

Synopsys Armenia

Research and Development Site



Synopsys: Fueling the New Era of Smart, Secure Everything

Synopsys technology is at the heart of innovations that are changing the way we work and play. Autonomous vehicles. Artificial intelligence. The cloud. 5G. These breakthroughs are ushering in the era of Smart, Secure Everything—where devices are getting smarter, everything’s connected, and everything must be secure.

Powering this new era of digital innovation are advanced silicon chips and exponentially growing amounts of software content—all working together, smartly and securely. Synopsys is at the forefront of Smart, Secure Everything with the world’s most advanced technologies for chip design and verification, IP integration, and software security and quality testing. We help our customers innovate from silicon to software so they can deliver Smart, Secure Everything.

Synopsys, Inc. is headquartered in Mountain View, California, and has approximately 120 offices located throughout North America, Europe, Japan, Asia, and India. www.synopsys.com

30+
Years in Business

\$3B+
Annual Revenue

13,000+
Employees

Smart, Secure Everything Changes Everything

The future of Smart, Secure Everything depends on silicon chips running faster, scaling down to fit into smaller devices, integrating more capabilities, and processing massive amounts of data—all while consuming less power—reliably. A single chip the size of a nickel and no thicker than a fingernail can have 30 billion transistors across 100 different layers operating seamlessly. As complexity rises, companies also need chips customized for autonomous, AI, cloud, and 5G applications.

Our Culture



“ At Synopsys, we’re constantly evolving - our challenges get tougher, our teams distributed more widely around the globe, and yet our values continue to pave the way to the future. For more than 35 years our core values have served to unite and guide our actions and are woven into the fabric of our organization and characterize who we are. Our people and our values combine to make Synopsys a pretty amazing place to accelerate your career. ”

~Chi-Foon Chan
President and Co-CEO, Synopsys

Our Commitment

“ A key element of Synopsys’ success is our strong set of core values: Integrity, Customer Success through Execution Excellence, Leadership, and Passion. We adhere to these principles because they are what we believe in and because they achieve results. ”

~Aart De Geus
Chairman and Co-CEO, Synopsys



Synopsys Armenia Research and Development Center

Synopsys established a presence in Armenia in 2004 as Synopsys Armenia closed joint stock company (CJSC) after acquiring Monterey Arset and Leda Design. Later, Synopsys enlarged its presence in Armenia by acquiring HPLA in 2005 and Virage Logic in 2010. Today, Synopsys is one of the largest IT employers in Armenia with more than 850 employees.

Located in Yerevan, Synopsys Armenia is also one of the largest Synopsys sites outside the US.



From Silicon to Software is What We Do

Synopsys technology makes it possible for leading companies to build smarts, security, and safety into their next-generation products. From silicon to software, we globally help our customers meet new goals for power, speed, connectivity, mobility, and reliability that are critical to the future of Smart, Secure Everything.

We are committed to bringing the best technology solutions to our customers. Synopsys Armenia exemplifies how Synopsys' business practices throughout the world reflect our company values of leadership, customer success and integrity.

Our Mission



“We perform cutting-edge R&D and provide dedicated support for electronic design automation (EDA) and semiconductor intellectual property (IP) solutions..... Our unique contribution is made possible due to the diverse talents, innovation and passion of exceptional individuals, who share our vision and values”

~Yervant Zorian
President, Synopsys Armenia; Chief Architect and Fellow, Synopsys

Our Impact

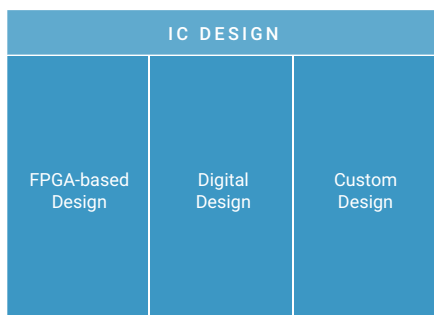
“Synopsys brought an unprecedented innovative culture to Armenia. First of all, it was the entry of the most advanced technologies into our country that continues to this day. It has also contributed to a significant reduction of brain drain by creating hundreds of new jobs as well as providing the best professional education in the world.”

~Hovik Musayelyan
Director, Synopsys Armenia



Cutting-Edge R&D at Synopsys Armenia

Emerging and rapidly evolving trends like autonomous vehicles, artificial intelligence (AI), the cloud, and 5G are transforming everything we know about mobility, connectivity, and security—from the way we consume and experience information to how we view data privacy and ensure our personal safety. These innovations are all possible because of complex silicon chips and powerful software code.

