FabLink\textsubscript{suite}

SEMI-compliant equipment integration for any equipment controllers

Accomplish the integration challenge

- Integrate your production equipment into fab wide MES or host system using standardized communication interfaces
- Limit the integration effort into your equipment controller & shorten the tool setup time into factory IT systems
- Provide connectivity in semiconductor, LED, solar and other related industries, supporting the SECS/GEM, PV02, InterfaceA (EDA) and GEM300 standards
- Benefit from our know-how as an active member of SEMI
- Create your interface documentation automatically from its configuration

Features

- Flexible implementation of
  - SECS/GEM & PV02 connectivity
  - GEM300 services
  - InterfaceA (EDA) functionalities
- Integrated configurator
  - Easy equipment interface configuration
  - Automated interface documentation
- Various equipment-side integration methods supported (Profibus, SIMATIC\textsuperscript{®} S7, TwinCAT, TCP/IP, OPC, ...)
- Includes a starter application with the most GEM capabilities as foundation for your interface
- Simple communication programming library (API)
- Configurable SECS/GEM or PV02 connectivity for SIMATIC\textsuperscript{®} WinAC\textsuperscript{®}
- Customizable interface application by using integrated development environment

Benefits

- Full SEMI compliance off-the-shelf
- SECS/GEM, PV02, GEM300 and InterfaceA (EDA) support in one solution
- Reduced integration effort for OEM
- Automated creation of GEM documentation
- Dynamic interface configuration without compiling
**FabLink - Details**

**Architecture**
FabLink provides an interface application with several proprietary interfaces to exchange information with the equipment control software, like TCP/IP, OPC, Profibus, SIMATIC® S7, TwinCAT or any custom protocol. Also a .NET API is available. You just have to choose the easiest method for exchanging the required information.

**SEMI compliance off-the-shelf**
FabLink provides all needed functionalities for a SEMI compliant host interface and supports all mandatory GEM services as well as the following functionalities:
- Remote Control
- Trace Reports
- Terminal Services
- Spooling
- Process Program Management
- Limits Monitoring
- Time Synchronization

The integrated starter application provides a basic graphical user interface and all GEM-required functionalities. Use the integrated FabLink suite development environment to customize this fundamental application on your special needs.

**Flexible configuration of SECS/GEM, PV02, GEM300 Services and InterfaceA (EDA)**
Modifications of the host interface, according to the actual tool design, are accomplished by using the FabLink designer. This includes the GEM information like variables, events, reports, alarms, constants, remote commands, predefined GEM300 objects and the complete EDA configuration for the Equipment Self Description. Additionally, the FabLink designer is able to create automatically a GEM Manual describing your equipment interface.

Add GEM300 object services to your SECS/GEM projects by utilizing additional FabLink suite objects.

**EDA inside, effective Equipment Data Acquisition**
EDALib is usable as library within FabLink suite and can be integrated into your SECS/GEM interfaces. By doing this, and by using XML configuration files, the tool data connectivity has to be set up just once for both interfaces. The integration effort and installation times for EDA can be reduced significantly. Our EDA solution is tested and proven in interoperability tests at SEMATECH and does of course fulfill the SEMI E147 EDA guidelines.

**AIS Services for FabLink**
Extensive experience from a large number of successful interface and integration projects are the foundation of innovative software solutions for data integration and host interfaces. AIS provides complete interface integration services around the world from specification and integration to documentation, test and commissioning. Comprehensive consulting and training shows you the most efficient way to use the FabLink suite for developing your interface based on your requirements.

**Brief summary of AIS Automation**
For more than 25 years AIS Automation Dresden GmbH has been supplying innovative software solutions for factory and production automation, equipment integration and equipment control. We will support you over the entire life cycle - from specification, via installation up to customer service. Our software solutions are deployed in semiconductor, photovoltaics, automotive and other high-tech manufacturing industries.

**Supported SEMI standards**

**SECS/GEM**
- SEMI E04 SECS I
- SEMI E05 SECS II
- SEMI E30 GEM
- SEMI E37 HSMS
- Test Host included
- GEM Manual can be generated automatically from configuration

**PV02**
- SEMI E05 SECS II
- SEMI E10 RAM
- SEMI E30 GEM
- SEMI E37 HSMS
- Network Time Synchronization via NTP
- Test Host included
- GEM Manual can be generated automatically from configuration

**GEM300**
- SEMI E39 Object Service
- SEMI E40 Processing Management
- SEMI E87 Carrier Management
- SEMI E90 Substrate Tracking
- SEMI E94 Control Jobs
- SEMI E116 Equipment Performance Tracking

**InterfaceA (EDA)**
- SEMI E120 Common Equipment Model
- SEMI E125 Equipment Self Description
- SEMI E132 Authentication and Authorization
- SEMI E134 Data Collection Management
- SEMI E138 Semiconductor Common Components

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