



APMC 2025

2025 ASIA-PACIFIC MICROWAVE CONFERENCE
DEC 2 - 5, 2025 | ICC JEJU, Jeju Island, Korea

Session Title:	[WB2] Advances in Millimeter Wave and THz Phased Array ICs
Session Date:	December 3 (Wed.), 2025
Session Time:	15:40-17:20
Session Room:	Room B (Halla B)
Session Chair(s):	Hussein Ssali (Kyushu University, Japan) Hojin Song (POSTECH, Korea)

[WB2-1] [Invited] 15:40-16:00

2D Beam-Steerable 300-GHz CMOS Phased-Array Transmitter and Receiver

Takeshi Yoshida, Shunsuke Hara, Kyoya Takano and Satoshi Tanaka (Hiroshima University, Japan); Mohamed H. Mubarak and Akifumi Kasamatsu (National Institute of Information and Communications Technology, Japan); Yoshiki Sugimoto and Kunio Sakakibara (Nagoya Institute of Technology, Japan); Shuhei Amakawa and Minoru Fujishima (Hiroshima University, Japan)

[WB2-2] 16:00-16:20

A Frequency-Reconfigurable Multi-Band 4-Channel Beamforming IC for Millimeter-Wave 5G Communication

Gyuha Lee (Korea Advanced Institute of Science and Technology, Korea (South)); Hyoungkyu Jin and Jaehun Lee (Samsung Electronics, Korea (South)); Eun-Taek Sung (ETRI, Korea (South)); Songcheol Hong (Korea Advanced Institute of Science and Technology, Korea (South))

[WB2-3] 16:20-16:40

Generating Enhanced THz Power via an 8×1 UTC-PD Array Integrated with a T-Junction Combiner

Hussein Ssali, Yoshiki Kamiura, Ming Che and Kazutoshi Kato (Kyushu University, Japan)

[WB2-4] 16:40-17:00

IF-Beamforming H-Band Receiver Using Cartesian Vector Modulation

Seunghoon Lee (POSTECH, Korea (South)); Junhyeong Kim (Samsung Electronics, Korea (South)); Sangcheol Jeon, Seongwoo Jang, Youngseo Du and Ho-Jin Song (POSTECH, Korea (South))

[WB2-5] 17:00-17:20

Sideband/Image-Rejection Up-/down-Converter Transceiver RFIC for Scalable 5G mm-Wave Phased-Array Antenna Systems

Aniello Franzese and Batuhan Sütbaşı (IHP - Leibniz Institute for High Performance Microelectronics, Germany); Nebojsa Maletic (IHP - Leibniz-Institut für innovative Mikroelektronik, Germany); Andrea Malignaggi (IHP, Germany); Renato Negra (RWTH Aachen University, Germany); Corrado Carta (IHP - Leibniz Institut für Innovative Mikroelektronik, Germany & Technische Universität Berlin, Germany)