Call for Papers
ASP-DAC 2026

http://www.aspdac.com/
January 19-22, 2026
Hong Kong Disneyland Hotel, Hong Kong SAR

Aims of the Conference:
ASP-DAC 2026 is the 31st annual international conference on VLSI design automation in Asia and South Pacific regions, one of the most active regions of design, CAD, and fabrication of silicon chips in the world. The conference aims to provide the Asian and South Pacific CAD/DA and Design community with opportunities to present recent advances and with forums for future directions in technologies related to design and Electronic Design Automation (EDA). The format of the meeting intends to cultivate and promote an instructive and productive interchange of ideas among EDA researchers/developers and system/circuit/device designers. All scientists, engineers, and students who are interested in theoretical and practical aspects of VLSI design and design automation are welcomed to ASP-DAC. ASP-DAC recognizes excellent contributions with the Best Paper Award and 10-Year Retrospective Most Influential Paper Award.

Areas of Interest:
Original papers in, but not limited to, the following areas are invited.

[1] System-Level Modeling and Design Methodology:
1.1. HW/SW co-design, co-simulation and co-verification
1.2. System-level design exploration, synthesis, and optimization
1.3. System-level formal verification
1.4. System-level modeling, simulation, and validation
1.5. Networks-on-chip and NoC-based system design

[2] Embedded, Cyberphysical (CPS), IoT Systems, and Software:
2.1. Many- and multi-core SoC architecture
2.2. IP/platform-based SoC design
2.3. Real-time systems/Dependable architecture
2.4. Cyber-physical systems and Internet of Things
2.5. Kernel, middleware, and virtual machine
2.6. Compiler and toolchain
2.7. Resource allocation for heterogeneous computing platform
2.8. Storage software and application

[3] Memory Architecture and Near/In-Memory Computing:
3.1. Storage system and memory architecture
3.2. On-chip memory architectures and management: Scratchpads, compiler, controlled memories, etc.
3.3. Memory/storage hierarchies and management for emerging memory technologies
3.4. Near-memory and in-memory computing

[4] Tools and Methods for Building Artificial Intelligence (AI)
4.1. Design methods for learning on a chip
4.2. Tools and design methodologies for edge AI and TinyML
4.3. Efficient ML training and inference
Note: papers on AI/LLM-assisted tools and design methods should be submitted to respective tracks

[5] Hardware Systems and Architectures for AI:
5.1. Hardware, device, architecture, and system-level design for deep neural networks
5.2. Hardware acceleration for LLM
5.3. Neural network acceleration co-design techniques
5.4. Novel reconfigurable architectures, including FPGAs for AI/MLs

[6] Photonic/RF/Analog-Mixed Signal Design:
6.1. Photonic/RF/Analog-mixed signal synthesis, layout, and verification
6.2. High-frequency electromagnetic and circuit simulations
6.3. Mixed-signal design consideration
6.4. Communication and computing using photonics

[7] Approximate, Bio-Inspired and Neuromorphic Computing:
7.1. Circuit and system techniques for approximate, hyper-dimensional, and stochastic computing
7.2. Neuromorphic computing
7.3. CAD for approximate and stochastic systems
7.4. CAD for bio-inspired and neuromorphic systems

[8] High-Level, Behavioral, and Logic Synthesis and Optimization:
8.1. High-level/Behavioral synthesis tool and methodology
8.2. Combinational, sequential, and asynchronous logic synthesis
8.3. Synthesis for deep neural networks
8.4. Technology mapping, resource scheduling, allocation, and synthesis
8.5. Functional, logic, and timing ECO (engineering change order)
8.6. Interaction between logic synthesis and physical design

[9] Physical Design and Timing Analysis:
9.1. Floorplanning, partitioning, placement, and routing optimization
9.2. Interconnect planning and synthesis
9.3. Clock network synthesis
9.4. Post-layout and post-silicon optimization
9.5. Package/PCB/3D-IC placement and routing
9.6. Extraction, TSV, and package modeling
9.7. Deterministic/statistical timing analysis and optimization

[10] Design for Manufacturability/Reliability and Low Power:
10.1. Reticle enhancement, lithography-related design, and optimization
10.2. Design for manufacturability, yield, and defect tolerance
10.3. Reliability, robustness, aging, and soft error analysis
10.4. Power modeling, analysis, and simulation
10.5. Low-power design and optimization at circuit and system levels
10.6. Thermal-aware design and dynamic thermal management
10.7. Energy harvesting and battery management
10.8. Signal/Power integrity, EM modeling and analysis

[11] Testing, Validation, Simulation, and Verification:
11.1. ATPG, BIST, and DFT
11.2. System test and 3D IC test, online test, and fault tolerance
11.3. Memory test and repair
11.4. RTL and gate-leveling modeling, simulation, and verification
11.5. Circuit-level formal verification
11.6. Device/circuit-level simulation tool and methodology

[12] Hardware and Embedded Security:
12.1. Hardware-based security
12.2. Detection and prevention of hardware trojans
12.3. Side-channel attacks, fault attacks, and countermeasures
12.4. Design and CAD for security
12.5. Cyberphysical system security
12.6. Nanoelectronic security
12.7. Supply chain security and anti-counterfeiting
12.8. Security/privacy for LLM/AI/ML

