7 – 12 June 2026
Thomas Michael Menino Convention and Exhibition Center
Boston, MA
ims-ieee.org

Call for Papers

2026 International MTT Symposia (IMS)
REVOLUTIONIZING RF

The IEEE International MTT Symposia (IMS) (www.ims-ieee.org) is the world's premier RF/microwave technical conference and industry exhibition. Attendees will appreciate that IMS2026 has been refreshed with the technical content reorganized, and new branding, new website, and new mobile app launched.

IMS2026 kicks off with the IEEE MTT-S RF Integrated Circuits (RFIC) Symposium, then introduces two new symposia formed out of traditional IMS technical content, the IEEE MTT-S RF Technology & Techniques (RFTT) Symposium and the IEEE MTT-S RF Systems & Applications (RFSA) Symposium, before concluding the week with the ARFTG Microwave Measurement Conference.

IEEE Hard Tech Venture Summit, which connects early-stage hardware startups with resources and funding, will again be co-located with IMS2026. The IMS Exhibition will continue to run for three days mid-week.

The RFIC, RFTT and RFSA symposia will now mirror each other in structure, with their own steering committee and paper selection and a commonality to allow the attendees to seamlessly focus on the technical topics that are most relevant to them. A detailed description of each symposium is outlined later in this Call for Papers. This reorganization allows IMS to continue to grow and evolve with a new increasing emphasis on RF systems and applications along with its more traditional technical content of RF subsystems and components.

The IMS Technical Symposium is now the RFSA Symposium and the RFTT Symposium.

Our theme Revolutionizing RF brings IMS2026 back to Boston, Massachusetts, a long-time stronghold for the RF/microwave industry with its rich history of technological innovation. The Greater Boston area hosts countless renowned universities and leading RF/microwave companies. The event will be held in the Thomas Michael Menino Convention and Exhibition Center (formerly the BCEC) in the heart of the Seaport District, a vibrant waterfront neighborhood known for its modern buildings, trendy restaurants, bustling nightlife, and scenic harbor views, blending innovation with rich maritime history. We look forward to welcoming you back to Boston for IMS2026!

IMS2026 General Co-Chairs
Gregory Lyons, *MIT Lincoln Laboratory*
Timothy Hancock, *Raytheon*

A complete roster of IMS2026 leadership roles can be found at www.ims-ieee.org

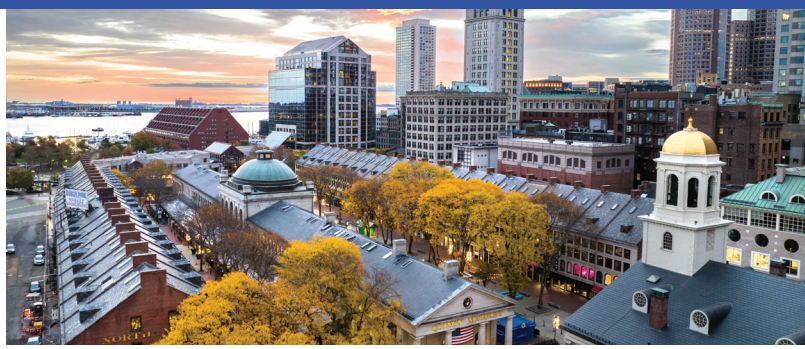
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
RFIC Workshops	**RFIC** Symposium				
		RFSA Symposium		**RFSA** Workshops	
	RFSA & **RFTT** Workshops	**RFTT** Symposium			**ARFTG**
		IMS Exhibition			
RFIC Plenary & Reception	**RFSA** & **RFTT** Plenary & **IMS** Reception	**RFSA** RF Systems Dialogue	**IMS** Industry-Hosted Reception		

IMS2026 Week-at-a-Glance Overview

Paper Submission Deadline: **6 January 2026**

RFIC

Radio Frequency Integrated Circuits



The IEEE MTT-S RF Integrated Circuits (RFIC) Symposium evolved from the IEEE Microwave and Millimeter-Wave Monolithic Circuits Symposium (MMWMC 1982-1996) and has always been a key aspect of IMS for monolithic integrated circuit design. Today the RFIC Symposium remains the premier forum dedicated exclusively to presenting the latest advances in RF, millimeter-wave, and THz integrated circuits and systems.

