

Media contact

Muriel Guilbert

muriel.guilbert@meolestrategy.com

Agileo Automation Announces Future Expansion Of A²ECF-SEMI Automation Framework With SEMI EDA (Equipment Data Acquisition) Standard

***Integration of latest SEMI standard empowers OEMs to deliver structured, high-bandwidth data
to semiconductor fabs and drive efficiencies for enhanced fab competitive advantage***

CEA-Leti Innovation Days/LID World Summit, Grenoble, France, June 17, 2025 – [Agileo Automation](#), a leading provider of control and connectivity solutions for global semiconductor equipment manufacturers, today announced that it will soon expand its [A²ECF-SEMI automation framework](#) to include SEMI's EDA (Equipment Data Acquisition) standards suite. This expansion, alongside the already included products [Agil'GEM](#) and [Agil'GEM300](#), will empower semiconductor equipment manufacturers to deliver structured and high-bandwidth data to manufacturing facilities. EDA standards, built on the legacy of [SECS/GEM](#) and GEM300, are transforming equipment communication and enabling high-speed, data-driven manufacturing. This integration will enable wafer fabs to drive process improvements with artificial intelligence (AI) by leveraging large amounts of reliable and actionable data. With each new process node and the growing adoption of advanced packaging techniques, the global semiconductor industry faces a steep increase in data complexity. As semiconductor fabs become more connected and automated, the ability of OEM equipment to integrate seamlessly and deliver high-quality, structured data is no longer optional – it has become a competitive differentiator. This announcement comes after the French company achieved two important milestones over the past six months, both related to the development of EDA capabilities.

In April 2024, Agileo delivered a digital twin of a semiconductor manufacturing equipment based on [A²ECF SEMI](#), representing a fundamental building block of the [OTPaaS](#) (operational technology, platform as a service) project, in particular for use cases related to distributed orchestration and industrial data acquisition. This project started over three years ago and came to a close in March 2025 when the demonstrator was deployed in a [CEA-Leti](#) cleanroom. This digital twin was designed to faithfully simulate the behavior of real semiconductor manufacturing equipment, based on SEMI's SECS/GEM E5, E37, and E30 standards. This project allowed Agileo to lay the foundations for high-bandwidth, high-volume communication and work on several use cases for leveraging this data. The OTPaaS project was led by a consortium of leading national industrial corporations, small- to medium-sized enterprises, and top-tier research organizations as part of [France 2030](#).

During SEMI's North America Standards Fall Meetings at its Milpitas, CA headquarters in November 2024, a handful of vendors including Agileo and an OEM achieved a significant milestone, successfully carrying out the first SEMI EDA Freeze

3 standards suite interoperability tests focusing on connectivity and data acquisition. EDA Freeze 3 brings a substantial leap in performance for semiconductor equipment through the adoption of gRPC instead of SOAP/XML, enabling reduced latency, and increased data collection throughput.

Agileo has carried out EDA Freeze 2 client and server tests with equipment manufacturers already supporting EDA and is working with these early adopters on the integration on their equipment using A²ECF-SEMI, Agil'GEM, and Agil'GEM300. The company will soon be providing a comprehensive offer for OEMs that are in need of EDA Freeze 2 or 3. Given the benefits EDA brings to fabs, including data security, efficiency, and structured data organization, it is increasingly being required in RFQs that equipment manufacturers must address.

“EDA is going to truly transform the way we operate semiconductor manufacturing facilities and enable wafer fabs to embrace this evolution to realize superior yields, faster innovation cycles, and a sustainable competitive advantage in an ever-accelerating market,” explains [Marc Engel](#), CEO of Agileo Automation. “The deployment of EDA marks a major step forward in advancing cleanroom data security and efficiency, setting a new standard for semiconductor manufacturing environments. We are proud to be a major contributor to that global effort and pleased to support OEMs in all market segments with a complete and scalable product suite.”

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About Agileo Automation

Since its inception in 2010 in Poitiers, France, Agileo Automation has empowered global semiconductor equipment manufacturers to optimize their production machines with control, communication, data acquisition, and testing solutions, enabling their deployment in large-scale fabs worldwide. At the heart of Industry 4.0, Agileo's A²ECF-SEMI framework provides a robust foundation for developing equipment controller software, leveraging the SEMI SECS/GEM and GEM300 standard suites. As a member of [SEMI](#) and the [OPC Foundation](#), Agileo is a key contributor to the development and integration of industry standards such as SEMI standards and OPC Unified Architecture (OPC-UA). For more information, please visit our [web site](#) or follow us on [LinkedIn](#).