

Session Title: [TF2] Advanced Front-End System for 5G adv/6G

Session Date: December 4 (Thu.), 2025

Session Time: 10:30-12:10
Session Room: Room F (302)

Session Chair(s):

Akihito Hirai (Mitsubishi Electric Corporation, Japan)
Young-jin Kim (Korea Aerospace University, Korea)

[TF2-1] 10:30-10:50

A Closed-Loop Impedance Tuner with Integrated Reflectometer and High-Voltage Tuning Switches

Ting-Li Hsu and Amelie Hagelauer (Technical University of Munich, Germany); Valentyn Solomko (Infineon Technologies, Germany)

[TF2-2] 10:50-11:10

A 15.5-44 GHz Vector Modulator Phase Shifter with an Improved QAF in 22nm FD-SOI CMOS

Zixuan Wang, Jiewen Wang, Kun Gao, Wenhua Chen, Haigang Feng and Zhenghe Feng (Tsinghua University, China)

[TF2-3] 11:10-11:30

Design of a 22nm CMOS 2,4GHz and 5GHz WiFi-6 Transmitter with Calibration for LO Leakage and Image Using an Envelope Detector

Eunchang Kim, Seonwoo Kim, Joong-Gi Yeo, Bo-geun Jung, In-Sung Hwang, Young-jin Kim and Choon Sik Cho (Korea Aerospace University, Korea (South))

[TF2-4] 11:30-11:50

A Low-Cost Digital Predistortion Method Based on 2D Look-Up Tables for 5G Mobile Applications

Yu-Chen Chang, Chun-Ying Chen and Jau-Horng Chen (National Taiwan University, Taiwan)

[TF2-5] 11:50-12:10

A Calibration Method Compensating Impedance Difference of Signal Paths in Wideband Reflectometer for Semiconductor Process Chamber

Ji-Young Kim, Sungjun Cho, Seong-Jin Kim, Hyo-Won Lee, Yeong-Ju Seo and Jong-Won Yu (Korea Advanced Institute of Science and Technology (KAIST), Korea (South))