
IEEE Solid-State Circuits Society
FIVE-YEAR STRATEGIC PLAN
2021-2025

Approved: TBD

Rev: 2020-3.0



Introduction

Advances in integrated circuits have been the driving force behind transformational changes in our global society over the last Century. These innovations provided ubiquitous access to information, pervasive communications, and enhanced mobility and quality of life around the world. The Solid-State Circuits Society (SSCS) as the world leading, innovative source of technical information, networking and professional development opportunities has catalyzed these advances through its members and programs. Members value the quality of SSCS technical publications, educational offerings and sponsored activities (conferences, workshops, courses, etc.)

Moving forward, SSCS cannot be complacent. Solid-state circuits and systems are essential to addressing our global societies' grand challenges such as climate change, environmental resilience, human health and wellness, and energy sustainability. SSCS must act with *urgency* to address the social and technical challenges facing our society to ensure that SSCS continues to be a driving force for technological innovation and a model for inclusive, rapid change. Additionally, SSCS must embrace and adapt to the changing perspectives and demographics of its future members. With this in mind, SSCS created a new technical committee, the "Solid-State Circuits Directions (SSCD)" to proactively pilot new programs and approaches anticipating rapid technological changes and adapting them to all SSCS activities. SSCS leadership will also expand its technical scope by stimulating interactions with other communities and promoting forward-looking topics as well as embracing the diversity, equity and inclusion in our membership and leadership. This will create the vibrant, forward-looking and agile international organization of the next decade. And as it is part of our DNA, SSCS will renew our efforts to foster and enable a spirit of innovation and entrepreneurship.

With this backdrop, we enthusiastically look forward to the future using this strategic plan as our guidepost.

Vision Statement

To foster innovation and excellence in solid-state circuits for the benefit of humanity.

Mission Statement

IEEE Solid-State Circuits Society serves our members through education, communication, recognition, leadership opportunities and networking.

Field of Interest

The IEEE Solid-State Circuits Society's field of interest is the design, implementation, and application of solid-state integrated circuits.

Motto

IC Innovation

Purpose and Values

The SSCS Strategic Plan was developed to be directly in line with the IEEE Strategic Plan, including the core purpose, values, and overarching goals. Each of these constructs have been enhanced to be more reflective and specific to SSCS. The strategic goals are unique to this plan.

SSCS's core purpose is to foster the development and facilitate the exchange of scientific and technological knowledge in our field of interest that benefits members, the profession, and humanity.

SSCS's core values are captured by "SERVE":

- **Serve** – Providing members with efficient, relevant, trusted, and timely benefits through flagship conferences and journals, education webinars, sessions and forums, and valuable network opportunities offered through its local chapter events and global conferences and workshops.
- **Engage** – Actively promoting an open and inviting culture among its membership. The society will be known for its transparency and accountability in all aspects of its operations and activities.
- **Recognize** – Recognizing members at all levels who contribute as volunteers or through outstanding industry and/or academic innovations to our mission. This recognition will support members' career development, acknowledge the impact of the contributions and inspire our membership broadly.
- **Validate** – Embracing diversity and promoting an open and welcoming culture of its members globally.
- **Educate** - Creating and sustaining an engaged, interactive international community of solid-state circuits professionals. SSCS provides life-long learning opportunities at every stage of members' careers preparing them for the continuously changing world.

Target Customers

SSCS's purpose of creating and maintaining a diverse global community of professionals to exchange technical information for the advancement of humanity and the profession includes promoting the creation, dissemination and validation of high-quality solid-state circuits information. This strategic plan envisions the establishment and maintenance of a holistic environment to serve the needs of practicing engineers, researchers and educators while providing lifelong learning, career development and leadership opportunities.

This also includes promoting the identification, creation, development, standardization and application of solid-state circuit technologies and disseminating the knowledge to the membership, the profession, and the public.

SSCS provides products and services of interest to a broad range of constituents. These constituencies include practicing engineers, researchers and educators in academia, government laboratories and industry, young professionals (YPs), undergraduate and graduate students, high school students and media. SSCS strives to provide targeted services to all of these constituencies. For example, electrical engineering (EE) and solid-state circuits awareness programs are needed for undergraduate and high school students to help them consciously and actively contemplate a career in electrical engineering and specifically solid-state circuits. The industry will benefit immensely from the effectiveness of these programs.

Goals and Strategies and Tactics

The high-level goals are informed by our values and our target audience. These goals are focused on engaged members, dynamic programs and publications, and global IC innovation in service to humanity. The goals can be captured as **Engaged | Dynamic | Impactful**.

With these high-level goals, specific five-year targets are defined as shown in bold/italic. Under each of these goals are strategies that define the focus for the next five years. These strategies are operationalized through tactics defined by the SSCS subcommittees. Each subcommittee will define tactics for the relevant strategies that align with their charter. The VPs will work with their subcommittees to develop the implementation plan which includes the tactics and corresponding assessments. The implementation plans will be reviewed and revised annually either at the Society Retreat or Winter AdCom meeting.

1. ENGAGED MEMBERS

Overall Goal: SSCS recruits a diverse membership and is an innovative source of technical information, networking and professional development opportunities.

Engaged Members 5 Year Target: *Increase overall SSCS membership by 10 % with emphasis on students, YPs, women, and ethnic and geographical distribution. Demonstrate added value across the membership as measured by surveys.*

Strategies

- 1.1 Motivate and engage a diverse membership that is global in reach and represents diversity in terms of gender, ethnicity, age group and geographic location.
- 1.2 Advance efforts to fill society leadership positions with diverse candidates, as benchmarked against overall Society/Council metrics reported by the TAB Committee on Diversity and Inclusion. Society leaders will actively encourage membership participation and engagement.
- 1.3 Provide timely and tangible SSCS membership benefits.
- 1.4 Expand the Women in Circuits programs to provide enhanced visibility and support.
- 1.5 Grow student and chapter membership through tailored programs.

2. DYNAMIC PROGRAMS AND PUBLICATIONS

Overall Goal: SSCS enhances members' careers and catalyzes technological advances through timely, relevant and state-of-the-art programs and publications.

Dynamic Programs and Publications 5 Year Target: *In the next five years, the specific goals are to introduce and show the impact of new programs and publications for SSCS target audiences and share conference-transformation expertise across SSCS programs.*

Strategies

- 2.1 Create germane and forward-looking new journals, workshops, conferences, educational programs,

- and/or other offerings to cultivate an innovative and entrepreneurial SSCS community.
- 2.2 Develop agile programs focused on industry needs and career development.
 - 2.3 Employ creative use of emerging technology (such as virtual platforms and hybrid programs) for existing and new programs and share best practices and experiences with virtual platforms and hybrid programs.
 - 2.4 Offer vibrant programs focused on student and YP needs.

3. GLOBAL IMPACT IN SERVICE TO HUMANITY

Overall Goal: To enable solid-state circuits as key technology to meet the needs of the human condition.

Global Impact 5 Year Target: In the next five years, develop outreach strategies and programs using various media to grow the membership pipeline and inform the larger community about the positive impact of SSC-created technologies and products.

Strategies

- 3.1 Build a worldwide community through chapter and local activities, outreach to high school and college students, partnerships, and other community building activities.
- 3.2 Promote public awareness of the role of solid-state circuits in fostering advances in technology for the benefit of human welfare.