

Standards Manager Web Standards List
IPC-Association Connecting Electronic Industries

Id	Number	Title	Year	Organization	Page
1	2591	Connected Factory Exchange (CFX)	2021	IPC	
2	6902	Qualification and Performance Specification for Printed Electronics on Flexible Substrates	2021	IPC	
3	9257	Requirements for Electrical Testing of Flexible Printed Electronics	2021	IPC	
4	HDBK-001H	Handbook and Guide to Supplement J-STD-001	2021	IPC	
5	1791B	Trusted Electronic Designer, Fabricator and Assembler Requirements	2021	IPC	
6	4552B	Specification for Electroless Nickel/Immersion Gold (ENIG) Plating for Printed Circuit Boards	2021	IPC	
7	6013E	Qualification and Performance Specification for Flexible and Rigid-Flexible Printed Boards	2021	IPC	
8	6017A	Qualification and Performance Specification for Printed Boards Containing Embedded Passive Devices	2021	IPC	
9	J-STD-001HS	Requirements for Soldered Electrical and Electronic Assemblies	2021	IPC	
10	1602	Standard for Printed Board Handling and Storage	2020	IPC	0
11	2222B	Sectional Design Standard for Rigid Organic Printed Boards	2020	IPC	0
12	6012ES	Space and Military Avionics Applications Addendum to IPC-6012E, Qualification and Performance Specification for Rigid	2020	IPC	0
13	7711/7721C-AM1	Rework, Repair and Remain Competitive A Hands-on Approach to the Restoration of Electronic Assemblies	2020	IPC	0
14	9797	Press-fit Standard for Automotive Requirements and other High-Reliability Applications	2020	IPC	0
15	A-600	Acceptability of Printed Boards	2020	IPC	0
16	A-610GA	Automotive Addendum to IPC J-STD-001G Requirements for Soldered Electrical and Electronic Assemblies and IPC-A-610G Acceptability of Electronic Assemblies	2020	IPC	0
17	A-610H	Acceptability of Electronic Assemblies	2020	IPC	0
18	IPC-WHMA-A-620D	Requirements and Acceptance for Cable and Wire Harness Assemblies	2020	IPC	0
19	1791	Trusted Electronic Designer, Fabricator and Assembler Requirements	2020	IPC	0
20	2223D	Sectional Design Standard for Flexible Printed Boards	2020	IPC	0
21	2591	Connected Factory Exchange (CFX)	2020	IPC	0
22	6012E	Qualification and Performance Specification for Rigid Printed Boards	2020	IPC	0
23	J-STD-001GA	Automotive Addendum to IPC J-STD-001G Requirements for Soldered Electrical and Electronic Assemblies and IPC-A-610G Acceptability of Electronic Assemblies	2020	IPC	0
24	J-STD-001GS-AM1	Space and Military Applications Electronic Hardware Addendum to IPC J-STD-001G Requirements for Soldered Electrical and Electronic Assemblies	2020	IPC	0
25	J-STD-001H	Requirements for Soldered Electrical and Electronic Assemblies	2020	IPC	0
26	TM-650	TEST METHODS MANUAL	2020	IPC	0
27	TM-650	TEST METHODS MANUAL	2020	IPC	0
28	TR-587	Conformal Coating Material and Application State of the Industry' Assessment Report	2020	IPC	0
29	WP-014A	Pb-free Electronics Risk Management (PERM) Council Position on the Use of Pb-free Electronics in the Aerospace and Defense Electronics Industries	2020	IPC	0
30	WP-019B	An Overview on Global Change in Ionic Cleanliness Requirements	2020	IPC	0
31	1752B	Materials Declaration Management Standard	2020	IPC	0
32	1754-AM2	Materials and Substances Declaration for Aerospace and Defense and Other Industries	2020	IPC	0

33	1755A	Responsible Sourcing of Minerals Data Exchange Standard	2020	IPC	0
34	6012EM	Medical Applications Addendum to IPC-6012E Qualification and Performance Specification for Rigid Printed Boards	2020	IPC	0
35	A-620D-S	Space and Military Applications Electronic Hardware Addendum to IPC/WHMA-A-620D	2020	IPC	0
36	TM-650-2.6.7.2	Thermal Shock, Thermal Cycle and Continuity	2020	IPC	0
37	1782A	Standard for Manufacturing and Supply Chain Traceability of Electronic Products	2020	IPC	0
38	2551	International Standard for Digital Twins	2020	IPC	0
39	2581C	Generic Requirements for Printed Board Assembly Products Manufacturing Description Data and Transfer Methodology	2020	IPC	0
40	7093A	Design and Assembly Process Implementation for Bottom Termination Components	2020	IPC	0
41	8921	Requirements for Woven and Knitted Electronic Textiles (E-Textiles) Integrated with Conductive Fibers, Conductive Yarns and/or Wires	2019	IPC	0
42	WP-021	Considerations of New Classes of Coatings for IPC-CC-830 Revision C	2019	IPC	0
43	WP-026	PC Technology Solutions White Paper on Blockchain and the Electronics Industry: A Review of the Current State of Blockchain Technology and Its Potential Applications in Electronics Manufacturing	2019	IPC	0
44	1754 WAM 1		2019	IPC	0
45	1791 AM1	Trusted Electronic Designer, Fabricator and Assembler Requirements	2019	IPC	0
46	2231	DFX Guidelines	2019	IPC	0
47	2591	Connected Factory Exchange (CFX)	2019	IPC	0
48	9111	Troubleshooting for Printed Board Assembly Processes	2019	IPC	0
49	HDBK-620	Handbook and Guide to IPC-D-620 & IPC/WHMA-A-620	2019	IPC	0
50	HERMES-9852	The Global Standard for Machine-to-Machine Communication in SMT Assembly	2019	IPC	0
51	WP-025	PC White Paper on A Framework for the Engineering and Design of E-Textiles	2018	IPC	0
52	9301	Numerical Analysis Guidelines for Microelectronics Packaging Design and Reliability	2018	IPC	0
53	CC-830C	Qualification and Performance of Electrical Insulating Compound for Printed Wiring Assemblies	2018	IPC	0
54	4591A	Requirements for Printed Electronics Functional Conductive Materials	2018	IPC	0
55	1791	Trusted Electronic Designer, Fabricator and Assembler Requirements	2018	IPC	0
56	4203B	Cover and Bonding Material for Flexible Printed Circuitry	2018	IPC	0
57	7095D	Design and Assembly Process Implementation for Ball Grid Arrays (BGAs)	2018	IPC	0
58	WP-024	IPC White Paper on Reliability and Washability of Smart Textile Structures Readiness for the Market	2018	IPC	0
59	6903A	Terms and Definitions for the Design and Manufacture of Printed Electronics	2018	IPC	0
60	4204B	Flexible Metal-Clad Dielectrics for Use in Fabrication of Flexible Printed Boards	2018	IPC	0
61	J-STD-001GS	Space and Military Applications Electronic Hardware Addendum to IPC J-STD-001G Requirements for Soldered Electrical and Electronic Assemblies	2018	IPC	0
62	IPC/JEDEC-9707-AM1	Spherical Bend Test Method for Characterization of Board Level Interconnects	2018	IPC	0
63	IPC/JEDEC J-STD-033D	Handling, Packing, Shipping and Use of Moisture, Reflow, and Process Sensitive Devices	2018	IPC	0
64	PERM-WP-022	Mitigation of Pure Tin Risk by Tin-Lead SMT Reflow Results of an Industry Round-Robin Final Report	2018	IPC	0
65	J-STD-001GS FRENCH	Annexe des produits électroniques des applications spatiales et militaires à la norme J-STD-001G, Exigences des Assemblages électriques et électroniques Brasés	2018	IPC	0
66	6013D AMD 1	Qualification and Performance Specification for Flexible and Rigid-Flexible Printed Boards	2018	IPC	0
67	1754	Materials Declaration Standard for Aerospace and Defense - Includes Access to Additional Content	2018	IPC	0
68	9121-AM1	Troubleshooting for PCB Fabrication Processes Amendment 1	2018	IPC	0
69	2292	Design Standard for Printed Electronics on Flexible Substrates	2018	IPC	0

