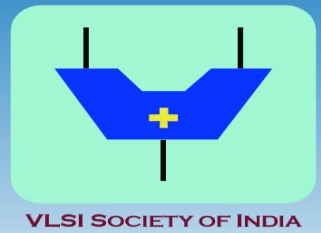




27th International Symposium on VLSI Design and Test (VDAT-2023)

Sept. 29 - Oct. 01, 2023

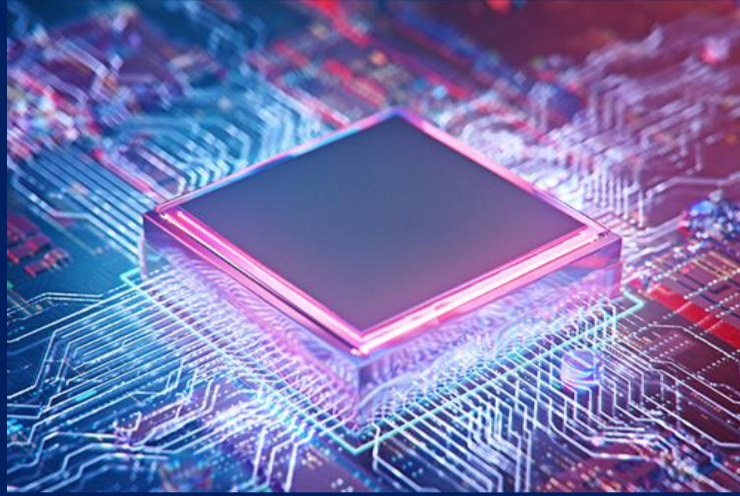
SYMPOSIUM VENUE → BITS Pilani - Pilani Campus (Rajasthan) 333 031, INDIA



VLSI SOCIETY OF INDIA

CALL FOR PAPERS

VLSI Design & Test Symposium (VDAT) promotes research and development in various fields of VLSI Design. VDAT began as a small workshop in the year 1998, and in 2005 it acquired the status of an international symposium. The 27th International Symposium on VLSI Design and Test (VDAT-2023) will be jointly hosted by Birla Institute of Technology & Science (BITS), Pilani, and CSIR - Central Electronics Engineering Research Institute (CSIR-CEERI), Pilani. This symposium aims to bring Industries, Academics, Researchers, Startups, MSMEs, and related practitioners together to exchange their ideas for leveraging in their respective fields. The VLSI Society of India, leading institutes and industries actively support the symposium.



Emerging Chip Architectures for Future: Beyond Moore's Law

- Organizing Patrons**
 Prof. V Ramgopal Rao, Vice-Chancellor, BITS Pilani
- Prof. Sudhirkumar Barai, Director, BITS Pilani
- Dr. P C Pancharia, Director, CSIR-CEERI
- Steering Committee**
 Prof. V. Agarwal, Auburn University, USA
 Dr. Satya Gupta, VLSI Society of India
 Mr. Jaswinder Ahuja, Cadence, India
 Dr. Devesh Dwivedi, GlobalFoundries, India
 Ms. Chitra Hariharan, Intel
 Mr. Niranjana Pol, Seagate
 Mr. Anil Kempanna, Intel
 Mr. Lakshmi Kethamreddy, Samsung
 Mr. Sumit Goswami, Qualcomm
 Mr. Veeresh Shetty, Siemens
 Prof. Preeti Ranjan Panda, IIT Delhi
 Prof. Manoj Gaur, IIT Jammu
 Mr. Nagi Naganathan, Microsoft, USA

- Advisory Committee**
 Ms. Sunita Verma, MeitY
 Dr. Praveen Kumar S., DST/SERB
 Shri Surinder Singh, Director, SCL
 Mr. Anand Ramamoorthy, Micron Technology
 Prof. Santanu Chaudhury, IIT Jodhpur
 Prof. G. Sundar, BITS Pilani
 Prof. Suman Kundu, BITS Pilani
 Prof. Srinivasan Madapusi, BITS Pilani
 Prof. M. B. Srinivas, BITS Pilani
 Prof. S. Gurunaryanan, BITS Pilani
- General Chair**
 Prof. Chandra Shekhar, BITS Pilani
 Prof. M Balakrishnan, IIT Delhi
- Organizing Committee Chair**
 Dr. Nitin Chaturvedi, BITS, Pilani
 Dr. Jai Gopal Pandey, CEERI, Pilani
- Sponsorship Chair**
 Prof. Sanket Goel, BITS, Pilani
 Prof. Navneet Gupta, BITS, Pilani
 Mr. Preet Yadav, NXP
- Technical Programme Chair**
 Prof. Raj Singh, AcSIR
 Prof. Sudeb Dasgupta, IIT Roorkee
 Prof. Virendra Singh, IIT Bombay
 Mr. M. Santosh, CEERI Pilani
 Dr. Abhijit Asati, BITS, Pilani
- Tutorial Chair**
 Dr. S C Bose, IIT, Jodhpur
 Prof. Anu Gupta, BITS, Pilani
- Publicity Chair**
 Prof. Santosh Kumar Vishwakarma, IIT Indore
 Dr. Pramod Tanwar, CEERI, Pilani
- Registration Chair**
 Dr. Rahul Singhal, BITS, Pilani
 Dr. Meetha V. Shenoy, BITS, Pilani
- Design Contest Chair**
 Prof. Dinesh Sharma, IIT Bombay
 Prof. G S Visweswaran, IIT Delhi
- Exhibit Chair**
 Dr. Sandeep Joshi, BITS, Pilani
 Dr. Vijay Chatterjee, CEERI, Pilani
- Startup Chair**
 Mr. Ashok Mishra, Bangalore
 Mr. Sachin Arya, BITS, Pilani
- Website Chair**
 Dr. Virendra Shekhawat, BITS, Pilani
 Dr. Yashvardhan Sharma, BITS, Pilani
- Logistics Chair**
 Dr. Pankaj B Aggarwal, CEERI, Pilani
 Dr. Anand Abhishek, CEERI, Pilani
 Mr. Pawan Sharma, BITS, Pilani

