Synopsys Academic & Research Alliances (Taiwan) – FAQs

Updated in Oct 2023

Synopsys Academic & Research Alliances (SARA) proprietary documents can be used for teaching and fundamental research purposes:

"Fundamental research means basic and applied research in science and engineering, the results of which ordinarily are published and shared broadly within the scientific community, as distinguished from proprietary research and from industrial development, design, production, and product utilization, the results of which ordinarily are restricted for proprietary or national security reason."

Q: What resources are available to support use of the Synopsys tools at universities?

A: Synopsys provides the following materials to help professors adopt and quickly integrate Synopsys tools into their courses. All information is available for download from our SARA and Members Only web page, which requires SolvNetPlus ID and password to access.

- *Curriculum:* Includes 100+ full-semester courses for IC design and EDA Development, workshops, short lectures, and labs.
- *14nm, 32/28nm and 90nm Generic Libraries:* Enables students to master advanced IC design methods, such as low power, using the latest Synopsys EDA tools. Includes digital I/O and standard cell libraries, memories, PLL, technology kit, sample designs and support for the following processors: DesignWare ARC 600 Academic Core, ARM Cortex M0 DesignStart, OpenSPARC T1, and LEON3. It is designed for educational and training purposes only and not recommended for fabrication.
- *14nm, 32/28nm and 90nm Interoperable PDKs:* Enables students to master design of analog and mixed-signal ICs using the latest Synopsys custom implementation tool suite. Includes simulation models for various devices, layer map and technology file, drc and lvs runset files for physical and electrical design rules verification, parasitic extraction deck, schematic symbol library, and parameterized cells. It is designed for educational and training purposes only and not recommended for fabrication.
- *Generic Memory Compiler:* Contains software for the automatic generation of static memory circuits (SRAMs) based on parameters set by the user. Ability to generate a range of SRAMs with different output data formats for integrating memory into a design. The Generic Memory Compiler supports both the Synopsys 14nm, 32/28nm and 90nm Generic Libraries. It is designed for educational and training purposes only and not recommended for fabrication.

Q: Who created the curriculum?

A: Synopsys curriculum comes from a variety of sources, including:

- Synopsys Armenia Educational Department
- Synopsys Business Unit Subject Matter Experts
- Universities who chose to share their materials with Synopsys

Q: Who created the Generic Libraries, Interoperable PDKs, and Generic Memory Compiler?

A: These resources were created in the Synopsys Armenia Educational Department under the direction of Prof. Dr. Vazgen Melikyan. They are used by universities primarily for teaching, but they are also used by Synopsys employees for customer training, customer demos, product flow testing, etc.

Q: What tools are available to universities?

A: The current SARA tool bundle is available at Taiwan Semiconductor Research Institute (TSRI). It is updated on a regular basis by Sales Operations. Please visit TSRI web site (Link) for more information.

Q: Are university students eligible to access SolvNetPlus?

A: Yes. Students who wish to access SolvNetPlus should get approval from their professors prior to the applications. The applications should be filed by the professors with a list of the student users on the "SARA Taiwan Application Form". The application will be submitted by the professors to SARA Taiwan for approval. When approved, the professor will receive an email with instructions to create user logins for the students.

Q: Do university SolvNetPlus users get technical support?

A: Yes and no. The university users CANNOT file case on SolvNetPlus to request Synopsys technical support. The method for universities to request support is via TSRI (https://www.tsri.org.tw). From there the inquiries are screened and routed accordingly.

Q: Can university SolvNetPlus users access training resources on Synopsys Learning Center?

A: Yes. The university SolvNetPlus users can access "Self-Paced Learning" resources on Synopsys Learning Center (https://www.synopsys.com/support/training/self-paced.html) at no cost. Academic users with SolvNeptPlus accounts will be automatically entitled to the "Elite" subscription model. Users will be able to watch JumpStart, Product Release Update training, Webinars and Quick Tips,

Foundation, Advanced, Methodology, and Full-Flow courses along with guided learning journeys, badging, and gamification. Please note that this does not apply to "Instructor-Led Training" courses.

Q: How can I use the SolvNetPlus materials appropriately adhering to the terms of use?

A: The distribution of Synopsys proprietary documents (electronic and hard copy) on campus must be strictly controlled. EVERY university professor, student, or staff member who has access to the Synopsys proprietary documents are responsible for protecting these proprietary materials. By signing the "SARA Taiwan Application Form", the users acknowledge that –

- They understand that the proprietary materials (electronic and hard copy) are the property of Synopsys.
- They understand the proprietary materials supplied through SolvNetPlus must be viewed only by themselves and not shown to any other person.
- They understand the proprietary materials may not be copied to or stored in any medium (paper or electronic) that is always not under strictly secure control.
- They understand that any act of posting or redistribution of proprietary materials from SolvNetPlus is a violation of academic integrity, and that legal liabilities may ensue from such an act.

Q: Can the SolvNetPlus contents be used for my personal research purposes?

A: Yes. We encourage universities to conduct fundamental research and publish papers. However, if the research is funded by a company with a potential commercial benefit, this may lead to legal concern. Please contact SARA Taiwan (tw-up@synopsys.com) if you need further clarification.

Q: Can I publish papers using SARA tools?

A: Yes and please mention Synopsys name and the tools used in the reference section of the paper using appropriate trademarks from here: https://www.synopsys.com/company/legal/trademarks-brands.html.