70	WP-023	IPC Technology Solutions White Paper on Performance-Based Printed Board OEM Acceptance Via Chain Continuity Reflow Test: The Hidden Reliability Threat - Weak Microvia Interface	2018	IPC	0
71	7094A	Design and Assembly Process Implementation for Flip Chip and Die-Size Components	2018	IPC	0
72	2221B APPENDIX A	Generic Standard on Printed Board Design - Version 2.0	2018	IPC	0
73	IPC/WHMA-A-620C-S	Space Applications Electronic Hardware Addendum to IPC/WHMA-A-620C	2018	IPC	0
74	7621	Guideline for Design, Material Selection and General Application of Encapsulation of Electronic Circuit Assembly by Low Pressure Molding with Thermoplastics	2018	IPC	0
75	4412B AMD 2	Specification for Finished Fabric Woven from E-glass for Printed Boards	2018	IPC	0
76	J-STD-001G AMD 1	Requirements for Soldered Electrical and Electronic Assemblies	2018	IPC	0
77	WP-019A	An Overview on Global Change in Ionic Cleanliness Requirements	2018	IPC	0
78	PERM-2901	Pb-free Design & Assembly Implementation Guide	2018	IPC	0
79	4552A	Specification for Electroless Nickel/Immersion Gold (ENIG) Plating for Printed Circuit Boards	2017	IPC	0
80	4921A	Requirements for Printed Electronics Base Materials (Substrates)	2017	IPC	0
81	6012D-AM1	Qualification and Performance Specification for Rigid Printed Boards	2017	IPC	0
82	6013D	NULL	2017	IPC	0
83	7091	NULL	2017	IPC	0
84	7530A	Guidelines for Temperature Profiling for Mass Soldering Processes (Reflow & Wave)	2017	IPC	0
85	7711C-7721C	NULL	2017	IPC	0
86	9204		2017	IPC	0
87	1072-AM1	NULL	2017	IPC	0
88	1401		2017	IPC	0
89	2226A	Sectional Design Standard for High Density Interconnect (HDI) Printed Boards	2017	IPC	0
90	4101E	Specification for Base Materials for Rigid and Multilayer Printed Boards	2017	IPC	0
91	4103B	Specification for Base Materials for High Speed/High Frequency Applications	2017	IPC	0
92	9505		2017	IPC	0
93	A-600FC ADD	NULL	2017	IPC	0
94	A-640	NULL	2017	IPC	0
95	IPC-WHMA-A-620C	NULL	2017	IPC	0
96	J-STD-001FS	Space Applications Electronic Hardware Addendum to IPC J-STD-001F Requirements for Soldered Electrical and Electronic Assemblies	2017	IPC	0
97	J-STD-002E	NULL	2017	IPC	0
98	J-STD-006C AMD 1	Requirements for Electronic Grade Solder Alloys and Fluxed and Non-Fluxed Solid Solders for Electronic Soldering Applications	2017	IPC	0
99	A-610G	Acceptability of Electronic Assemblies	2017	IPC	0
100	WP-019		2017	IPC	0
101	J-STD-001G	Requirements for Soldered Electrical and Electronic Assemblies	2016	IPC	0
102	A-600	NULL	2016	IPC	0
103	4202B	Flexible Base Dielectrics for Use in Flexible Printed Circuitry	2016	IPC	0
104	2581B-WAM1	NULL	2016	IPC	0
105	9241		2016	IPC	0

106	9262		2016	IPC	0
107	1071B		2016	IPC	0
108	1601A		2016	IPC	0
109	4556 AMD 1	Specification for Electroless Nickel/Electroless Palladium/ Immersion Gold (ENEPIG) Plating for Printed Circuit Boards	2016	IPC	0
110	6012DA		2016	IPC	0
111	9121		2016	IPC	0
112	A-600H	Acceptability of Printed Boards	2016	IPC	0
113	HDBK-001F		2016	IPC	0
114	J-STD-609B		2016	IPC	0
115	J-STD-609B	NULL	2016	IPC	0
116	1782	NULL	2016	IPC	0
117	2223D	NULL	2016	IPC	0
118	9252B	NULL	2016	IPC	0
119	9691B	NULL	2016	IPC	0
120	6018C	NULL	2016	IPC	0
121	6018CS	NULL	2016	IPC	0
122	A-610-AMD 1	NULL	2016	IPC	0
123	D-640	NULL	2016	IPC	0
124	J-STD-001 AND 1	NULL	2016	IPC	0
125	J-STD-046	NULL	2016	IPC	0
126	D-620	NULL	2015	IPC	0
127	HDBK-4691	NULL	2015	IPC	0
128	JEDEC-9702 AMD1	NULL	2015	IPC	0
129	6903	NULL	2015	IPC	0
130	4103A-WAM1 AMD2	NULL	2015	IPC	0
131	1072	NULL	2015	IPC	0
132	J-STD-001FS	Space Applications Electronic Hardware Addendum to IPC J-STD-001F Requirements for Soldered Electrical and Electronic Assemblies	2015	IPC	0
133	IPC/JEDEC J- STD-020E	Moisture/Reflow Sensitivity Classification for Nonhermetic Solid State Surface Mount Devices	2015	IPC	0
134	6012DS	Space and Military Avionics Applications Addendum to IPC-6012D Qualification and Performance Specification for Rigid Printed Boards	2015	IPC	0
135	6012D	Qualification and Performance Specification for Rigid Printed Boards	2015	IPC	0
136	7092	Design and Assembly Process Implementation for Embedded Components	2015	IPC	0
137	7801	Reflow Oven Process Control Standard	2015	IPC	0
138	IPC/JPCA-6901	Application Categories for Printed Electronics	2015	IPC	0
139	T-50M	Terms and Definitions for Interconnecting and Packaging Electronic Circuits	2015	IPC	0
140	TM-650 2.1.1F	Microsectioning, Manual and Semi or Automatic Method	2015	IPC	0
141	IPC/JEDEC J- STD-033C-	Handling, Packing, Shipping and Use of Moisture/Reflow Sensitive Surface Mount Devices	2014	IPC	0

