reliable, and more economical.

TAKE PART IN THIS LIVE EVENT AND BENEFIT FROM THE EXPERT KNOW-HOW ON 6G PACK-AGING SOLUTIONS!

REGISTRATION

This workshop is part of this year's IMAPS 2021, 54th International Symposium on Microelectronics
For registration please go to: www.imaps2021.org

PARTICIPATION FEE

The workshop is contained in the conference fee.

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IMAPS 2021 SAN DIEGO
54th INTERNATIONAL SYMPOSIUM on MICROELECTRONICS
OCTOBER 11-14, 2021 · SAN DIEGO, CA · IMAPS2021.org

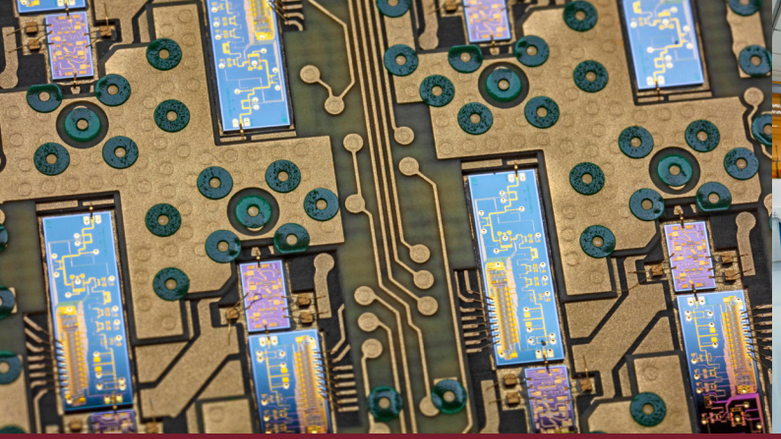
Fraunhofer

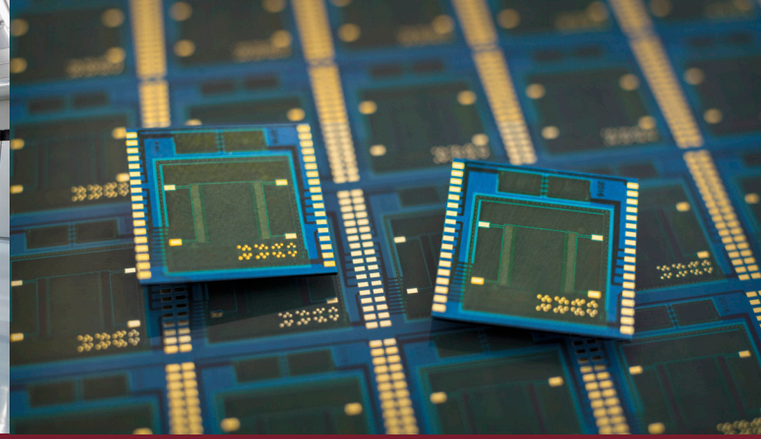
FRAUNHOFER INSTITUTE FOR RELIABILITY AND MICROINTEGRATION IZM

INVITED SESSION, ONLINE
OCTOBER 11, 2021 | 12.00 P.M. (PST)

WHAT DOES 6G MEAN FOR PACKAGING?

DESIGN | TECHNOLOGY | EQUIPMENT





PROGRAM

All times are Pacific Standard Time

12.00 Keynote: The leap from 5 to 6G

Use cases, packaging requirements and challenges. Novel antenna-in-package (AiP) solutions for 5G mmWave and 6G. Discussion of most significant differences between 5G and 6G.

Ivan Ndip

12.30 Cost-optimized manufacturing technologies for RF packages

Advanced packaging as FOWLP for RF and mmWave applications including antenna-in-package (AiP), shielding or III-V semiconductor solutions

Tanja Braun

12.50 Glass interposer technology for highly compact high-frequency applications

Low loss packaging concepts based on glass substrates and through glass vias. Presentation of wafer level processes and technologies for glass interposer

Markus Wöhrmann

01.10 Photonic packaging

Dense optical and electrical interconnects, RF transmission and thermal management. Fine pitch bumping, high precision bonding, low temperature joining and cost effective assembly methods for reliable products

Hermann Oppermann

01.30 Photonic systems for massive communication

Optical interconnects for low latency, low power, high bandwidth, high density. Photonic system integration for massive communication applications, such as datacenters, 5G, and next generation computing.

Tolga Tekin

01.50 Aging of RF materials

Influence of different accelerated aging conditions and various durations on the properties of RF laminates

Hans Walter et al

02.10 Wrap-up and closing