A Push for Aatma Nirbhar Bharat



- https://www.instagram.com/vdat23_bitspilani/
- <https://twitter.com/2023Vdat>
- <https://www.facebook.com/VDAT2023>



<https://discovery.bits-pilani.ac.in/VDAT2023/>

Low-Power Integrated Circuits and Devices

- Low-Power Analog/Digital/Mixed Signal Circuits
- Low-Voltage Low-Power Sensors Interface
- Circuit design for Reliability
- Device Modelling and Simulation
- MEMS/NEMS/MOEMS Devices, Organic Devices

FPGA-based Design and Embedded Systems

- Adaptive Computing using Reconfigurable Fabrics
- Large-Scale Systems and Power Networks
- Hardware-Software Co-design
- Reconfigurable and FPGA-based Design
- Multi-FPGA Systems

Memory, Computing & Processor Design

- Memory Design
- STT-RAM, PC-RAM, R-RAM, and Memristors
- Emerging Memory Technologies
- Neuromorphic Computing
- Quantum Computing

System-Level Design

- Systems-on-Chip (SoC), Lab-on-Chip
- Mixed-Mode System-on-Chip
- High-Speed Interconnects, Network-on-Chip
- Wireless Transceivers, Multimedia Processors
- Heterogeneous and Homogeneous MPSoCs

VLSI Architectures and System Integration

- VLSI Processors & Signal Processing Architectures
- RF Integrated Circuits & Systems
- Machine Learning Architectures
- Low-Power IoT Architectures and Systems
- Compressive Sensing, Wireless Systems

Emerging Integrated Circuits and Systems

- Artificial Intelligence Accelerators
- Cognitive Computing Systems
- Printed & Flexible Electronics
- Low Power Edge Computing System
- Analog/Digital/Mixed Signal Circuits

VLSI Testing and Security

- Hardware Security and VLSI Design Optimization
- Hardware Attacks, Detection, Threat Modelling
- Fault Diagnosis and Fault Models
- DFT and BIST for Digital Designs

CAD for VLSI

- Design Automation and CAD Tools
- Design Flows for MPSoCs
- ML/AI based Design-Flows and EDA
- Design Automation for DFX

Student Fellowship

VDAT-2023 will provide a limited number of fellowships to Undergraduate and Masters students for attending the symposium. Details may be checked out from the website.

Dates & Deadlines (Extended)

Regular Papers

- Full Paper Submission: **June 15, 2023** **June 25, 2023**
- Notification of Acceptance: **July 22, 2023** **July 31, 2023**
- Camera Ready Paper: **August 07, 2023** **August 10, 2023**

Poster Papers

- Paper Submission: **June 15, 2023** **June 25, 2023**
- Notification of Acceptance: **July 22, 2023** **July 31, 2023**
- Camera Ready Paper: **August 07, 2023** **August 10, 2023**

Tutorials

- Tutorial Proposal Submission: **June 15, 2023** **June 30, 2023**
- Tutorial Announcement: **August 15, 2023** **August 15, 2023**

Design Contest

- Submission of Design: **June 15, 2023** **July 31, 2023**
- Notification of Acceptance: **July 22, 2023** **August 31, 2023**

Submission Guidelines

Authors are invited to submit original, unpublished research manuscripts on the above topics. Submissions must be done through easy-chair portal. All papers will be reviewed by at least three members of the program committee, with a double-blind review process. Soft copies of papers should be submitted in PDF format, manuscripts should not exceed six A4 size pages and should be uploaded online. All accepted papers must be presented by one of the authors in order to be included in the SCOPUS indexed Springer CCIS conference proceedings.