142	J-STD-001F	Requirements for Soldered Electrical and Electronic Assemblies	2014	IPC	0
143	J-STD-003C	Solderability Tests for Printed Boards - Incorporates Amendment 1: May 2014	2014	IPC	0
144	J-STD-030A	JOINT INDUSTRY STANDARD Selection and Application of Board Level Underfill Materials	2014	IPC	0
145	SM-817A	General Requirements for Dielectric Surface Mounting Adhesives	2014	IPC	0
146	TM-650 2.4.9E	Peel Strength, Flexible Dielectric Materials	2014	IPC	0
147	TM-650 2.4.16B	Initiation Tear Strength, Flexible Insulating Materials	2014	IPC	0
148	TM-650 2.6.26A	DC Current Induced Thermal Cycling Test	2014	IPC	0
149	4101D	NULL	2014	IPC	0
150	J-STD-030A	NULL	2014	IPC	0
151	1071A	Best Industry Practices for Intellectual Property Protection in Printed Board Manufacturing - Effective Date: 6/21/2010	2014	IPC	0
152	1755	Conflict Minerals Data Exchange Standard	2014	IPC	0
153	4101D	Specification for Base Materials for Rigid and Multilayer Printed Boards - Includes Amendment 1: July 2015	2014	IPC	0
154	4103A	Specification for Base Materials for High Speed/High Frequency Applications - Incorporates Amendment 1	2014	IPC	0
155	7711B/7721B AMD2	REWORK, MODIFICATION AND REPAIR OF ELECTRONIC ASSEMBLIES	2014	IPC	0
156	8701	Final Acceptance Criteria Standard for PV Modules-Final Module Assembly	2014	IPC	0
157	A-610F	Acceptability of Electronic Assemblies	2014	IPC	0
158	FC-234A	Pressure Sensitive Adhesive (PSA) Assembly Guidelines for Flexible, Rigid or Rigid-Flex Printed Boards	2014	IPC	0
159	HDBK-630	Guidelines for Design, Manufacture, Inspection and Testing of Electronic Enclosures	2014	IPC	0
160	4203A-AMD 1	NULL	2014	IPC	0
161	4204A AMD 1	NULL	2014	IPC	0
162	4412B AMD 1	NULL	2014	IPC	0
163	J-STD-003C AMD1	NULL	2014	IPC	0
164	WHMA-A- 620B AMD 1	NULL	2013	IPC	0
165	4204A-AMD 1	NULL	2013	IPC	0
166	2581B	NULL	2013	IPC	0
167	4203A	Cover and Bonding Material for Flexible Printed Circuitry	2013	IPC	0
168	4412B	Specification for Finished Fabric Woven from "E" Glass for Printed Boards	2013	IPC	0
169	4556	Specification for Electroless Nickel/Electroless Palladium/ Immersion Gold (ENEPIG) Plating for Printed Circuit Boards	2013	IPC	0
170	5703	Cleanliness Guidelines for Printed Board Fabricators	2013	IPC	0
171	6013C	NULL	2013	IPC	0
172	7095C	Design and Assembly Process Implementation for BGAs	2013	IPC	0
173	9641	High Temperature Printed Board Flatness Guideline	2013	IPC	0
174	9709	NULL	2013	IPC	0
175	A-630	NULL	2013	IPC	0
176	HDBK-830A	NULL	2013	IPC	0
177	J-STD-002D	NULL	2013	IPC	0
178	IPC-JEDEC- 9706	NULL	2013	IPC	0

179	IPC-WHMA-A-620B-S	NULL	2013	IPC	0
180	JPCA-2291	Design Guideline for Printed Electronics	2013	IPC	0
181	J-STD-003C	NULL	2013	IPC	0
182	J-STD-006C	Requirements for Electronic Grade Solder Alloys and Fluxed and Non-Fluxed Solid Solders for Electronic Soldering Applications	2013	IPC	0
183	T-50K	Terms and Definitions for Interconnecting and Packaging Electronic Circuits	2013	IPC	0
184	TM-650 2.4.17.1B	NULL	2013	IPC	0
185	1758	Declaration Requirements for Shipping, Pack and Packing Materials	2012	IPC	0
186	2221B	Generic Standard on Printed Board Design	2012	IPC	0
187	4552	Specification for Electroless Nickel/Immersion Gold (ENIG) Plating for Printed Circuit Boards - Incorporates Amendments 1 & 2	2012	IPC	0
188	4921	Requirements for Printed Electronics Base Materials (Substrates)	2012	IPC	0
189	7527	Requirements for Solder Paste Printing	2012	IPC	0
190	9151D	Process Capability, Quality, and Relative Reliability (PCQR2) Benchmark Test Standard and Database	2012	IPC	0
191	9203	Users Guide to IPC-9202 and the IPC-B-52 Standard Test Vehicle	2012	IPC	0
192	9252A AMD 1	NULL	2012	IPC	0
193	9592B	Requirements for Power Conversion Devices for the Computer and Telecommunications Industries	2012	IPC	0
194	AJ-820A	Assembly and Joining Handbook	2012	IPC	0
195	HDBK-001E	Handbook and Guide to Supplement J-STD-001	2012	IPC	0
196	HDBK-850	Guidelines for Design, Selection and Application of Potting Materials and Encapsulation Processes Used for Electronics Printed Circuit Board Assembly	2012	IPC	0
197	J-STD-033C GERM	NULL	2012	IPC	0
198	J-STD-033C HUNG	NULL	2012	IPC	0
199	J-STD-033C	NULL	2012	IPC	0
200	IPC-JEDEC-9704A	NULL	2012	IPC	0
201	IPC-JPCA-4591	NULL	2012	IPC	0
202	IPC-WHMA-A-620B GERMAN	NULL	2012	IPC	0
203	IPC-WHMA-A-620B SPANISH	NULL	2012	IPC	0
204	IPC-WHMA-A-620B	NULL	2012	IPC	0
205	J-STD-005A	Requirements for Soldering Pastes	2012	IPC	0
206	TM-650 2.1.13B	NULL	2012	IPC	0
207	TM-650 2.3.25D	NULL	2012	IPC	0
208	TM-650 2.3.28B	NULL	2012	IPC	0

