



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.

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.

Support Your Standardization Efforts with IPC Training and Certification Programs

To get the greatest benefit from using IPC standards, it's important to provide your employees with training on key standards standards. Through its international network of licensed and audited training centers, IPC offers globally recognized, industry-traceable training and certification programs on key industry standards. Learn more about the benefits of IPC's training and certification programs at www.ipc.org/certification.

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.

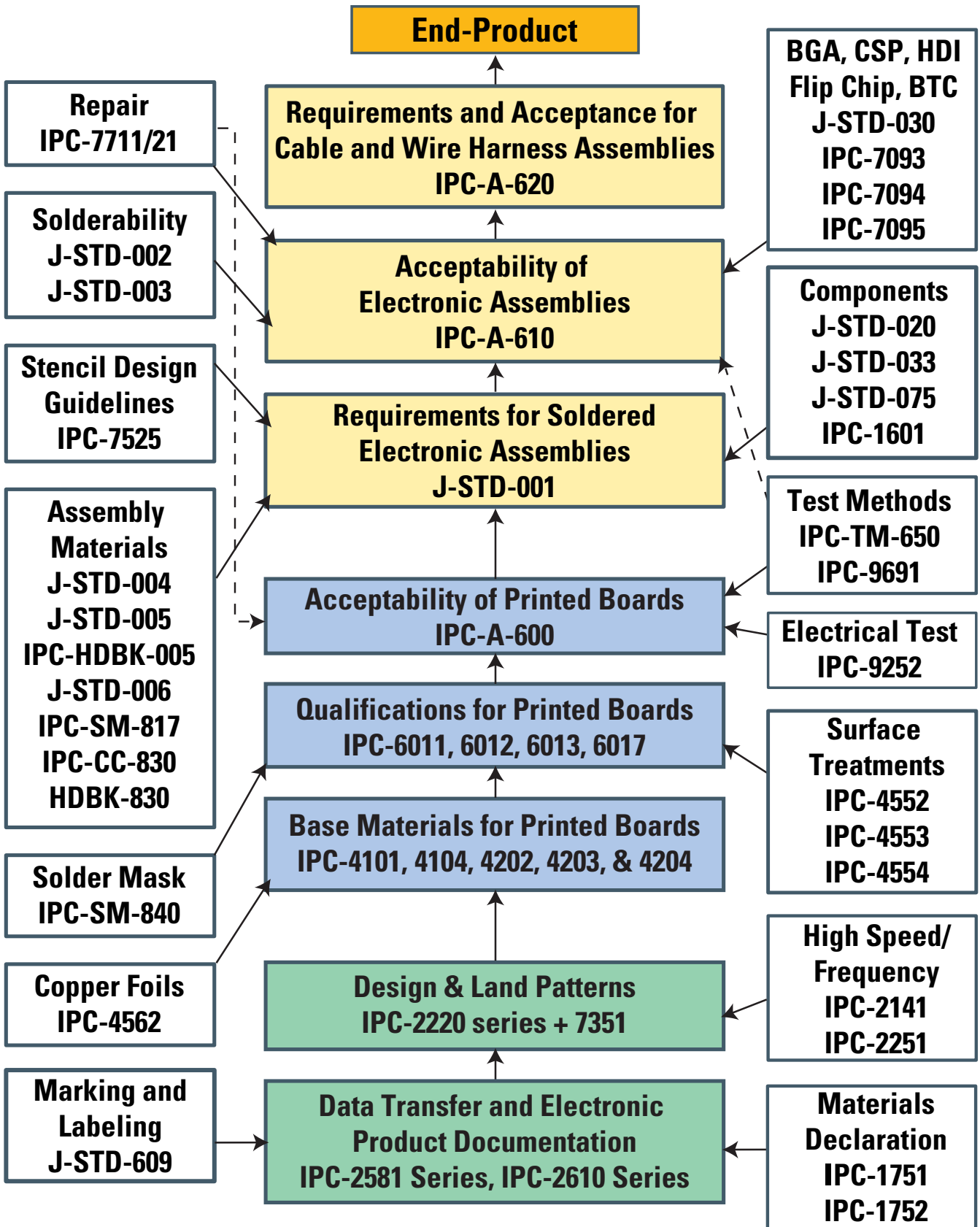
An IPC Standard for Nearly Every Step

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.



IPC STANDARDS — EVERYTHING YOU NEED FROM START TO FINISH



MORE IPC STANDARDS AVAILABLE AT
www.ipc.org/SpecTree (.pdf format)

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
Conti Temic Microelectronic GmbH, Germany
CTS, United Kingdom
Ericsson AB, Sweden
Foresite Systems, United Kingdom
France Telecom – CNET, France
Huber + Suhner AG, Switzerland
Infineon Technologies AG, Germany
JJS Electronics Ltd., United Kingdom
Matthias Mansfeld Elektronik, Germany
Muehlbauer 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
Renishaw 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



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