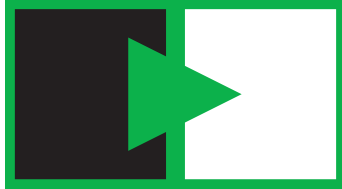




**IPC-HERMES-9852**  
**Version 1.2**



**IPC-HERMES-9852**

# **The Global Standard for Machine-to-Machine Communication in SMT Assembly**

Developed by The Hermes Standard Initiative and approved by IPC

***Supersedes:***

HERMES-9852 Version 1.1

Users of this publication are encouraged to participate in the development of future revisions.

Contact:

IPC

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# The Global Standard for Machine-to-Machine Communication in SMT Assembly

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## 1 SCOPE

The aim of this specification is to create a state-of-the-art communication protocol for surface-mount technology (SMT) production lines. Therefore, this new communication protocol has to cope with the following:

- Replace the electrical SMEMA interface as specified in IPC-SMEMA-9851
- Extend the interface to communicate (including):
  - Unique identifiers (IDs) for the handled printed boards
  - Equipment identifiers of the first machine noticing a printed board
  - Barcodes
  - Conveyor speed
  - Product type specific information (including):
    - Product type identifier
    - Length
    - Width
    - Thickness

With respect to version numbers IPC-HERMES-9852 adheres to the rules of Semantic Versioning 2.0.0 (SemVer\_2.0.0).

Hints on naming

- Wherever a feature is described by the word “**shall**” it is mandatory.
- The word “machine” is used for any equipment which can be found in a SMT production line (e.g., printers, placement machines, ovens, automatic optical inspections (AOIs), transport modules, shuttles, stackers, etc.).
- The term “printed board” may also refer to carriers transporting printed boards.
- The word “Hermes” is used as abbreviation for “IPC-HERMES-9852”.
- “The Hermes Standard” and IPC-HERMES-9852 are synonyms for the standard specified in this document and might be used interchangeably.