209	TM-650 2.5.5.12A	NULL	2012	IPC	0
210	TM-650 2.5.34	NULL	2012	IPC	0
211	TM-650 2.6.2D	NULL	2012	IPC	0
212	TM-650 2.6.25A	NULL	2012	IPC	0
213	2223C GERMAN	Sectional Design Standard for Flexible Printed Boards	2011	IPC	0
214	2223C	Sectional Design Standard for Flexible Printed Boards	2011	IPC	0
215	4103A	Specification for Base Materials for High Speed/High Frequency Applications	2011	IPC	0
216	4204A	Flexible Metal-Clad Dielectrics for Use in Fabrication of Flexible Printed Circuitry	2011	IPC	0
217	6018B	Qualification and Performance Specification for High Frequency (Microwave) Printed Boards	2011	IPC	0
218	7093	Design and Assembly Process Implementation for Bottom Termination Components	2011	IPC	0
219	7525B GERMAN	Stencil Design Guidelines	2011	IPC	0
220	7525B	Stencil Design Guidelines	2011	IPC	0
221	9202	Material and Process Characterization/Qualification Test Protocol for Assessing Electrochemical Performance	2011	IPC	0
222	9850A	Surface Mount Placement Equipment Characterization	2011	IPC	0
223	CH-65B CHINESE	NULL	2011	IPC	0
224	CH-65B	Guidelines for Cleaning of Printed Boards and Assemblies	2011	IPC	0
225	CMDD	IPC Conflict Minerals Due Diligence Guide	2011	IPC	0
226	IPC-JEDEC- 9707	NULL	2011	IPC	0
227	JIG-101	Material Composition Declaration for Electrotechnical Products - Ed 4.0	2011	IPC	0
228	TM-650 2.4.3E	NULL	2011	IPC	0
229	TM-650 2.6.21B	NULL	2011	IPC	0
230	J-STD-004B AMD 1	NULL	2011	IPC	0
231	9708	NULL	2010	IPC	0
232	A-600	NULL	2010	IPC	0
233	4821 AMD 1	NULL	2010	IPC	0
234	1071	Best Industry Practices for Intellectual Property Protection in Printed Board Manufacturing	2010	IPC	0
235	1601	Printed Board Handling and Storage Guidelines	2010	IPC	0
236	1751A	Generic Requirements for Declaration Process Management - Incorporates Amendment 1: November 2012	2010	IPC	0
237	1752A	Materials Declaration Management - Incorporates Amendment 1: November 2012	2010	IPC	0
238	1756	Manufacturing Process Data Management - Version 2.0	2010	IPC	0
239	2222A	Sectional Design Standard for Rigid Organic Printed Boards	2010	IPC	0
240	2611	Generic Requirements for Electronic Product Documentation	2010	IPC	0
241	2612-1	Sectional Requirements for Electronic Diagramming Symbol Generation Methodology	2010	IPC	0
242	2612	Sectional Requirements for Electronic Diagramming Documentation (Schematic and Logic Descriptions)	2010	IPC	0
243	2614	Sectional Requirements for Board Fabrication Documentation	2010	IPC	0
244	4202A	Flexible Base Dielectrics for Use in Flexible Printed Circuitry	2010	IPC	0

245	6012C	Qualification and Performance Specification for Rigid Printed Boards	2010	IPC	0
246	7351B	Generic Requirements for Surface Mount Design and Land Pattern Standard - Includes Access to Additional Content; Includes CD-ROM; Subscription customers can obtain one complimentary copy from IHS by contacting IHS Customer Care at +1 800 IHS-CARE (+1 800	2010	IPC	0
247	9631 GERMAN	Users Guide for IPC-TM-650, Method 2.6.27, Thermal Stress, Convection Reflow Assembly Simulation	2010	IPC	0
248	9631	Users Guide for IPC-TM-650, Method 2.6.27, Thermal Stress, Convection Reflow Assembly Simulation	2010	IPC	0
249	A-600H FRENCH	Acceptability of Printed Boards	2010	IPC	0
250	A-600H RUSSIAN	NULL	2010	IPC	0
251	A-600H	Acceptability of Printed Boards	2010	IPC	0
252	A-610E CZECH	Acceptability of Electronic Assemblies	2010	IPC	0
253	A-610E HEBREW	Acceptability of Electronic Assemblies (Hebrew)	2010	IPC	0
254	A-610E HINDI	Acceptability of Electronic Assemblies (Hindi Language)	2010	IPC	0
255	A-610E HUNGARIAN	Acceptability of Electronic Assemblies (Hungarian Language)	2010	IPC	0
256	A-610E ROMANIAN	Acceptability of Electronic Assemblies	2010	IPC	0
257	A-610E	Acceptability of Electronic Assemblies	2010	IPC	0
258	J-STD-609A	NULL	2010	IPC	0
259	J-STD-001E FRENCH	NULL	2010	IPC	0
260	J-STD-001E HUNGARIAN	Requirements for Soldered Electrical and Electronic Assemblies - Hungarian	2010	IPC	0
261	J-STD-001E	Requirements for Soldered Electrical and Electronic Assemblies	2010	IPC	0
262	J-STD-001ES	Space Applications Electronic Hardware Addendum to IPC J-STD-001E Requirements for Soldered Electrical and Electronic Assemblies	2010	IPC	0
263	SM-840E	Qualification and Performance Specification of Permanent Solder Mask and Flexible Cover Materials	2010	IPC	0
264	SPVC-LAT1	ANALYTICAL PROCEDURES FOR PORTABLE LEAD-FREE ALLOY TEST DATA	2010	IPC	0
265	TM-650 2.6.28	Moisture Content and/or Moisture Absorption Rate, (Bulk) Printed Board	2010	IPC	0
266	TR-586	NULL	2009	IPC	0
267	2152	Standard for Determining Current Carrying Capacity in Printed Board Design	2009	IPC	0
268	4553A	Specification for Immersion Silver Plating for Printed Boards	2009	IPC	0
269	5704	Cleanliness Requirements for Unpopulated Printed Boards	2009	IPC	0
270	6017	Qualification and Performance Specification for Printed Boards Containing Embedded Passive Devices	2009	IPC	0
271	7094	Design and Assembly Process Implementation for Flip Chip and Die Size Components	2009	IPC	0
272	IPC-JEDEC- 9703	NULL	2009	IPC	0
273	TM-650 2.3.28.2	Bare Printed Board Cleanliness by Ion Chromatography	2009	IPC	0
274	TM-650 2.5.5.11	Propagation Delay of Lines on Printed Boards by TDR	2009	IPC	0
275	TM-650 2.5.7.2A	Dielectric Withstanding Voltage (Hipot Method) - Thin Dielectric Layers for Printed Boards	2009	IPC	0

