

SEMI SMT-ELS: SMT Equipment Link Standards

- The Standards Suite to Make SMT Assembly Line Smarter -

December 5, 2019



“SEMI SMT-ELS (Equipment Link Standards)” is the Standards suite for SMT assembly line that replaces SMEMA and adds data communication capabilities to make assembly line smarter.

SEMI SMT-ELS Standards suite uses the advanced general purpose M2M interface “SEMI A1/A1.1 PESCI (Production Equipment Smart Connection Interface)” for equipment interface tier and uses “SEMI A2 SMASH (Surface Mount Assembler Smart Hookup, which was proposed by major SMT assembly equipment suppliers)” for SMT assembly line control tier.

SEMI Standards are global standards that have been supporting semiconductor and related manufacturing lines for many years and its development process is open for those who are interested.

Benefits of SEMI SMT-ELS

SEMI SMT-ELS provides higher level of connectivity and control capabilities of SMT assembly line including:

- Host-equipment Communication
 - ✧ M2M Network setting
 - ✧ Production route setting
- Inter-equipment Communication

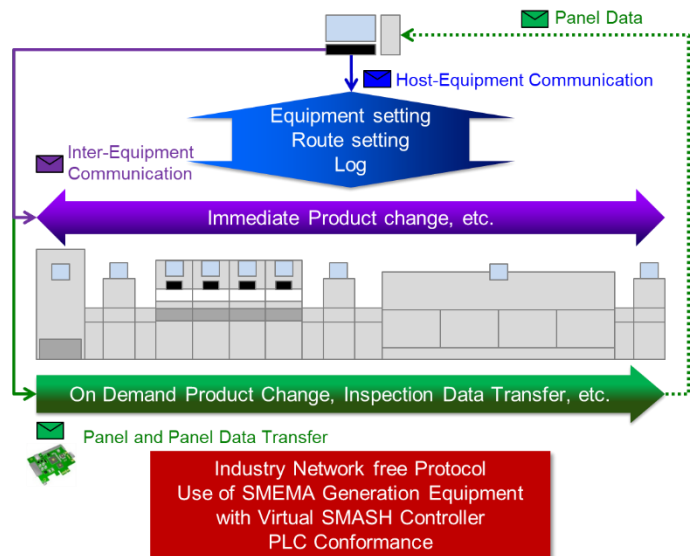
Direct communication between equipment which performs:

 - ✧ Immediate product change
 - ✧ Panel Data usage mode setting
- Panel and Panel Data Transfer

Object Oriented panel transfer which simultaneously transfers a panel with its data.

 - ✧ On Demand product change
 - ✧ Panel handoff exception handlings (Pause – Recovery)

SEMI SMT-ELS is highly extendable in its structure for the future requirements.



SEMI Standards used for SEMI SMT-ELS Standards suite

SEMI SMT-ELS consists of the following SEMI Standards.

- SEMI A2 Specification for Surface Mount Assembler Smart Hookup (SMASH)
- SEMI A1 Specification for Production Equipment Smart Connection Interface (PESCI)
- SEMI A1.1 Specification for TCP/IP Interface for PESCI

SEMI SMT-ELS Freeze Version 0 is available now.

SMT Applications (Host / M2M Interfaces)
SEMI A2 SMASH
SEMI A1 PESCI
SEMI A1.1 TCP/IP Interface for PESCI
TCP/IP

How to purchase the SEMI Standards for SEMI SMT-ELS Standards suite

The Standards are available through “SEMIVIEWS” the license to access those documents. Please ask SEMI Staff in your locale for SEMIVIEWS.



For more up-to-date information on implementation or revisions

Please join the following SEMI activities.

SEMI Flow Manufacturing (FM) Forum

SEMI FM Forum is the place to collaboratively works on implementation knowhow, interoperability testing, feedback, etc. The forum is open for any users and suppliers of SEMI SMT-ELS Standards suite. Please ask SEMI Staff for the registration.

SEMI Standards Automation Technology Committee

SEMI Standards Automation Technology (AT) committee is responsible for development and improvement of SEMI SMT-ELS Standards suite, and task forces under the committee are responsible to each document. This activity is open for everyone with free Program Member registration. Please ask SEMI Staff for the registration.

Endorsement

The application of SEMI SMT-ELS has been endorsed by the following companies and association.

Companies



Association



Homepage

For more information, please visit:

http://www1.semi.org/jp/SEMI_SMT-ELS

About SEMI

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Association Contact

Junko Collins, Director, Standards & EHS /SEMI Japan Email:jcollins@semi.org