RFIC2026 continues to cover a broad spectrum of topics, ranging from individual circuit blocks to fully integrated systems operating from sub-GHz to THz frequencies. These circuit blocks include, but are not limited to, integrated power amplifiers, front-end circuits, low-noise amplifiers, oscillators, frequency synthesizers, and data converters. The fully integrated systems often leverage highly integrated SiGe and/or Si CMOS architectures and may include digital-processing and memory-storage subsystems.

The symposium welcomes papers on monolithic and heterogeneously integrated systems spanning a wide array of applications, including 5G/6G wireless, radar, satellite, IoT, sensing, wireline, quantum, optical, biomedical, and other emerging areas.

Introduced in 2025 and continuing in 2026, RFIC features a dedicated track for industry and start-up papers, aimed at encouraging and highlighting impactful, application-driven work that benefits the broader community.

Symposium Chair: Mohyee Mikhemar, *Broadcom*
TPC Chair: Bodhisatwa Sadhu, *IBM*
TPC Vice Chair: Debopriyo Chowdhury, *Broadcom*

A complete roster of RFIC2026 leadership roles and author information can be found at www.rfic-ieee.org.

RFIC Technical Areas

RFIC1: Industry and Start-ups — RFIC and mm-Wave circuit and system design techniques and demonstrations for commercial applications in various areas of RFIC and mm-Wave including products or R&D for productization or new concepts and ideas from start-ups targeting co mmercial products.

RFIC2: Sub-D band mm-Wave Circuits — >20GHz <110GHz circuits for wireless communication, including phase shifters, phased arrays, beamformers, MIMO transceivers, and other systems for 5G applications.

RFIC3: D-band Circuits — >110GHz circuits and SOCs for wireless communication, including transceivers, transmitters, and other systems for 6G applications.

RFIC4: Transmitters and Power Amplifiers — For RF through mm-Wave, D-band, and higher frequencies, power amplifiers, drivers, modulators, digital transmitters, advanced TX circuits, linearization, and efficiency enhancement techniques.

RFIC5: Front-End Circuits — LNAs, mixers, VGAs, T/R switches, integrated FEM, amplifiers, filters, and demodulators.

RFIC6: Wireline, Optical, Quantum and Mixed-Signal Circuits — Baseband and RF converters (ADC/DAC), sub- sampling/over-sampling circuits, converters for digital beamforming or emerging architectures, power (DC-DC) converters for RF applications, conversion techniques for wireline or optical connectivity (I/O transceivers and CDRs), silicon photonics, quantum computing ICs, hardware security, and AI applied to RF circuits.

RFIC7: Oscillators and Frequency Synthesizers — For RF through mm-Wave frequencies, D-band and higher, VCOs, injection-locking frequency dividers/multipliers, PLLs, DLLs, MDLLS, DDS, LO drivers, and frequency dividers.

RFIC8: Device/Packaging/Modeling and Testing Technologies — RF device technology (both silicon and compound semiconductors), MEMs, integrated passives, photonic technologies, reliability, packaging, modeling and testing, EM modeling/co-simulation, built-in-self-test (BIST), 3D ICs, and novel THz solutions.

RFIC9: Wireless Radios and Systems-on-Chip — Innovative circuit and system-on-chip concepts related to software- defined radio, interference cancellation, full-duplex, cellular/WiFi, GPS, low-power radio circuits for sensors, IoT and biomedical applications, radio architectures suitable for energy harvesting, wake-up receivers, etc.

RFIC10: Radar, Imager, and Sensor — Integrated and vehicular radar, imaging, spectroscopy, MEMs-based sensors and actuators, and sensing circuits at RF through THz frequencies.

RFIC11: RFIC Integrated Systems and Applications — System-level innovations in RFICs with application to 5G and 6G, radar, imaging, satellite communications, terahertz, biomedical, and optoelectronic systems. May include interactive demonstration and presentation of complete systems based on new or previously published chips.