276	TM-650 2.6.27	Thermal Stress, Convection Reflow Assembly Simulation	2009	IPC	0
277	WP-009	A Summary of Tin Whisker Research References	2009	IPC	0
278	CC-830B AMD 1	NULL	2008	IPC	0
279	4562A	Metal Foil for Printed Board Applications	2008	IPC	0
280	4781	Qualification and Performance Specification of Permanent, Semi-Permanent and Temporary Legend and/or Marking Inks	2008	IPC	0
281	4811	Specification for Embedded Passive Device Resistor Materials for Rigid and Multilayer Printed Boards	2008	IPC	0
282	9252A	Requirements for Electrical Testing of Unpopulated Printed Boards	2008	IPC	0
283	J-STD-020D.1	NULL	2008	IPC	0
284	J-STD-075	NULL	2008	IPC	0
285	J-STD-004B	Requirements for Soldering Fluxes - Incorporates Amendment 1: November 2011	2008	IPC	0
286	2316	Design Guide for Embedded Passive Device Printed Boards	2007	IPC	0
287	2582	Sectional Requirements for Implementation of Administrative Methods for Manufacturing Data Description	2007	IPC	0
288	2583	Sectional Requirements for Implementation of Design Characteristics for Manufacturing Data Description	2007	IPC	0
289	2584	Sectional Requirements for Implementation of Printed Board Fabrication Data Description	2007	IPC	0
290	2588	Sectional Requirements for Implementation of Part List Product Data Description	2007	IPC	0
291	4554	Specification for Immersion Tin Plating for Printed Circuit Boards - Incorporates Amendment 1: January 2012	2007	IPC	0
292	4563	Resin Coated Copper Foil for Printed Boards Guideline	2007	IPC	0
293	5702	Guidelines for OEMs in Determining Acceptable Levels of Cleanliness of Unpopulated Printed Boards	2007	IPC	0
294	7526	Stencil and Misprinted Board Cleaning Handbook	2007	IPC	0
295	7711B-7721B FRENCH	NULL	2007	IPC	0
296	7711B-7721B KOREAN	NULL	2007	IPC	0
297	7711B-7721B	NULL	2007	IPC	0
298	9201A	Surface Insulation Resistance Handbook	2007	IPC	0
299	9691A GERMAN	NULL	2007	IPC	0
300	9691A	User Guide for the IPC-TM-650, Method 2.6.25, Conductive Anodic Filament (CAF) Resistance Test (Electrochemical Migration Testing)	2007	IPC	0
301	9851	SMEMA Standard Mechanical Equipment Interface Standard	2007	IPC	0
302	DR-572A	Drilling Guidelines for Printed Boards	2007	IPC	0
303	TM-650 2.3.2G	Chemical Resistance of Flexible Printed Board Materials	2007	IPC	0
304	TM-650 2.3.42	Solder Mask - Resistance to Solvents and Cleaning Agents	2007	IPC	0
305	TM-650 2.3	Chemical Test Methods - Revision Y	2007	IPC	0
306	TM-650 2.4.7.1	Solder Mask - Determination of Machineability	2007	IPC	0
307	TM-650 2.4.21F	Land Bond Strength, Unsupported Component Hole	2007	IPC	0
308	TM-650 2.4.28.1F	Solder Mask Adhesion - Tape Test Method	2007	IPC	0
309	TM-650 2.4.29C	Solder Mask - Adhesion to Flexible Circuits	2007	IPC	0
310	TM-650 2.4	Mechanical Test Methods - Revision Z	2007	IPC	0

311	TM-650 2.5.5.13	Relative Permittivity and Loss Tangent Using a Split-Cylinder Resonator	2007	IPC	0
312	TM-650 2.5.6.1B	Solder Mask - Dielectric Strength	2007	IPC	0
313	TM-650 2.5	Electrical Test Methods - Revision X	2007	IPC	0
314	TM-650 2.6.1G	Fungus Resistance of Printed Board Materials	2007	IPC	0
315	TM-650 2.6.3.1E	Solder Mask - Moisture and Insulation Resistance	2007	IPC	0
316	TM-650 2.6.3.7	Surface Insulation Resistance	2007	IPC	0
317	TM-650 2.6.11D	Solder Mask - Hydrolytic Stability	2007	IPC	0
318	TM-650 2.6.14D	Solder Mask - Resistance to Electrochemical Migration	2007	IPC	0
319	TM-650 2.6	Environmental Test Methods - Revision Y	2007	IPC	0
320	TM-650	TEST METHODS MANUAL	2007	IPC	0
321	WP-TR-584A	NULL	2007	IPC	0
322	4761	Design Guide for Protection of Printed Board Via Structures	2006	IPC	0
323	4821	Specification for Embedded Passive Device Capacitor Materials for Rigid and Multilayer Printed Boards	2006	IPC	0
324	9261A	In-Process DPMO and Estimated Yield for PCAs	2006	IPC	0
325	9591	Performance Parameters (Mechanical, Electrical, Environmental and Quality/Reliability) for Air Moving Devices	2006	IPC	0
326	9701A	Performance Test Methods and Qualification Requirements for Surface Mount Solder Attachments	2006	IPC	0
327	HDBK-005	Guide to Solder Paste Assessment	2006	IPC	0
328	HDBK-840	Solder Mask Handbook	2006	IPC	0
329	JP002	Current Tin Whiskers Theory and Mitigation Practices Guideline	2006	IPC	0
330	TM-650 2.3.41	Test Method for Total Halogen Content in Base Materials	2006	IPC	0
331	TM-650 2.4.24.6	TEST METHODS MANUAL	2006	IPC	0
332	TR-585	Time, Temperature and Humidity Stress of Final Board Finish Solderability	2006	IPC	0
333	1065	Material Declaration Handbook	2005	IPC	0
334	2546 AMD 2	Sectional Requirements for Shop-Floor Equipment Communication Messages (CAMX) for Printed Circuit Board Assembly	2005	IPC	0
335	8497-1	Cleaning Methods and Contamination Assessment for Optical Assembly	2005	IPC	0
336	J-STD-001D ROMANIAN	Requirements for Soldered Electrical and Electronic Assemblies	2005	IPC	0
337	TM-650 2.5.5.10	High Frequency Testing to Determine Permittivity and Loss Tangent of Embedded Passive Materials	2005	IPC	0
338	WP-008	Setting Up Ion Chromatography Capability	2005	IPC	0
339	1710A	OEM Standard for Printed Board Manufacturers' Qualification Profile	2004	IPC	0
340	1720A	Assembly Qualification Profile	2004	IPC	0
341	2141A	Design Guide for High-Speed Controlled Impedance Circuit Boards	2004	IPC	0
342	7912A	End-Item DPMO for Printed Circuit Board Assemblies	2004	IPC	0
343	9194	Implementation of Statistical Process Control (SPC) Applied to Printed Board Assembly Manufacture Guideline	2004	IPC	0
344	CM-770E	Guidelines for Printed Board Component Mounting	2004	IPC	0
345	D-326A	Information Requirements for Manufacturing Printed Boards and Other Electronic Assemblies	2004	IPC	0

