International SEMATECH and The PEER Group Inc. today announced that third-party services for testing automation software conformance are now available to manufacturers of 300 mm semiconductor manufacturing equipment.

With this newly available service, equipment manufacturers have a reliable method of reducing the extensive and costly factory floor acceptance testing of their new 300 mm tools, company officials said.

“With 300 mm tools, automation has become much more complex and critical to successful manufacturing,” said Scott Kramer, director of the International SEMATECH Manufacturing Initiative (ISMI), a SEMATECH subsidiary working with test service providers. “Our member companies need better automation quality assurance practices from equipment suppliers, so that equipment procurement cycle times and costs are reduced.”

Kramer said members asked ISMI to work with suppliers to test equipment for specific automation operational scenarios in their respective fabs. In response, ISMI developed a set of software protocols that capture most of the members’ requirements. PEER Group is the first company to be licensed by ISMI to provide objective, third-party testing for equipment conformance to those specifications.

“The combination of our EFEM (equipment front end module) automation work for OEMs and our equipment integration experience for fabs makes us the ideal ISMI test service provider,” said Robert Harris, president of PEER Group. “Not only will we complete the tests efficiently, but we can also help the equipment manufacturers interpret the results and improve the automation of their equipment to the satisfaction of the IC manufacturers.”

The ISMI operational scenarios go beyond standard industry tests by simulating 300 mm factory automated production, and allowing an equipment maker to:

- Establish that a tool meets a particular baseline capability
- Eliminate some source inspections
- Reduce field support
- Distinguish common automation requirements from a special customer need

“SEMATECH member companies provided the impetus for this testing program and are continuing their commitment by specifying the tests in their RFQs. The single goal of this program is to reduce fab-specific testing and these members, along with the equipment makers, will be the first to benefit,” said Kramer.

The original press release can be found [here](#).