Paper Submission Deadline: **2 December 2025**

RFSA

Radio Frequency Systems & Applications

We are excited to announce the inaugural IEEE MTT-S RF Systems & Applications (RFSA) Symposium, which will debut in 2026 as part of IMS. This new symposium is dedicated to fostering discussions on emerging topics in microwave systems and applications, covering frequencies from MHz to THz. Recognizing the increasing importance of these areas, RFSA aims to become a hub for creative exchange and groundbreaking ideas in system-level research and innovation, closely integrated with circuit-focused research at RFIC and component-related research at RFTT.

RF systems innovation focuses on integrating components and subsystems to achieve application goals within the constraints of available signal-processing techniques and digital processing hardware. Novel application contexts introduce new challenges for hardware and signal processing solutions, driving innovation in both communication and sensing technologies. RFSA invites contributions across a wide range of fields, including radars, communications radios, biomedical applications, phased arrays, and imagers. RFSA also invites papers discussing innovations in emerging applications where microwave technology plays a crucial role, such as non-terrestrial communications on the move and joint communication and sensing applications.

The symposium will feature technical sessions, an interactive forum, workshops, panels, and plenary sessions. A highlight of RFSA2026 will be the RF System Dialogue, a special event designed to facilitate deep interactions between industry and academia, fostering collaboration and innovation.

We invite researchers and industry professionals to contribute their latest findings and insights to RFSA2026. Join us in shaping the future of RF systems and applications!

Symposium Chair: Brian Floyd, *North Carolina State University*
TPC Chair: Christian Waldschmidt, *University of Ulm*
TPC Vice Chair: Jeffrey Nanzer, *Michigan State University*

A complete roster of RFSA2026 leadership roles and author information can be found at www.ims-ieee.org.

RFSA Technical Areas

RFSA1: Instrumentation and measurement techniques — Measurement techniques from MHz to THz for materials, linear and nonlinear devices, circuits, and systems; calibration and de-embedding techniques, measurement uncertainty, and over-the-air measurement methods and novel instrumentation.

RFSA2: Integrated transceivers and phased-arrays — Design and characterization of complex III-V ICs, silicon ICs, heterogenous systems in the RF to mm-wave band including narrowband and wideband designs; innovative circuits and sub-systems for communications, radar, imaging, and sensing applications; Integrated on-chip and on-package antennas and antenna systems.

RFSA3: Microwave and Terahertz Photonics, THz systems — Photonic techniques for the generation, processing, control, and distribution of microwave, mm-wave, and THz signals, Radio-over-fiber links; design and characterization of microwave photonic and THz circuits; interaction between microwaves, THz waves, and optical waves; THz circuits and systems for communications, radar, imaging, and sensing applications.

RFSA4: Wireless power transmission — Energy harvesting systems and applications, rectifiers, self-biased systems, combined data and power transfer systems.

RFSA5: Sensing and RFID systems — Short range wireless and RFID sensors, gas and fluidic sensors; passive and active tags from HF to millimeter-wave frequencies; RFID systems including wearables and ultra-low-power.

RFSA6: Microwave and millimeter-wave wireless subsystems and systems — Microwave/millimeter-wave subsystems such as beamformers; microwave and millimeter-wave (<300 GHz) communication systems, incl. 5G – 6G, with hardware implementation for terrestrial, vehicular, and indoor applications, point-to-point links, cognitive and software-defined radios, MIMO, full-duplex technologies, shared and novel spectrum use, novel modulation schemes, and channel modeling.

RFSA7: Radar and imaging systems — RF, millimeter-wave, and sub-THz radar and imaging systems, automotive radars, sensors for intelligent vehicular highway systems, UWB and broadband radar, remote sensing, radiometers, passive and active imaging systems, radar detection techniques, and related signal processing.

RFSA8: Airborne and space systems — Sub-systems and systems for remote sensing for earth observation; positioning, navigation, and timing; space exploration, human spaceflight and space transportation; satellite communications including 5G, 6G applications involving aerospace platforms; communication and sensor system for UAVs, high altitude platforms, airplanes, and satellites.

