



IPC-1072

Intellectual Property Protection in Electronic Assembly Manufacturing

Developed by the EMS Intellectual Property Subcommittee (E-21) of the
Intellectual Property Standard Committee (E-20) of IPC

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

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Intellectual Property Protection in Electronic Assembly Manufacturing

1 SCOPE

1.1 Purpose The purpose of this standard is to assist printed circuit board assemblers in development of requirements for the protection of intellectual property (IP) for their customers in commercial, industrial and military and other high-reliability markets. This standard focuses on protection of the inherent IP designed into the printed board (PB) such that IP flows from the customer to the PB assemblers and that IP that is incorporated into the PB is protected. Patents and other such “forever protection” of the manufactured product is beyond the scope of this document.

This standard is not intended to be a legal guide. Please consult an attorney for questions of a legal nature.

1.2 Levels of IP Protection This standard recognizes that electrical and electronic products are subject to classification by intended end-item use. Additionally, different manufacturers and or customers may desire different levels of IP protection. Three levels of IP protection have been established to reflect the differences in IP protection (see 1.3.1 through 1.3.3).

1.2.1 Definition of Requirements The words “shall” and “shall not” are used in the text of this document wherever there is a requirement for IP protection.

1.3 Selection of IP Level The user is responsible for selecting the desired level of IP protection. The procurement documentation or data package shall state the IP level and any exceptions to specific parameters, where appropriate.

Criteria defined in this document reflect three classes, which are as follows:

1.3.1 Level 1 – Basic IP Protection This level of requirement provides good IP protection and is best suited for high-volume consumer goods. Items may be manufactured globally under Level 1 IP protection.

1.3.2 Level 2 – High IP Protection This level of requirement provides a higher level of IP protection and is best suited for high-value goods. In most cases, items may be manufactured globally under Level 2 IP protection.

1.3.3 Level 3 – Advanced Level for Military, Government and Commercial IP Protection

This level of requirement provides the highest IP protection and is best suited for military and other high-security systems.

- Level 3 activities required to be conducted in the United States (U.S.) or in a State Department – and Department of Defense (DoD) – (or other appropriate government agency) approved location shall be under the strict supervision of U.S. citizens or those possessing legal U.S. residency.
- For Level 3 activities conducted for a different national government, the user shall adhere to all citizenship and residency requirements, regulations and laws of that national government.

2 APPLICABLE DOCUMENTS

2.1 IPC¹

IPC-T-70 Terms and Definitions for Interconnecting and Packaging Electronics

IPC-1071 Best Industry Practices for Intellectual Property Protection in Printed Board Manufacturing

The purpose of IPC-1071 is to assist PB manufacturers in the development of requirements for the protection of IP for their customers in commercial, industrial and military and other high-reliability markets. This standard focuses on protection of the inherent IP designed into the PB such that IP flows from the customer to the PB manufacturer and that IP that is incorporated into the PB is protected. Patents and other such “forever protection” of the manufactured product are beyond the scope of this document.

1. www.ipc.org