[13] Emerging Devices, Technologies and Applications:
13.1. EDA and circuits design for quantum and Ising computing
13.2. Nanotechnology, MEMS
13.3. Biomedical, biochip, and biodata processing
13.4. Edge, fog, and cloud computing
13.5. Automotive and smart-energy systems design and optimization
13.6. New device and process technologies

Authors must submit full-length, double-columned, original papers, with a maximum of 6 pages in PDF format (including the abstract, figures and tables). One page of references is allowed, which does not count towards the 6-page limitation. ASP-DAC does not allow double and/or parallel submissions of similar work to any other conferences, symposia, or journals. Extended abstracts published elsewhere may be submitted but must include sufficient new content. The submission must not include information that serves to identify the authors of the manuscript, such as name(s) or affiliation(s) of the author(s), anywhere in the manuscript, abstract, references, and bibliographic citations. While research papers with open-source software are highly encouraged where the software will be made publicly available (via GitHub or similar), the authors' identities need to be anonymized in the submitted paper for the double-blind review process. Issuing the paper as a technical report, posting the paper on a website, or presenting the paper at a workshop that does not publish formally reviewed proceedings does not disqualify it from appearing in the proceedings. Note that each paper shall be accompanied by at least one different conference registration at the speaker's registration rate. ACM and IEEE reserve the right to exclude a paper from distribution after the conference (e.g., removal from ACM Digital Library and IEEE Xplore) if the paper is not presented at the conference by any author.

Submission of Papers:

Deadline for abstract submission:	**5 PM AOE (Anywhere on earth)**	**July 4 (Fri), 2025**
Deadline for PDF uploading:	**5 PM AOE (Anywhere on earth)**	**July 11 (Fri), 2025**
Announcement of accepted manuscript IDs:		**Sep. 2 (Tue), 2025**
Notification of acceptance:		**Sep. 5 (Fri), 2025**
Deadline for final version:	**5 PM AOE (Anywhere on earth)**	**Oct. 31 (Fri), 2025**

For detailed instructions for submission, please refer to the "Authors' Guide" at:
http://www.aspdac.com/

ASP-DAC 2026 Chairs

General Chair:	**Tsung-Yi Ho (The Chinese University of Hong Kong)**
Technical Program Chair:	**Takashi Sato (Kyoto University)**
Technical Program Vice Chairs:	**Seokhyeong Kang (Pohang University of Science and Technology)**

Call for Designs

University LSI Design Contest
ASP-DAC 2026

http://www.aspdac.com/
January 19-22, 2026
Hong Kong Disneyland

ASIA SOUTH PACIFIC DESIGN AUTOMATION CONFERENCE

Aims of the Contest:

As a unique feature of ASP-DAC 2026, the University LSI Design Contest will be held. The aim of the Contest is to encourage education and research on VLSI design at universities and other educational organizations. We solicit designs that fit in one or more of the following categories:

(1) Implemented on FPGAs/chips in universities or other educational organizations during the last two years.
(2) Designs that report actual measurements from implementations.
(3) Innovative design prototypes.

Interesting or excellent designs selected will be honored by providing the opportunities for presentation in a special session at the conference. Award(s) will be given to a few numbers of outstanding designs, selected from those presented at the conference.

Areas of Design:

Application areas or types of circuits of the original LSI circuit designs include (but are not limited to):
(1) Analog, RF and Mixed-Signal Circuits, (2) Digital Signal Processing, (3) Microprocessors, (4) Custom ASIC.
Methods or technology used for implementation include:
(a) Custom ASIC and Cell-Based LSIs, (b) Gate Arrays, (c) FPGA/PLDs.

Submission of Design Descriptions:

A camera-ready summary is requested to be prepared within 2-4 pages including figures, tables, and references. It is strongly recommended that measured experimental results and a chip micrograph are included in the summary. Please do not submit the same paper as a regular paper.
Specification of the submission format will be available at: **http://www.aspdac.com/aspdac2026/**

Design submission site: https://easychair.org/conferences/?conf=aspdac2026

- **Deadline for summary:** 5 PM AOE (Anywhere on Earth) August 8 (Fri), 2025
- **Notification of acceptance:** Sep. 15 (Mon), 2025
- **Deadline for camera-ready:** 5 PM AOE (Anywhere on Earth) Nov. 7 (Fri), 2025

Review:

Submitted designs will be reviewed by the Design Contest Committee in a process similar to the review process for the technical papers. The following criteria will be applied in the selection of designs:

(1) Novelty of application, algorithm, architecture, design, measurement, etc.
(2) Quality of design and implementation.
(3) Performance of the design.

Interesting or excellent designs selected will be presented at a special session of the conference.

Presentation:

An author of each selected design will be required to make a short presentation at a special session of ASP-DAC 2026. A separate poster session will be arranged to enable interactive discussion with the audience. A digest of each design to be presented will be included in the conference proceedings.

Contact Email: aspdac2026-udc@aspdac.com

ASP-DAC 2026 Chairs:

General Chair:	**Tsung-Yi Ho (The Chinese University of Hong Kong)**
Technical Program Chair:	**Takashi Sato (Kyoto University)**
Design Contest Chair:	**Fengbin Tu (The Hong Kong University of Science and Technology)**

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