

Extended technical and scientific resources for TIE 2017 international design contest

Standards

- **IPC CHECKLIST** for Producing Rigid PCBAs;
- **IPC-2221** - Generic Standard on Printed Board Design;
- **IPC-2222** - Sectional Design Standard for Rigid Organic Printed Boards;
- **IPC-2223** - Sectional Design Standard for Flexible Printed Boards;
- **IPC-7351** - Generic Requirements for Surface Mount Design and Land Pattern Standard;
- **IPC-2141** - Controlled Impedance Circuit Boards and High Speed Logic Design;
- **IPC-2581** - Generic Requirements for Printed Board Assembly Products Manufacturing Description Data and Transfer Methodology;
- **IPC-4101** - Specification for Base Materials for Rigid and Multilayer Printed Boards;
- **IPC-6012** - Qualification and Performance Specification for Rigid PCBs;
- **IPC-7525** - Stencil Design Guidelines;
- **IPC-7527** - Requirements for Solder Paste Printing;
- **IPC-A-600** - Acceptability of Printed Boards.

Books

- Coombs C. F., Jr., "**Printed circuits handbook**" – 6th edition, McGraw Hill Professional, 1000 pp., 2007, ISBN 978-0071510790;
- Harper C. A., „**Electronic packaging and interconnection handbook**”, McGraw-Hill, 2000;
- Lau J., Wong C. P., Prince J. L., Nakayama W., „**Electronic Packaging – Design, Materials, Process and Reliability**”, McGraw-Hill, 1998;

- Johnson H., Graham M., „**High-speed digital design, a handbook of black magic**”, Prentice Hall PTR, New Jersey, 1993;
- Brooks D., „**Signal Integrity Issues and Printed Circuit Board Design**”, Prentice Hall PTR, 432 pp. 2003;
- Bogatin E., „**Signal and Power Integrity – Simplified**”, Prentice Hall, Boston, 2010.
- Jamnia A., „**Practical Guide to the Packaging of Electronics: Thermal and Mechanical Design and Analysis**”, 2nd edition, CRC Press, 2008;
- Harper C. A., „**High Performance Printed Circuit Boards**”, McGraw-Hill professional engineering, Professional Engineering, McGraw-Hill, 2000;
- Ulrich R. K., Brown W. D., „**Advanced electronic packaging**”, 2nd edition, IEEE Press - Wiley, 812 pp., 2006;
- Xingcun C. T., „**Advanced Materials for Thermal Management of Electronic Packaging**”, Springer Science & Business Media, 2011;
- Jin Y., Wang Z., Chen J., „**Introduction to Microsystem Packaging Technology**”, CRC Press, Boca Raton, 218 pp., 2011;
- Rohsenow W. M., Hartnett J. P., Cho Y. I., „**Handbook of heat transfer**”, McGraw-Hill, 1998;
- Ganesan S., Pecht M., „**Lead-free Electronics**”, John Wiley & Sons, New Jersey, 766 pp., 2006;
- Tummala R., Rymaszewski E. J., Klopfenstein A. G., „**Microelectronics Packaging Handbook: Technology Drivers**”, Part 1, Springer Science & Business Media, 2012.