IPC Standards: What Every Manufacturer Should Know
Why Should Original Equipment Manufacturers (OEMs) Use IPC Standards?

To achieve a high quality end product and maintain a competitive position in the marketplace, you need to infuse quality throughout the manufacturing process.

**Did you know there is an IPC standard associated with nearly every step of printed circuit board production and assembly?** From design and purchasing to assembly and acceptance, IPC offers a standard to help you assure superior quality, reliability and consistency in the electronic assemblies that go into your product.

As with the manufacturing process — which uses a step-by-step approach — IPC standards also build upon one another. To achieve your desired results, it’s important to implement the appropriate IPC standards associated with each step of production.

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**Why Use IPC Standards in Your Manufacturing Process?**

- **Gain Control Over End Product Quality and Reliability** — Quality and reliability are the cornerstones of competing in the marketplace and critical to your company’s reputation and profitability. By implementing IPC standards throughout the manufacturing process, you help ensure better performance, longer life and compliance with lead-free regulations.

- **Improve Communication with Suppliers and Employees** — IPC standards are the standards that your competitors, suppliers and EMS providers use. Working from an established IPC standard helps all of you to “speak the same language” — the language of the global electronic industry. In addition, using IPC standards eliminates confusion for employees, because they know they need to perform to an established industry standard.

- **Help Contain Costs** — Ensuring that your design and the bare boards you purchase comply with IPC standards allows you to produce electronic assemblies that meet stringent quality tests down the line, minimizing costly delays, rework and scrap. Let IPC’s globally recognized, industry-consensus standards help you meet your customers’ demands for quality and reliability in the equipment you manufacture.

**Get Involved in Standards Development**

Contribute your technical expertise to IPC’s standards development efforts, and become part of a worldwide network of people who help establish and improve the standards that impact your company and the work you do.

IPC has more than 90 different standards committees, many of which are responsible for creating standards that directly impact OEMs — such as the various committees responsible for addenda to the widely used IPC-A-610, *Acceptability of Electronics Assemblies*, focusing on the specific needs of the automotive, telecom and aerospace industries.

Whether your area of expertise lies in design, purchasing, acceptability or elsewhere, you can make your voice heard by joining an IPC standards committee today.

**How Do Standards Committees Work?**

IPC standards committees are facilitated by experienced IPC staff members, and led by chairpersons from PCB companies, EMS providers, consultancies, design firms, OEMs and other organizations that play a role in the printed board and electronics manufacturing industries.

Standards committee meetings are held at various venues throughout the year, including IPC APEX EXPO™ in the United States. IPC committee meetings are also currently held in Asia and Europe. Regardless of where a meeting takes place, however, you are invited to participate in person, by e-mail or via teleconference.

**Which Standards Will You Help Develop?**

To learn more about standards committees, standards currently under development and how you can contribute your expertise, please visit [www.ipc.org/committees](http://www.ipc.org/committees).

**An IPC Standard for Nearly Every Step**

IPC has published standards for many steps of the printed circuit manufacturing and assembly process, building from a foundation of solid design up to final acceptance. For more information about specific standards, please visit [www.ipc.org/onlinestore](http://www.ipc.org/onlinestore).
With IPC Standards, You’re In Good Company

Join these other OEM and EMS companies who recognize the importance of using IPC standards to help achieve quality, reliability and consistency in their end products.

See inside to learn more about the benefits of IPC standards, and how you can get involved.

### Asia, Middle East and Pacific Rim
- Alvarion Ltd., Israel
- Astec Power, Philippines
- AudioCodes Ltd., Israel
- Beijing Siemens Cerberus Electronics, China
- Ceragon Networks, Israel
- Eastern Company Ltd., Japan
- ECI Telecom Ltd., Israel
- Elbit Systems Ltd., Israel
- ELTA Systems Ltd., Israel
- Flextronics Mfg. (Zhuhai) Co. Ltd., China
- Fujitsu Ltd., Japan
- High Tech Computer Corp., Taiwan, ROC
- Hong Fu Jin Precision Component (SZ) Co., Ltd., China
- Huawei Technologies Co., Ltd., China
- Intel Products (M) Sdn. Bhd., Malaysia
- Juki Corporation, Japan
- Kyosha Company, Ltd., Japan
- Mektec Manufacturing Corp., Thailand
- Mitac International Corporation, Taiwan, ROC
- NSK Co., Ltd., Japan
- Panasonic Corporation, Japan
- Seabridge Ltd., A Siemens Company, Israel
- Sony Corporation, Japan
- Robert Bosch (Australia) Pty., Australia
- Tait Electronics, New Zealand

### Europe
- ATG Test Systems GmbH, Germany
- Autoliv Electronics AB, Sweden
- B.A.M.E.S., Italy
- BEAMIND, France
- Bourns Electronics, Ireland
- Conni Temic Microelectronic GmbH, Germany
- CTS, United Kingdom
- Ericsson AB, Sweden
- Foresee Systems, United Kingdom
- France Telecom – CNET, France
- Huber + Suhner AG, Switzerland
- Infineon Technologies AG, Germany
- JJS Electronics Ltd., United Kingdom
- Matthias Mansfeld Elektronik, Germany
- Muehlebauer AG, Germany
- Multek Europe GmbH & Co. KG, Germany
- Nokia Siemens Networks, Finland
- Nokia Technology Platform, Finland
- Oce-Technologies B.V., Netherlands
- Omron Electronics Ltd., United Kingdom
- Pac Tech Packaging Technologies, Germany
- Pluritec Industries, Italy
- Pulse Electronics, United Kingdom
- Ronishaw PLC, United Kingdom
- Robert Bosch GmbH, Germany
- SELEX Sensors & Airborne Systems Ltd., United Kingdom
- Siemens AG, Germany
- Siemens Landis & Staefa Division, Switzerland
- Siemens VDO Automotive AG, Germany
- Vliesstoff Kasper GmbH, Germany
- Volvo 3P, Sweden
- Zetex PLC, United Kingdom

### Other Global Companies
- Agilent Technologies
- Alcatel-Lucent
- Apple Inc.
- Bayer Health Care
- Boeing Company
- Bose Corporation
- Boston Scientific
- Caterpillar Inc.
- Cisco Systems, Inc.
- Dell Inc.
- Eastman Kodak Company
- GE
- Goodrich Corporation
- Hewlett-Packard Company
- Honeywell International
- IBM Corporation
- Intel Corporation
- Johnson Controls Inc.
- Kyocera
- Lenovo
- Logitech Inc.
- Microsoft Corporation
- Motorola, Inc.
- Research In Motion Limited
- Rockwell Collins
- Sun Microsystems Inc.
- Thermo Fisher Scientific
- Tyco Electronics
- Unisys Corporation
- Xerox Corporation
- Yazaki
- Zebra Technologies Corporation

Association Connecting Electronics Industries