

kontron

The Power of IoT

Kontron AIS GmbH



FabLink®

The Easy Way to a SEMI-Compliant Interface – SECS/GEM, GEM300 & EDA

FabLink® enables fast and SEMI-compliant integration of production equipment. The solution supports SECS/GEM, GEM300 and EDA, and connects equipment to higher-level systems. FabLink® is designed for semiconductor, PCB, LED, OLED, flat panel and photovoltaic manufacturing and supports SEMI-PV2 and SEMI-A3.

CRA ★ ★ ★
ready

**SEMI-compliant
Integration
via SECS/GEM,
GEM300 & EDA**

**Integration
of PLC controls
or protocols
(e. g., OPC UA)**

**Easy
configuration
and creation of
SEMI documen-
tation**

**Fast
integration
into existing
equipment**

Your benefits with FabLink®

- › SEMI-compliant solution with about 20,000 installations worldwide
- › Support of SECS/GEM, GEM300, PV2, SEMI A3 and EDA (Interface A) in one solution
- › Minimal development effort for equipment manufacturers
- › Time savings thanks to prepared SEMI documentation
- › Comprehensive support in evaluating and responding to end customer specifications
- › Continuous product development and regular updates

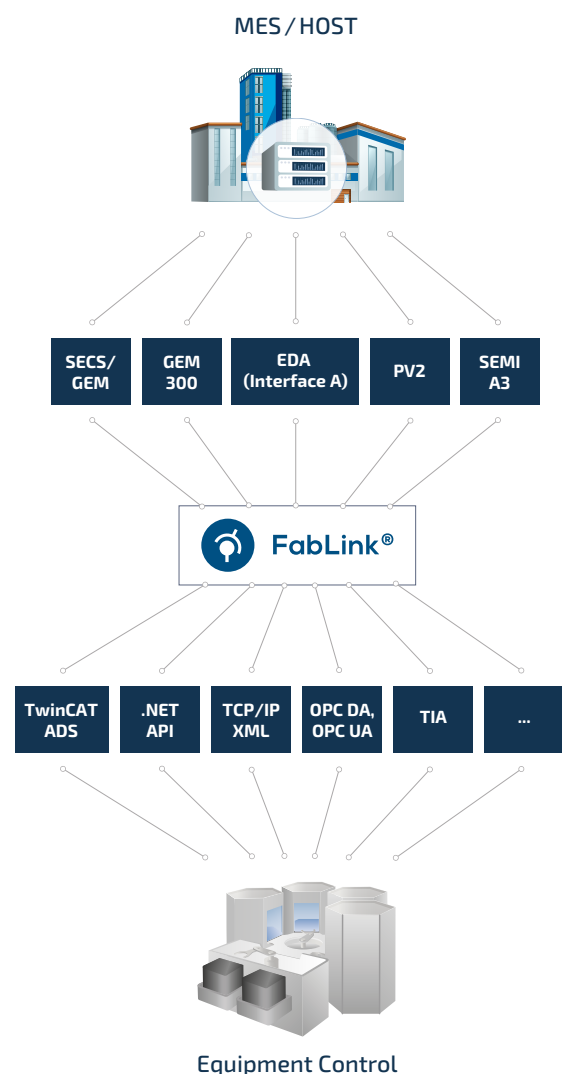
Features

- ✓ SEMI-compliant SECS/GEM and GEM300 implementation
- ✓ Support of additional GEM functions, e.g.
 - › Spooling
 - › Limits Monitoring
 - › Terminal Service
- ✓ SEMI-compliant EDA (Interface A) implementation
- ✓ FabLink® Designer

With the integrated FabLink® Designer, you can configure the SECS/GEM interface of your equipment series quickly and easily. The export function of the FabLink® Designer provides a prepared interface documentation (GEM manual) in open file format, which can be edited and passed on directly to the fab operator. This saves you valuable time and ensures a transparent process.

- ✓ Easy connection of your equipment

Use the C#/.NET API to connect your high-level language application or to connect your tool to FabLink® using TCP/IP XML, OPC DA or OPC UA. FabLink® also supports the integration of PLCs, e.g. from Siemens, Beckhoff or Mitsubishi, with ready-made libraries.





Libraries and Protocols

For equipment control, e.g. Siemens, Beckhoff, Mitsubishi or XML, C#/.NET API, OPC DA, OPC UA



Time-to-Market

Quick and easy implementation of SECS/GEM interfaces



Security Compliance

Compliance with industry-specific cybersecurity standards and CRA ready

Supported SEMI standards

SECS/GEM

- › E05 - SECS II
- › E30 - GEM
- › E37 - HSMS
- › Documentation

GEM300

- › E39 - Object Service
- › E40 - Processing Management
- › E84 - Carrier Handoff
- › E87 - Carrier Management
- › E90 - Substrate Tracking
- › E94 - Control Job Management
- › E116 - Equipment Performance Tracking

SEMI A3

- › Specification for Printed Circuit Board Equipment Communication Interfaces (PCBECI)

Interface A (EDA Freeze I + Freeze II)

- › E120 - Common Equipment Model
- › E125 - Equipment Self Description
- › E128 - Specification for XML Message Structures
- › E132 - Authentication and Authorization
- › E134 - Data Collection Management
- › E138 - Semiconductor Common Components
- › E145 - Classification for Measurement Unit Symbols in XML

PV2

- › Guide for PV Equipment Communication Interfaces (PVECI)

Common Standards

- › E148 - Time Synchronization and TS-Clock
- › E157- Module Process Tracking
- › E167- Specification for Equipment Energy Saving Mode Communications (EESM)
- › E172 - SECS Equipment Data Dictionary (SEDD)

Cybersecurity

- › E187 - Cybersecurity of Fab Equipment
- › E188 - Malware Free Equipment Integration
- › E191 - Computing Device Cybersecurity Status Reporting

The implementation of further standards (e.g. E82, E88, E142) using FabLink® can be realized by individual adaptations.

Our service for your SEMI-compliant equipment integration

Training, requirements analysis, consulting, implementation, commissioning and support. For the integration of your equipment and the implementation of a SECS/GEM interface, select the services you need from our extensive portfolio of consulting and support. Our comprehensive trainings also enable you to configure additional SECS/GEM interfaces yourself in order to implement your individual requirements independently.

About Kontron AIS

We set the benchmark in industrial software –

for more than 30 years and with an experienced team of over 230 employees. The proven software products and customized digitalization solutions enable machine and equipment builders as well as factory operators to break new ground in automation and secure long-term competitive advantages. Together with its customers, Kontron AIS implements worldwide cross-industry, intelligent digitalization strategies and solutions for the smart manufacturing of tomorrow.

As a subsidiary of the Kontron AG, Kontron AIS offers integrated, end-to-end IoT concepts consisting of hardware and software as well as worldwide project management, service, and support thanks to a global network.



Software Development



Consulting and Requirement Engineering



Project Management and Training



Supply of Hardware for Control and IT Systems



On-Site Installation and Commissioning



Flexible, Global Service and Support

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