19th IEEE MCSoC 2026

Shanghai Jiao Tong University, Shanghai, China, Dec. 14-17, 2026

The 19th IEEE International Symposium on Embedded Multicore/Many-core Systems-on-Chip (MCSoC-2026) aims to provide the world's premier forum of leading researchers in the Embedded Multicore/Many-core SoCs software, tools, and applications design areas for academia and industries.

Sponsored by IEEE and the IEEE Computer Society Technical Community on Microprocessors and Microcomputers (TCMM), the 2026 edition will feature a robust technical program including keynote lectures, special sessions, and 19 specialized tracks. Key focus areas include heterogeneous architectures, energy-efficient computing, network-on-chip (NoC) technologies, neuromorphic and brain-inspired systems, and chiplet-based integration.

With past editions hosted in Japan, Austria, France, Italy, South Korea, the United States, China, Singapore, Vietnam, and Malaysia, MCSoC continues to expand its global footprint. The 2026 symposium in Shanghai will build on this legacy, offering a hybrid format to accommodate both in-person and online participation, and reaffirming its role as a driving force in shaping the future of intelligent multicore systems.

Prospective authors are invited to submit their contributions. Submission of a contribution implies that at least one of the authors will have full registration to the symposium upon acceptance of their contribution. Submission can include technical, experimental, theoretical, conceptual, or a survey.

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Paper Submission & Deadlines
- Paper submission: April 30, 2026
- Acceptance notification: July 20, 2026
- Camera-ready paper: July 31, 2026
- Conference date: December 14-17, 2026

Submission System: https://edas.info/N34632

https://www.mcsoc-forum.org

Technical Tracks

- Programming Techniques for Embedded Multicore/Manycore SoCs
- Architectural Innovations in Embedded Multicore/Manycore SoCs
- Design Methodologies for Embedded Multicore/Manycore SoCs
- Interconnection Networks for Embedded Multicore/Manycore SoCs
- Testing, Security, and Trust in Embedded Multicore/Manycore Systems
- Design Automation and Low-Power Techniques for Embedded Manycore SoCs
- Real-Time Systems for Embedded Multicore/Manycore SoCs
- Operating System Platforms for Real-Time Embedded Applications
- Application Domains for Embedded Multicore/Manycore SoCs
- Hardware Acceleration of AI on Embedded Edge SoCs
- Machine Learning for Energy-Efficient and Reliable Manycore Systems
- Chiplet-Based Architectures and Design for Multicore SoCs
- Sustainable Design and Lifecycle Management for Multicore SoCs
- Privacy-Preserving AI Acceleration on Embedded Multicore SoCs
- Formal Verification and Benchmarking of Multicore SoC Platforms
- Compiler Technologies and Toolchains for Embedded Multicore SoCs
- Multicore SoCs for Cyber-Physical and Autonomous Systems
- 2026 MCSoC-NeuroCore Global Summit on Neuromorphic Systems and Brain-Inspired Computing

Special Sessions

- Cutting-Edge Emerging Applications
- Embedded Applications and Ubiquitous Computing
- Embedded, Cyber-Physical, and IoT Systems
- Digital Accessibility through AI and ML
- Intelligent Mechatronics & Neuroprosthesis
- Quantum Technology and Machine Learning
- Optical Communications, Devices and Networking
- Emerging Technologies and Sustainability
- Emerging Machine Learning and Deep Learning
- Harnessing AI Tools for Transforming Education
- Embedded Machine Learning and Data Analytics
- Embedded Biomedical Engineering
- Parallel/Distributed, Grid, and Cloud Computing
- Distributed Computing & Comm. Techniques for Emerging AI Applications
- Intelligent Systems and Learning Technologies

Proceedings Publication and Indexing

The conference proceedings, including all technical tracks, special tracks, special sessions, and workshop papers, will be published by IEEE Conference Proceedings, which will be included in the Computer Society Digital Library CSDL and IEEE Xplore. All CPS conference publications are also submitted for indexing to EI's Engineering Information Index, Compendex, ISI Thomson's Scientific and Tech. Pro. Scopus, ISTP/ISI Proceedings.

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