3rd IEEE International Conference on VLSI Systems, Architecture, Technology, and Applications.

(VLSI-SATA 2022)

December 15 – 17, 2022

Amrita Vishwa Vidyapeetham

School of Engineering, Bengaluru

Important Dates:

Paper Submission Deadline: ***7th November, 2022(Phase 2)***

Notification of Acceptance: ***18th November, 2022(Phase 2)***

Camera Ready: ***28th November, 2022(Phase 2)***

Tutorial/Workshop/Special session is also invited. Please check www.vlsi-sata.in for more details and mail to vlsisata.amrita@gmail.com for any queries.

Theme: “Embedded Systems in Autonomous Driving”

3rd IEEE International Conference on VLSI Systems, Architecture, Technology, and Applications (VLSI SATA 2022) is technically sponsored by IEEE and held in Amrita School of Engineering, Bengaluru. VLSI SATA 2022 is technically and financially sponsored by IEEE VTS, Bangalore Section, and also technically sponsored by IEEE CAS, Bangalore Section and IEEE Bangalore Section. VLSI SATA is a forum for researchers, educators, and industry leaders to discuss all technology enablers in automotive systems and other industry verticals. VLSI SATA conference started with an idea to promote Knowledge building, engineering education, research, and developmental activities, and networking to establish and identify research groups and collaboration activities. Previous edition proceedings are online and in Scopus.

All accepted and presented papers will be submitted for possible publication in IEEE Xplore. Please find the link to previous publications.

https://ieeexplore.ieee.org/xpl/conhome/7044910/proceeding 2015

https://ieeexplore.ieee.org/xpl/conhome/7586733/proceeding 2016

CALL FOR PAPERS

Original, unpublished papers describing theoretical research, design and system solutions and practical applications in VLSI are solicited in the following areas, but not limited to:

Systems

- Reliable and/or Safe Embedded Electronics
- Systems for Testing
- Digital System Design and Validation
- Digital System and Circuits
- Memory Subsystems
- Memory Computing Systems
- HW/SW Co-Design
- IoT Systems
- Cyber-Physical Systems
- Embedded Operating Systems
- Analog and Mixed-Signal Systems
- RF Circuits and Systems
- Low Power Systems
- Power Management Systems
- Data converters
- High-speed Interfaces
- Reliable Systems
- Wireless Circuits and Systems
- CAD Tools and Methodologies for Design and Optimization

Technology

- 3D ICs
- MEMS, GaN, and SiC devices
- Layout Technology
- Physical Design
- Interconnect Technologies
- 3D Packaging and Wafer-level Packaging
- New Age Nanoelectronics Device
- Electronic Design Automation
- Advanced CMOS Technology
- Advanced Packaging and Heterogeneous Integration Technology
- Process Technology

Applications

- IoT and Big Data analytics
- AI oriented Applications
- Video and Image Processing Applications
- Hardware Security and Trust
- ML oriented Applications
- Wireless/Wired Communication Networks
- Automotive and Vehicular Networks
- RF Energy Harvesting
- Power Electronics Applications
- Biomedical and Healthcare Applications
- Sensors and Instrumentation Applications
- Signal Integrity Applications

Architecture

- Inter-Chip Interconnect
- On-Chip Interconnect
- Multicore and Manycore
- Data-Centric Architecture
- System on Chip
- Embedded Processor Architecture in Vehicle
- High-performance computing
- Embedded FPGA
- Reconfigurable computing
- Built In Self-Test (BIST)
- Design for Test
- Fault tolerance
- Quantum Computing
- Network Security
- Side-channel and Fault Analysis
- Trusted Computing
- Hardware Trojan
- Functional Safety and Privacy
- Optical Interconnect Architecture
- Reliable Communication Architecture
- NoC for FPGA, ASIC, CMP and MPSoC
- Approximate Computing

Organizing Committee:

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Submission and Author Instructions:

Soft copies of papers should be submitted in .pdf format as per the conference paper template, not exceeding six A4 size pages, double blind (no author details) and paper should be uploaded through online portal Microsoft https://cmt3.research.microsoft.com/User/Login
Please find the IEEE conference template to prepare the manuscript: https://www.ieee.org/conferences/publishing/templates.html

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