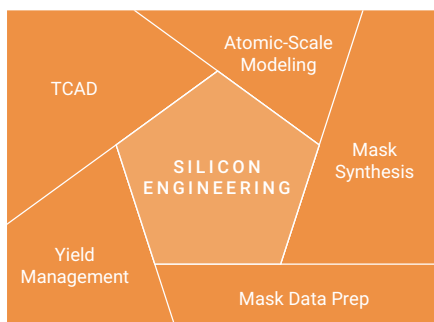


Accelerate Your Silicon Success with High-Quality IP

Synopsys is a leading provider of high-quality, silicon-proven IP solutions for SoC designs. The broad DesignWare IP portfolio includes logic libraries, embedded memories, embedded test & repair, analog IP, wired and wireless interface IP, security IP, embedded processors and subsystems. Synopsys' extensive investment in IP quality, comprehensive technical support and robust IP development methodology enables designers to reduce integration risk and accelerate time-to-market.

DesignWare USB IP Solutions

The USB IP offering includes controllers, PHYs, verification IP, and IP subsystems. These elements enable quick development of advanced chip designs incorporating the 20Gbps SuperSpeed USB standard.



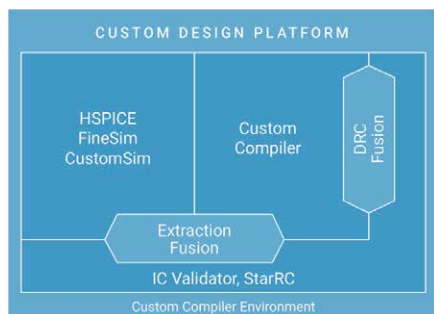
The Silicon Powering the Software

Most of today's cutting-edge FinFET high-volume designs are implemented using Synopsys tools. Early Process Development. Advanced Lithography. Yield Management.

Based on industry standards, our silicon engineering tools are production-proven at both established and emerging process nodes down to 5nm and below. Our tools optimize tradeoffs between speed, area, power, test, and yield.

Yield Explorer

Yield Explorer™ maximizes productivity and ensure the best quality of results while optimizing chips for power, performance, and yield. We help customers find system-level bugs earlier and faster, bring-up software sooner, and validate their entire system.



Accelerating Robust Custom Design

The Synopsys Custom Design Platform is a unified suite of design and verification tools that accelerates the development of robust custom and AMS designs. Anchored by the Custom Compiler™ custom design environment, the platform features industry-leading circuit simulation performance, and a fast, easy-to-use custom layout editor complemented with best-in-class technologies for parasitic extraction, reliability analysis, and physical verification.

Custom Compiler

The Synopsys Custom Compiler™ design environment is a modern solution for full-custom analog, custom digital, and mixed-signal IC design. Custom Compiler provides design entry, simulation management and analysis, and custom layout editing features. It delivers industry-leading productivity, performance, and ease-of-use while remaining easy to adopt for users of legacy tools.

Educating Tomorrow's Engineers

To provide Armenia with highly qualified and industry-ready specialists and to increase the level of silicon design expertise in Armenia and the surrounding region, Synopsys heavily invests in microelectronics education and research through collaboration with local and regional universities.

Synopsys helps universities expand their education and research programs into all aspects of system-on-chip (SoC) design and software engineering. The joint programs are based on a unique "Industry-Academia" collaboration model executed through the Synopsys Armenia Educational Department (SAED). Professor Vazgen Sh. Melikyan has been the head since SAED establishment.

Synopsys Armenia Educational Department offers advanced education for Bachelor and Master programs in IC design and EDA specializations, as well as PhD programs in automated systems & microelectronics and nanoelectronics.



"Industry-Academia" Collaboration Model

This "Industry-Academia" model perfectly combines the academic and industrial advantages. After acquiring a basic education around the 4th or 5th semester of the Bachelor program in the partner universities, the top-performing students are selected to continue their studies in SAED. To support this model Synopsys provides dedicated laboratory infrastructure where students get access to advanced Synopsys' EDA software and cutting-edge curriculum for their area of specialization – IC Design or EDA development. Curriculum for Bachelor and Master courses include lectures and labs conducted by industry professionals and university professors. All course projects, diploma works, Master theses, and PhD dissertations reflect real-world design challenges.



Cooperation with Universities

Synopsys Armenia is engaged in successful cooperation programs with major universities in National Polytechnic University of Armenia (NPUA), Yerevan State University (YSU), Russian-Armenian University (RAU), European University (EU), as well as the National Research University of Electronic Technology (MIET) in Russia. Customizations of the educational content are applied in cooperation with each university.

