

Session Title: [WE1] EMC Security and Modeling

Session Date: December 3 (Wed.), 2025

Session Time: 13:20-15:00
Session Room: Room E (301)

Session Chair(s): Yuichi Hayashi (NAIST, Japan)

Hyun-Ho Park (The University of Suwon, Korea)

[WE1-1] [Invited] 13:20-13:40

#### A Taxonomy of Electromagnetic Information Leakage Threats Focusing on Emission Process

Yuichi Hayashi and Taiki Kitazawa (Nara Institute of Science and Technology, Japan); Hikaru Nishiyama (National Institute of Advanced Industrial Science and Technology (AIST), Japan & Nara Institute of Science and Technology (NAIST), Japan)

[WE1-2] 13:40-14:00

## A Material Design Guideline for Millimeter-Wave Absorbers Derived from 3D Visualization of Target Permittivity and Conductivity

Dan Suzuki (Tohoku University, Japan); Kishio Hidaka (Tohoku University & Graduate School of Engineering, Japan); Saijian Ajia and Yasushi Endo (Tohoku University, Japan); Motoshi Tanaka and Shotaro Takahashi (Akita University, Japan); Tomonaga Ueno (Nagoya University, Japan); Tomoki Osato (SoraMaterials Inc., Japan); Sho Muroga (Tohoku University, Japan)

[WE1-3] 14:00-14:20

#### Modeling and Measurement of Electromagnetic Susceptibility Transfer for LDO Chips

Jingxuan Chen, Guangzhi Chen, Hongzhan Song, Zhenhua Wen, Youlong Weng and Donglin Su (Beihang University, China)

[WE1-4] 14:20-14:40

# A Novel Reflection Wave Decomposition Method Using Voltage-Controlled Voltage Source (VCVS) for Signal Integrity Analysis

Seonghi Lee, Dongryul Park, Sanguk Lee, Seunghun Ryu and Hyunwoo Kim (KAIST, Korea (South)); Hyunsik Kim and Duksoo Kim (SK Hynix, Korea (South)); Seungyoung Ahn (KAIST, Korea (South))

[WE1-5] 14:40-15:00

### Antenna Solutions Employing Coupling–Fed Techniques for Improved Platform Noise Immunity

Chung-Hao Huang and Chao-Chin Xu (Chung Yuan Christian University, Taiwan); Kuan-Hsueh Tseng and Chen-Kun Yang (Micro-Star INTL CO., LTD, Taiwan)