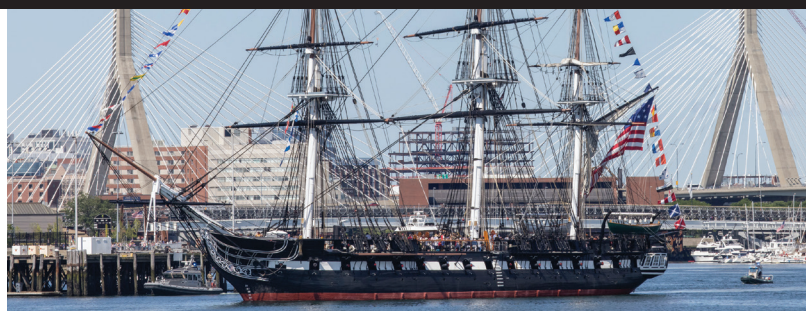
RFSA9: MHz-to-THz devices circuits, and systems for biological and healthcare applications — Electromagnetic field interaction at molecular, cellular, tissue and living systems levels; devices, circuits, and systems for characterizations of biological samples; microwave-enhanced chemistry; radar-based physiological sensors and their application; instrumentation and systems for biomedical diagnostic and therapeutic applications, incl. MRI and microwave imaging; wireless, wearable, and implantable devices for health monitoring.

RFSA10: AI/ML for RF to mmWave — AI/ML, algorithm implementations, and demonstrations for: spectrum sensing; mobile edge networking; MIMO and array beam operations and management; design and optimization; in-situ sensing, diagnostics, control, reconfiguration of MHz to THz communication and sensing circuits and systems.

RFSA11: Microwave field-matter interaction, material sensing and high-power applications — Industrial and scientific applications of microwave energy (e.g., chemistry, metallurgy, ceramic sintering, plasma generation, waste treatment, green materials, energy converters); MHz-to-THz sensing (from microwave microscopy to large surface/volume imaging) of materials for electronics and energy applications; multiphysics modeling of materials processing and characterization.

RFSA12: Additional innovative MHz-to-THz systems and applications — Submissions that describe innovative contributions in new and emerging areas of interest to the MTT community not falling under the above categories are encouraged.

Paper Submission Deadline: **2 December 2025**



RFTT

Radio Frequency Technology & Techniques

We are announcing the IEEE MTT-S RF Technology & Techniques (RFTT) Symposium to round out the IMS re-alignment for 2026. This new symposium is composed of much of the traditional IMS technical content that has included microwave passive components, packaging, active devices, discrete microwave circuits, computer-aided design, and computational EM and makes up approximately half of the IMS technical content.

RFTT will continue to focus on key topics in RF technology and techniques that includes planar, non-planar, and integrated filters and passive circuits; MEMs, acoustic, ferrite, ferroelectric, and phase-change components; heterogeneous packaging, MCMs, and 3D manufacturing; Si and III-V semiconductor device technologies; signal generation, modulators, and frequency conversion; low-noise amplifiers and receivers; power amplifiers and linearization techniques; mixed-signal circuits; quantum-engineering circuits; and sub-THz to THz circuits. This new alignment of the IMS material will help distinguish from the integrated design approaches of RFIC and the systems and applications of RFSA.

The symposium will continue to feature the technical sessions, an interactive forum, workshops, panels, and plenary sessions that you have come to expect. We invite researchers and industry professionals to contribute their latest findings and insights to RFTT2026. Join us in continuing the long history of presenting the emerging technology and techniques in the RF industry!

Symposium Chair: Steven Turner, *BAE Systems*
TPC Chair: Joe Bardin, *Google/UMass Amherst*
TPC Vice Chair: Steve Bowers, *University of Virginia*

A complete roster of RFTT2026 leadership roles and author information can be found at www.ims-ieee.org.

RFTT Technical Areas

RFTT1: Field analysis, guided waves, and computational EM — Novel guiding, radiating, and electromagnetic structures; new analytical techniques and numerical methods for such structures, and new computational EM methods, incl. EM-coupled multiphysics modeling.

RFTT2: Circuit and system CAD — Linear/w nonlinear simulation and design optimization techniques; behavioral modeling; statistical approaches; surrogate modeling; space mapping; model order reduction; uncertainty quantification in simulations; stability analysis; non-EM related multiphysics simulations, design automation.

