

## COMPASS Munich 2019 Call For Papers

FormFactor would like to invite you to submit an abstract to our users' conference on November 14<sup>th</sup>, 2019 in Munich, Germany. COMPASS will provide a forum to share test and measurement techniques and to exchange best practices and experiences using FormFactor's on-wafer test and measurement products.

Each session consists of a **25-minute presentation** and 10 minutes of Q&A at the end. There is **no formal (written)** technical paper required to submit, A summary of the proceedings will be publicized, and an electronic version of the presentations will be made available to all attendees.

If you are interested in presenting, please submit your 200-word abstract by August 26th, 2019 to <a href="mailto:compass@formfactor.com">compass@formfactor.com</a> Include the following with your abstract submission:

- Your name and contact information
- Company name
- Presentation title

FormFactor is soliciting presentations for the following topics, which include (but are not limited to):

## **Potential Topics:**

- Test challenges with automotive ICs
- RF/mmW/THz measurement and calibration methodology technology trends and theory
- High-voltage and high-current on-wafer device characterization
- Dynamic measurement challenges (e.g. current collapse measurements or unclamped inductance switching)
- Mass data acquisition for statistical data collection automation strategies and integration
- Unattended over-temperature measurements dealing with challenges, suggested guidelines and solutions
- Small pad probing procedures, guidelines, solutions
- 3D-TSV RF characterization
- Wafer- and/or package-level reliability test
- Integrated measurement systems requirements, architecture and application examples such as power and wafer-level reliability
- Procedures or criteria to define a proper system for data correlation between engineering and production test
- Tips, techniques and utilities for dealing with challenging probing situations
- DC parametric test
- Instrument drift and calibration
- MEMS device characterization
- Cryogenic probing
- Magnetic device probing
- Hall effect
- Maintenance of on-wafer engineering probes
- Silicon photonics testing (micro-LED/VCSEL, parallel test)

## **Additional Topics:**

- Test challenges with automotive ICs
- RF calibration innovative techniques for accurate production test
- 40+ GHz test including automotive radar, cell phone short haul/backhaul, 802.11ad
- HB-LED high-volume test
- Silicon photonics testing (micro-LED/VCSEL, parallel test)
- High-power production test
- Prolonging probe card life maintenance and cleaning procedures; evaluation of new cleaning media
- Cost-of-ownership models
- 3D package test at high volume
- Production test over temperature
- Micro-bump production probing (such as 3D-TSV)
- Production test methodologies
- Data transition and correlation procedures from R&D to production test
- Data comparison between different probing technologies
- WL-CSP and other package test with probes
- PTPA error analysis small pads, over temperature, probe card error, prober error, wear, etc.
- Probe card metrology tools
- Probe cards for PAs and LNAs matching networks, low inductance
- The future of test
- Over travel vs contact resistance

## **Important Dates:**

- > Abstract submissions due: Monday, August 26th
- Acceptance notification: by Friday, August 30<sup>th</sup>
- > Draft presentation files due: Friday, October 18th
- Final review with Technical Committee: by Friday, October 25<sup>th</sup>
- Final presentation files due: Friday, November 8<sup>th</sup>
- > COMPASS presentation: Thursday, November 14th

For questions, please contact our COMPASS 2019 Technical Committee Chairs:

- Arne Holland, FormFactor, Inc.: <u>arne.holland@formfactor.com</u>
- Jens Klattenhoff, FormFactor, Inc.: jens.klattenhoff@formfactor.com
- Peter Andrews, FormFactor, Inc.: <u>peter.andrews@formfactor.com</u>