346	IPC-JEDEC-9702	NULL	2004	IPC	0
347	TM-650 2.1.1.2A	Microsectioning-Semi or Automatic Technique Microsection Equipment (Alternate)	2004	IPC	0
348	TM-650 2.1.1E	Microsectioning, Manual Method	2004	IPC	0
349	TM-650 2.1	Visual Test Methods - Revision K	2004	IPC	0
350	TM-650 2.3.13A	Determination of Acid Value of Liquid Solder Flux - Potentiometric and Visual Titration Methods	2004	IPC	0
351	TM-650 2.3.15D	Purity, Copper Foil or Plating	2004	IPC	0
352	TM-650 2.3.28.1	Halide Content of Soldering Fluxes and Pastes	2004	IPC	0
353	TM-650 2.3.32D	Flux Induced Corrosion (Copper Mirror Method)	2004	IPC	0
354	TM-650 2.3.33D	Presence of Halides in Flux, Silver Chromate Method	2004	IPC	0
355	TM-650 2.3.34C	Solids Content, Flux	2004	IPC	0
356	TM-650 2.3.35.1A	Fluorides by Spot Test, Fluxes - Qualitative	2004	IPC	0
357	TM-650 2.3.35.2A	Fluoride Concentration, Fluxes - Quantitative	2004	IPC	0
358	TM-650 2.3.35C	Halide Content, Quantitative (Chloride & Bromide)	2004	IPC	0
359	TM-650 2.3.38C	Surface Organic Contaminant Detection Test	2004	IPC	0
360	TM-650 2.3.39C	Surface Organic Contaminant Identification Test (Infrared Analytical Method)	2004	IPC	0
361	TM-650 2.4.1E	Adhesion, Tape Testing	2004	IPC	0
362	TM-650 2.4.14.2A	Liquid Flux Activity, Wetting Balance Method	2004	IPC	0
363	TM-650 2.4.18.1A	Tensile Strength and Elongation, In-House Plating	2004	IPC	0
364	TM-650 2.4.36C	Rework Simulation, Plated-Through Holes for Leaded Components	2004	IPC	0
365	TM-650 2.4.41.2A	Coefficient of Thermal Expansion-Strain Gage Method	2004	IPC	0
366	TM-650 2.4.46A	Spread Test, Liquid, Paste or Solid Flux, or Flux Extracted from Solder Paste, Cored Wires or Preforms	2004	IPC	0
367	TM-650 2.5.5.7A	Characteristic Impedance of Lines on Printed Boards by TDR	2004	IPC	0
368	TM-650 2.5.7D	Dielectric Withstanding Voltage, PCB	2004	IPC	0
369	TM-650 2.6.3.3B	Surface Insulation Resistance, Fluxes	2004	IPC	0
370	TM-650 2.6.3.5	Bare Board Cleanliness by Surface Insulation Resistance	2004	IPC	0
371	TM-650 2.6.3.6	Surface Insulation Resistance - Fluxes - Telecommunications	2004	IPC	0
372	TM-650 2.6.3F	Moisture and Insulation Resistance, Printed Boards	2004	IPC	0

373	TM-650 2.6.4B	Outgassing, Printed Boards	2004	IPC	0
374	TM-650 2.6.5D	Physical Shock, Multilayer Printed Wiring	2004	IPC	0
375	TM-650 2.6.7.2B	Thermal Shock, Continuity and Microsection, Printed Board	2004	IPC	0
376	TM-650 2.6.8E	Thermal Stress, Plated-Through Holes	2004	IPC	0
377	TM-650 2.6.9B	Vibration, Rigid Printed Wiring	2004	IPC	0
378	TM-650 2.6.15C	Corrosion, Flux	2004	IPC	0
379	0040	Optoelectronics Assembly and Packaging Technology	2003	IPC	0
380	2226	Sectional Design Standard for High Density Interconnect (HDI) Printed Boards	2003	IPC	0
381	2251	Design Guide for the Packaging of High Speed Electronic Circuits	2003	IPC	0
382	2501	Definition for Web-Based Exchange of XML Data (Message Broker)	2003	IPC	0
383	4411A	Specification and Characterization Methods for Nonwoven Para-Aramid Reinforcement	2003	IPC	0
384	5701	Users Guide for Cleanliness of Unpopulated Printed Boards	2003	IPC	0
385	8413-1	Specification for Process Carriers Used to Handle Optical Fibers in Manufacturing	2003	IPC	0
386	J-STD-027	Mechanical Outline Standard for Flip Chip and Chip Size Configurations	2003	IPC	0
387	SPVC-WP-006	ROUND ROBIN TESTING AND ANALYSIS LEAD-FREE ALLOYS TIN, SILVER and COPPER	2003	IPC	0
388	TM-650 1.2A	Calibration	2003	IPC	0
389	TM-650 1.6A	Numerical Reporting	2003	IPC	0
390	TM-650 1.7A	Reporting, Invalid Test Results	2003	IPC	0
391	TM-650 1.8 GUIDE	Measurement Precision Calculator Users Guide For Use with Test Method 1.8, Measurement Systems Analysis for Binary Data	2003	IPC	0
392	TM-650 1.8A	Measurement Precision Estimation for Binary Data	2003	IPC	0
393	TM-650 1.9 GUIDE	Measurement Precision Calculator Users Guide For Use with Test Method 1.9, Measurement Systems Analysis for Variables Data	2003	IPC	0
394	TM-650 1.9A	Measurement Precision Estimation for Variables Data	2003	IPC	0
395	TM-650 2.6.3.4A	Moisture and Insulation Resistance - Conformal Coating	2003	IPC	0
396	2252	Design Guide for RF/Microwave Circuit Boards	2002	IPC	0
397	2511B	Generic Requirements for Implementation of Product Manufacturing Description Data and Transfer MXL Schema Methodology	2002	IPC	0
398	2547	Sectional Requirements for Shop-Floor Equipment Communication Messages (CAMX) for Printed Circuit Board Test, Inspection and Rework	2002	IPC	0
399	9199	Statistical Process Control (SPC) Quality Rating	2002	IPC	0
400	CC-830B	Qualification and Performance of Electrical Insulating Compound for Printed Wiring Assemblies - Incorporates Amendment 1: October 2008	2002	IPC	0
401	D-356B	Bare Substrate Electrical Test Data Format	2002	IPC	0
402	J-STD-032	Performance Standard for Ball Grid Array Balls	2002	IPC	0
403	TR-583	An In-Depth Look At Ionic Cleanliness Testing	2002	IPC	0
404	2541	Generic Requirements for Electronics Manufacturing Shop-Floor Equipment Communication Messages (CAMX)	2001	IPC	0
405	2546	Sectional Requirements for Shop-Floor Equipment Communication Messages (CAMX) for Printed Circuit Board Assembly - Incorporates Amendment 1: January 2003	2001	IPC	0
406	2571	Generic Requirements for Electronics Manufacturing Supply Chain Communication - Product Data eXchange (PDX)	2001	IPC	0