To date 1,592 students have graduated from the SAED Program. The majority of SAED graduates currently work at Synopsys Armenia, while the rest are employed by other IT companies in Armenia and the region.



Promoting Microelectronics

Synopsys is committed to improving education in all the communities it serves. Rooted in the responsibility that comes with corporate citizenship, our financial and human resources teams are devoted to supporting scientific education at all levels. In cooperation with local industry, government, and academic organizations, we foster and inspire the world's next generation of innovators. Our Microelectronics initiatives are designed to empower students and young professionals to enhance their expertise and uphold the long-standing tradition of scientific excellence in Armenia.



High School STEM Program

Enabling the next generation of innovators

Synopsys Armenia expanded its education focus to bring the basics of engineering into high schools and help students be better-equipped for professional orientation.

Launched in 2015, the High-School Program targets the development of technological education in Armenia by introducing 3 new disciplines – “Microelectronics,” “Information Technologies,” and “Basics of Telecommunications” into the high-school curricula.

Synopsys Armenia leads the “Microelectronics” discipline focusing on curriculum development and teachers’ training



Educational Award in IT Sphere

Recognizing the best, inspiring the next

The Educational Award is intended to motivate and empower young engineering students to pursue ambitious academic and career goals and uphold the tradition of engineering excellence in Armenia.

Established in 2005, the Educational Award in IT Sphere aims to acknowledge high-school and university students who have demonstrated notable achievements in their studies and research work, have participated in educational and scientific events, and have been actively involved in community projects.



International Microelectronics Olympiad

Creating a community of aspiring engineers

The Microelectronics Olympiad was established by Synopsys in 2006 under the patronage of the Prime Minister of Armenia and is in-cooperation with IEEE Computer Society TTTC. The Olympiad is an annual, knowledge-based contest aimed at:

- Creating a community of microelectronics specialists
- Recognizing and inspiring young engineers
- Sharing knowledge and experience
- Accelerating microelectronics talent on a global scale

Making a Difference: Community Impact

One of the core values Synopsys embodies is giving back to the community. We support humanitarian initiatives worldwide to make positive changes in the communities where our employees live and work.

Synopsys Armenia cultivates a socially responsible culture to inspire a new generation of leaders through successful partnerships with industry, academia, government, and non-governmental organizations. Synopsys Armenia employees are actively engaged in STEM, social, ecological, health, and other humanitarian initiatives by sharing their time, passion, and talent to strengthen local communities. Examples of employee contributions include gift drives for local orphanages, arranging disabled people's art-works exhibition-sales and charitable crafts fairs of Synopsys Armenia employees' handmade items.

Together with Armenia Tree Project NGO, Synopsys Armenia has been actively engaged in tree planting helping reduce air pollution and supporting a healthy environment in Yerevan. Driven by the motto "One Tree for Each Employee", Synopsys Armenia employees have planted more than 9,000 trees in 15 years.

Global Impact. Local Leadership.

Building on our year-round community engagement, Synopsys Global Volunteer Day is a special initiative that mobilizes employees for largescale, done-in-a-day service projects, making a big impact in local communities worldwide. In 2019 the Armenia volunteers donated their time and shared their passion for cleaning and beautifying the surrounding area of Katoghike Cathedral of Talin, one of the medieval architectural marvels of Armenia.

And more...

Synopsys Armenia's contribution reaches well beyond IT. In 2010 the U.S. State Department has recognized Synopsys in Armenia among 12 finalists worldwide for the U.S. Secretary of State's prestigious 2010 Award for Corporate Excellence (ACE). Synopsys was recognized for the software company's "promotion of U.S. and foreign investors by showcasing Armenia as a potential informational technology (IT) hub; collaboration with universities on IT training programs; and reduction of pollution levels by planting hundreds of trees to counter recent deforestation." The special citation was offered to Synopsys "in recognition of corporate citizenship, innovation and exemplary business practices in Armenia."



15

Years in Business

90+

PhDs

850+

Employees



35%

Women

30+

Patents

600+

Papers

1592

Student Graduates

77%

Graduates Employed
at Synopsys Armenia

52%

Employees are
SAED Students

5+

Partner Universities

10+

Partner High Schools

9000+ Trees Planted

We hire across a range of roles:



Applications Engineering



IT



Software Engineering



Hardware Engineering



Research

Apply Online: www.synopsys.com/careers

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