

Global Synergy in Silicon: VLSI and Embedded AI for Sustainable  
Computing and Next-Gen Electrified Mobility

# Call for Papers

## Topics

- Hardware for Machine Learning and Artificial Intelligence
- Analog & Mixed Signal and, RF Circuits
- Sensors interfacing circuits and systems
- Test, Verification and Reliability
- Embedded Systems, Internet of Things (IoT), and Cyber-Physical System Design
- Low power Digital Systems
- Electronic design automation
- Hardware and Systems Security
- Photonic Integrated Circuits & Optical Communication
- Power & Energy Management
- Emerging Technologies: in-memory/near-memory computing, neuromorphic computing, Post- CMOS Technologies & Quantum computing
- 3D IC and Advanced Packaging
- Emerging Memory Technologies
- Wireless systems 5G and beyond
- Reconfigurable computing and processor design
- VLSI circuits and systems for manufacturing, automotive and EV

**Submission Date : 25th July 2025 | Notification : 25th Sep 2025**

## Global Synergy in Silicon: VLSI and Embedded AI for Sustainable Computing and Next-Gen Electrified Mobility

The world is confronting escalating environmental challenges, making it imperative to integrate sustainability into technology. To reduce our carbon footprint, the two transformative domains that can reshape how we live, work and move are sustainable computing and electrified mobility.

Sustainability has long been a foundational principle in the evolution of VLSI systems. With the rapid rise of electrified mobility and the soaring energy demands driven by intelligent computing infrastructures, the need for sustainable computing has become more critical than ever—spanning every domain of our increasingly digital society.

Semiconductors can enable transformative technologies to address global challenges across critical sectors such as agriculture, energy, climate, transportation, education, healthcare, and electrified mobility. The recent evolution of VLSI and Embedded Systems—driven by accelerated computing, intelligent sensing, wireless connectivity, big data analytics, and robust security—highlights the importance to support advancements in EDA tools, design methodologies, and manufacturing, both in traditional CMOS and emerging beyond-CMOS technologies like Quantum Computing.

The VLSID 2026 conference serves as a dynamic platform for collaboration between industry and academia, aiming to discuss, deliberate and advance the frontiers of semiconductors and artificial intelligence. The goal is to foster innovation that will power the next generation of sustainable computing and electrified mobility solutions.

## Submission guidelines:

**Paper Submission:** Authors are invited to submit full-length (6 pages maximum), original, unpublished papers along with an abstract of at most 200 words. To enable blind review, the author list should be omitted from the main document. Previously published papers or papers currently under review for other conferences/journals should NOT be submitted and will not be considered. Electronic submission in PDF format to the <http://www.vlsid.org> website is required. Author and contact information (name, affiliation, mailing address, telephone, fax, e-mail) must be entered during the submission process. Paper Format: Submissions should be in camera-ready two-column format, following the IEEE proceedings specifications.

**Paper Publication and Presenter Registration:** Papers will be accepted for regular or poster presentations at the conference. Every accepted paper MUST have at least one author registered to the conference by the time the camera-ready paper is submitted; at least one of the authors is also expected to attend the conference and present the paper.