407	2576	Sectional Requirements for Electronics Manufacturing Supply Chain Communication of As-Built Product Data - Product Data eXchange (PDX)	2001	IPC	0
408	2578	Sectional Requirements for Supply Chain Communication of Bill of Material and Product Design Configuration Data - Product Data eXchange (PDX)	2001	IPC	0
409	7530	Guidelines for Temperature Profiling for Mass Soldering Processes (Reflow & Wave)	2001	IPC	0
410	TR-486	Report on Round Robin Study to Correlate Interconnect Stress Test (IST) with Thermal Stress/Microsectioning Evaluations for Detecting the Presence of Inner-Layer Separations	2001	IPC	0
411	1131	Information Technology (IT) Guide for PWB Manufacturers	2000	IPC	0
412	1331	Voluntary Safety Standard for Electrically Heated Process Equipment	2000	IPC	0
413	1730A	Laminator Qualification Profile	2000	IPC	0
414	1731	Strategic Raw Materials Supplier Qualification Profile	2000	IPC	0
415	2512A	Sectional Requirements for Implementation of Administrative Methods for Manufacturing Data Description [ADMIN]	2000	IPC	0
416	2513A	Sectional Requirements for Implementation of Drawing Methods for Manufacturing Data Description [DRAWG]	2000	IPC	0
417	2514A	Sectional Requirements for Implementation of Printed Board Fabrication Data Description [BDFAB]	2000	IPC	0
418	2515A	Sectional Requirements for Implementation of Bare Board Product Electrical Testing Data Description [BDTST]	2000	IPC	0
419	2516A	Sectional Requirements for Implementation of Assembled Board Product Manufacturing Data Description [BDASM]	2000	IPC	0
420	2517A	Sectional Requirements for Implementation of Assembly In-Circuit Testing Data Description [ASEMT]	2000	IPC	0
421	2518A	Sectional Requirements for Implementation of Part List Product Data Description [PTLST]	2000	IPC	0
422	2615	Printed Board Dimensions and Tolerances	2000	IPC	0
423	4121	Guidelines for Selecting Core Constructions for Multilayer Printed Wiring Board Applications	2000	IPC	0
424	9251	Test Vehicles for Evaluating Fine Line Capability	2000	IPC	0
425	IPC-JPCA-2315	NULL	2000	IPC	0
426	IPC-JPCA-6801	NULL	2000	IPC	0
427	TM-650 2.3.25.1	Ionic Cleanliness Testing of Bare PWBs	2000	IPC	0
428	TM-650 2.4.5.1	Flexibility - Conformal Coating	2000	IPC	0
429	TM-650 2.6.11.1	Hydrolytic Stability - Conformal Coating	2000	IPC	0
430	2524	PWB Fabrication Data Quality Rating System	1999	IPC	0
431	2531	SMEMA Standard Recipe File Format Specification	1999	IPC	0
432	6016	Qualification and Performance Specification for High Density Interconnect (HDI) Layers or Boards	1999	IPC	0
433	9191	General Guidelines for Implementation of Statistical Process Control (SPC)	1999	IPC	0
434	9502	PWB Assembly Soldering Process Guideline for Electronic Components	1999	IPC	0
435	IPC ENVIRONME NT	Printed Circuit Board Industry an Environmental Best Practice Guide	1999	IPC	0
436	IPC-EIA J- STD-026	NULL	1999	IPC	0
437	IPC-EIA J- STD-028	NULL	1999	IPC	0
438	J-STD-035	NULL	1999	IPC	0
439	IPC-JPCA-4104	NULL	1999	IPC	0
440	IPC-JPCA-6202	NULL	1999	IPC	0
441	QE-605A	Printed Board Quality Evaluation Handbook	1999	IPC	0

442	TM-650 2.4.22C	Bow and Twist (Percentage)	1999	IPC	0
443	2224	Sectional Standard for Design of PWBs for PC Cards	1998	IPC	0
444	2225	Sectional Design Standard for Organic Multichip Modules (MCM-L) and MCM-L Assemblies	1998	IPC	0
445	4110	Specification and Characterization Methods for Nonwoven Cellulose Based Paper for Printed Boards	1998	IPC	0
446	4130	Specification and Characterization Methods for Nonwoven "E" Glass Mat	1998	IPC	0
447	6015	Qualification and Performance Specification for Organic Multichip Module (MCM-L) Mounting and Interconnecting Structures	1998	IPC	0
448	9504	Assembly Process Simulation for Evaluation of Non-IC Components (Preconditioning Non-IC Components)	1998	IPC	0
449	FC-234	PSA Assembly Guidelines for Single-Sided and Double-Sided Flexible Printed Circuits	1998	IPC	0
450	TA-724	Technology Assessment Series on Cleanrooms	1998	IPC	0
451	TM-650 2.0	Printed Wiring Board Test Methods	1998	IPC	0
452	TM-650 2.2.4C	Dimensional Stability, Flexible Dielectric Materials	1998	IPC	0
453	TM-650 2.2.21	Planarity of Dielectrics for High Density Interconnection (HDI)/Microvia Technology	1998	IPC	0
454	TM-650 2.3.10.1	Flammability of Soldermask on Printed Wiring Laminate	1998	IPC	0
455	TM-650 2.3.17.1B	Resin Flow of Adhesive Coated Films and Unsupported Adhesive Films	1998	IPC	0
456	TM-650 2.3.37B	Volatile Content of Adhesive Coated Dielectric Films	1998	IPC	0
457	TM-650 2.4.9.1	Peel Strength of Flexible Circuits	1998	IPC	0
458	TM-650 2.4.9.2	Bonding Process	1998	IPC	0
459	TM-650 2.4.13F	Solder Float Resistance Flexible Printed Wiring Materials	1998	IPC	0
460	TM-650 2.4.19C	Tensile Strength and Elongation, Flexible Printed Wiring Materials	1998	IPC	0
461	TM-650 2.4.24.4	Glass Transition and Modulus of Materials Used in High Density Interconnection (HDI) and Microvias - DMA Method	1998	IPC	0
462	TM-650 2.4.24.5	Glass Transition Temperature and Thermal Expansion of Materials Used in High Density Interconnection (HDI) and Microvias - TMA Method	1998	IPC	0
463	TM-650 2.4.42.2	Die Shear Strength	1998	IPC	0
464	TM-650 2.4.42.3	Wire Bond Pull Strength	1998	IPC	0
465	TM-650 2.5.5.5.1	Stripline Test for Complex Relative Permittivity of Circuit Board Materials to 14 GHz	1998	IPC	0
466	TM-650 2.5.5.5C	Stripline Test for Permittivity and Loss Tangent (Dielectric Constant and Dissipation Factor) at X-Band	1998	IPC	0
467	TM-650 2.5.5.9	Permittivity and Loss Tangent, Parallel Plate, 1 MHz to 1.5 GHz	1998	IPC	0
468	TM-650 2.5.10.1	Insulation Resistivity for Adhesive Interconnection Bonds	1998	IPC	0
469	TM-650 2.5.17.2	Volume Resistivity of Conductive Materials Used in High Density Interconnection (HDI) and Microvias, Two-Wire Method	1998	IPC	0
470	TM-650 2.5.17E	Volume Resistivity and Surface Resistance of Printed Wiring Materials	1998	IPC	0

