



# Automation of Etch Equipment leveraging Falcon



## CUSTOMER CHALLENGES

- The etch equipment OEM from Korea wanted to focus on innovating their hardware practice.

## SCOPE

### The client:

- Required tool automation software for their array of 200mm and 300mm line of etch equipment
- Required host connectivity software compliant to SEMI standards
- Wanted a strategic engineering services partner who could take care of the entire software stack - equipment automation, factory automation

## SOLUTION

- Leveraged QuEST's in-house tool control framework - Falcon
- The extensive configuration capabilities were used to develop the framework for the functionality and configuration of each equipment
- Partnership with Brooks automation and pre-integrated robot interfaces were used to reduce the development time
- Device interfaces using custom protocols were developed and integrated into Falcon

## FEATURES

- Test automation and Continuous integration frameworks used to improve product quality
- Test automation framework was developed, incorporating SEMI standards compliance testing tools like CCS Envoy
- Provided post release, 24x7 support
- Implemented using local-global approach of QuEST with 15% of the development team onsite at customer site and 85% offshore.

## BENEFITS

- OEM was able to hit market in time and control the R&D costs with usage of Falcon suite
- OEM was able to fully focus on hardware development and optimization, because QuEST took complete responsibility of the development of automation software and factory connectivity
- Intuitive rule-based Scheduler achieved higher throughput than required by customer
- OEM benefitted from our world wide fab experience during FATs (Factory Acceptance Tests) at end customer site
- High reliability of the software earned appreciation from the customer and was cited as one of the reasons for repeat orders

## RESULTS