RFTT3: Planar passive components and circuits, excl. filters — Novel planar transmission-line components; artificial transmission lines, metamaterial structures, and high-impedance surfaces; planar couplers, dividers/combiners, multiplexers, resonators, and lumped-element approaches.

RFTT4: Planar passive filters — Planar passive filters, including lumped elements, theoretical filter and multiplexer synthesis methods.

RFTT5: Integrated passive circuits and filters — Design and characterization of silicon integrated, III-V integrated passive components and filters, including IPDs.

RFTT6: Non-planar passive components, filters, and other circuits — Transmission line components, resonators, filters and multiplexers based on dielectric, waveguide, coaxial, or other non-planar structures.

RFTT7: Tunable passive circuits and active filters — Tunable and active filters, tunable phase shifters and couplers.

RFTT8: Microwave acoustic, ferrite, ferroelectric, phase-change, and MEMS components — Surface and bulk acoustic wave devices including FBAR devices, bulk and thin-film ferrite components, ferroelectric-based devices, and phase-change devices and components. RF microelectromechanical and micromachined components and subsystems.

RFTT9: Packaging, MCMs, and 3D manufacturing technologies — Component and subsystem packaging, assembly methods, multi-chip modules, wafer stacking, 3D interconnect, and integrated cooling; package characterization; novel processes related to inkjet printing, 3D printing, or other additive manufacturing techniques.

RFTT10: Semiconductor device technologies and modeling — RF to THz devices on III-V, silicon, and other emerging technologies, incl. 2D devices); MMIC and Si RFIC manufacturing, reliability, failure analysis, yield, and cost; linear and nonlinear device modeling (CAD, compact, physics-based, empirical) including characterization, parameter extraction, and validation.

RFTT11: HF/VHF/UHF circuits and technologies — Advances in passive and active circuits (incl. PAs), components, and technologies that operate in the HF, VHF, and UHF frequency ranges ranges (<1 GHz).

RFTT12: Signal generation, modulators, frequency conversion — CW and pulsed oscillators in silicon and III-V processes including VCOs, DROs, YTOs, PLOs, and frequency synthesizers, frequency conversion ICs in silicon and III-V processes, such as IQ modulators, mixers, frequency multipliers/dividers.

RFTT13: Microwave and millimeter-wave low-noise amplifiers, variable-gain amplifiers, and receivers — LNAs, VGAs, receivers, detectors, integrated radiometers, and low- noise circuit characterization, including cryogenic circuits.

RFTT14: Low-power (<10 W) amplifiers, below 30 GHz — Advances in discrete and IC power amplifier devices and design techniques based on Si and III-V devices, demonstrating improved power, efficiency, and linearity for the microwave band (1-30 GHz).

RFTT15: High-power (>=10 W) RF and microwave amplifiers, below 30 GHz — Advances in discrete and IC power amplifier devices and design techniques based on III-V and LD-MOS devices, demonstrating improved power, efficiency, and linearity for the microwave band (1-30 GHz); power-combining techniques for SSPA and vacuum electronics.

RFTT16: Millimeter-wave and THz power amplifiers — Advances in IC power amplifier circuits, design techniques, and power combining based on Si and III-V compound semiconductor devices demonstrating improved power, efficiency, and linearity for millimeter-wave and THz bands; vacuum electronics for millimeter-wave.

RFTT17: Linearization and transmitter techniques for power amplifiers — Power amplifier behavioral modeling; linearization and pre-distortion techniques; envelope-tracking, out phasing, and Doherty transmitters for III-V and silicon technologies.

RFTT18: Mixed-signal, wireline, and signal shaping circuits — High-speed mixed-signal components and subsystems, including: PLLs, TDCs, ADCs, DACs, DDSs, and supporting circuits to interface these to the analog world.

RFTT19: Quantum devices, circuits, and technologies — Quantum devices and circuits (incl. cryogenic RF circuits); interfaces and technologies for quantum computing and quantum sensing applications

RFTT20: SubTHz and THz circuits — SubTHz and THz circuits (300GHz to 1 THz+).