



## PRELIMINARY CALL FOR PAPERS

# 1<sup>st</sup> IEEE IMPACT Conference

**Integrated Microelectronics for Power Applications: Circuits & Technologies**

**June 19–20, 2027 | Rihga Royal Hotel Kyoto, Kyoto, Japan**



Financially Sponsored by IEEE Power Electronics Society (PELS)  
Technically Co-Sponsored by IEEE Solid-State Circuits Society (SSCS)



Co-located with the VLSI Symposium · Same venue, immediately prior to the symposium

### SCOPE

The IEEE IMPACT Conference focuses on power-oriented microelectronics, spanning integrated **power devices**, **PMIC circuits**, **passive** components and **advanced packaging**. It targets innovations enabling higher integration, power density and efficiency through microelectronics technologies, heterogeneous integration, and package co-design.

Cross-disciplinary contributions linking devices, circuits, packaging and applications are particularly encouraged.  
Industry submission is highly encouraged.

### OUT OF SCOPE

**Conventional discrete or system-level power-electronics work without a clear, direct microelectronics-integration dimension is outside the scope.**

### APPLICATION TOPICS

#### POWER & ENERGY

- Power delivery for AI, data centers, HPC and telecom
- Automotive, e-mobility, avionics and industrial systems
- Battery-powered systems, BMS and chargers
- Energy harvesting, wireless power
- Consumer, mobile, IoT and edge-AI power management

### TECHNICAL TOPICS

#### DEVICES, CIRCUITS & PACKAGING

- Integrated PMICs; DC–DC, AC–DC, switched-capacitor, hybrid, resonant and multi-level converters
- Si, GaN, SiC and emerging power devices
- Integrated capacitors, magnetics and energy storage
- Advanced packaging, chiplets and 3D integration
- Thermal, reliability, EMI/EMC and power integrity
- Device–circuit–package co-design, DTCO/STCO

### SUBMISSION GUIDELINES

Publication: Accepted papers published in IEEE Xplore.  
Format: Same template as the VLSI Symposium.  
Conference website: <https://ieee-impact.org>

### IMPORTANT DATES

Paper submission: April 2, 2027  
(camera-ready submission)  
Acceptance notification: April 19, 2027

### ORGANIZING COMMITTEE

General Chairs: Makoto Takamiya (Univ. Tokyo), Gaël Pillonnet (CEA-Leti), Hanh-Phuc Le (UCSD)  
Technical Program Chairs: Gaël Pillonnet, Hanh-Phuc Le  
Local Arrangement Chairs: Makoto Takamiya, Kousuke Miyaji (Shinshu Univ.)