471	TM-650 2.5.33.1	Measurement of Electrical Overstress from Soldering Hand Tools - Ground Measurements	1998	IPC	0
472	TM-650 2.5.33.2	Measurement of Electrical Overstress from Soldering Hand Tools - Transient Measurements	1998	IPC	0
473	TM-650 2.5.33.3	Measurement of Electrical Overstress from Soldering Hand Tools - Current Leakage Measurements	1998	IPC	0
474	TM-650 2.5.33.4	Measurement of Electrical Overstress from Soldering Hand Tools - Shielded Enclosure	1998	IPC	0
475	TM-650 2.5.33	Measurement of Electrical Overstress from Soldering Hand Tools	1998	IPC	0
476	TM-650 2.6.16.1	Moisture Resistance of High Density Interconnection (HDI) Materials Under High Temperature and Pressure (Pressure Vessel)	1998	IPC	0
477	TM-650 2.6.24	Junction Stability Under Environmental Conditions	1998	IPC	0
478	TP-1114	Layman's Guide to Qualifying a Process to J-STD-001B	1998	IPC	0
479	TP-1115	Selection and Implementation Strategy for a Low-Residue No-Clean Process	1998	IPC	0
480	CF-152B	Composite Metallic Material Specification for Printed Wiring Board	1997	IPC	0
481	PE-740A	Troubleshooting for Printed Board Manufacture and Assembly	1997	IPC	0
482	QL-653A	Certification of Facilities That Inspect/Test Printed Boards, Components and Materials	1997	IPC	0
483	SMC-WP-004	Design for Success	1997	IPC	0
484	SMC-WP-005	PWB Surface Finishes	1997	IPC	0
485	TM-650 2.2.1A	Mechanical Dimensional Verification	1997	IPC	0
486	TM-650 2.2.2B	Optical Dimensional Verification	1997	IPC	0
487	TM-650 2.2.5A	Dimensional Inspections Using Microsections	1997	IPC	0
488	TM-650 2.3.24.2A	Porosity of Metallic Coatings on Copper-Base Alloys and Nickel (Nitric Acid Vapor Test)	1997	IPC	0
489	TM-650 2.5.3B	Current Breakdown, Plated Through-Holes	1997	IPC	0
490	TR-476A	Electrochemical Migration: Electrically Induced Failures in Printed Wiring Assemblies	1997	IPC	0
491	3406	Guidelines for Electrically Conductive Surface Mount Adhesives	1996	IPC	0
492	3408	General Requirements for Anisotropically Conductive Adhesive Films	1996	IPC	0
493	6011	Generic Performance Specification for Printed Boards	1996	IPC	0
494	A-311	Process Controls for Phototool Generation and Use	1996	IPC	0
495	D-279	Design Guidelines for Reliable Surface Mount Technology Printed Board Assemblies	1996	IPC	0
496	TP-1090	Layman's Guide to Qualifying New Fluxes for MIL-STD-2000A or MT-0002	1996	IPC	0
497	TR-465-3	Evaluation of Steam Aging on Alternative Finishes Round Robin Test Program Phase IIA	1996	IPC	0
498	TR-467	Supporting Data and Numerical Examples for ANSI/J-STD-001B: Appendix D (Control of Fluxes)	1996	IPC	0
499	9501	PWB Assembly Process Simulation for Evaluation of Electronic Components	1995	IPC	0
500	CA-821	General Requirements for Thermally Conductive Adhesives	1995	IPC	0
501	D-325A	Documentation Requirements for Printed Boards, Assemblies and Support Drawings	1995	IPC	0
502	D-355	Printed Board Assembly Description in Digital Form	1995	IPC	0
503	DW-424	General Specification for Encapsulated Discrete Wire Interconnection Board	1995	IPC	0
504	TM-650 2.2.14	Solder Powder Particle Size Distribution - Screen Method for Types 1-4	1995	IPC	0
505	TM-650 2.2.20	Solder Paste Metal Content by Weight	1995	IPC	0
506	TM-650 2.3.27.1	Rosin Flux Residue Analysis - HPLC Method	1995	IPC	0

507	TM-650 2.3.27	Cleanliness Test - Residual Rosin	1995	IPC	0
508	TM-650 2.3.34.1B	Percentage of Flux on/in Flux-Coated and/or Flux-Cored Solder	1995	IPC	0
509	TM-650 2.3.40	Thermal Stability	1995	IPC	0
510	TM-650 2.4.1.5A	Determination of Treatment Transfer	1995	IPC	0
511	TM-650 2.4.1.6	Adhesion, Polymer Coating	1995	IPC	0
512	TM-650 2.4.18.3	Tensile Strength, Elongation, and Modulus	1995	IPC	0
513	TM-650 2.4.22.2	Substrate Curvature: Silicon Wafers with Deposited Dielectrics	1995	IPC	0
514	TM-650 2.4.24.2	Glass Transition Temperature of Organic Films - DMA Method	1995	IPC	0
515	TM-650 2.4.24.3	Glass Transition Temperature of Organic Films - TMA Method	1995	IPC	0
516	TM-650 2.4.27.1B	Abrasion (Taber Method) Solder Mask and Conformal Coating	1995	IPC	0
517	TM-650 2.4.34.1	Solder Paste Viscosity - T-Bar Spindle Method (Applicable at Less Than 300,000 Centipoise)	1995	IPC	0
518	TM-650 2.4.34.2	Solder Paste Viscosity - Spiral Pump Method (Applicable for 300,000 to 1,600,000 Centipoise)	1995	IPC	0
519	TM-650 2.4.34.3	Solder Paste Viscosity - Spiral Pump Method (Applicable at Less Than 300,000 Centipoise)	1995	IPC	0
520	TM-650 2.4.34.4	Paste Flux Viscosity - T-Bar Spindle Method	1995	IPC	0
521	TM-650 2.4.34	Solder Paste Viscosity - T-Bar Spin Spindle Method (Applicable for 300,000 to 1,600,000 Centipoise)	1995	IPC	0
522	TM-650 2.4.35	Solder Paste - Slump Test	1995	IPC	0
523	TM-650 2.4.41.3	In-Plane Coefficient of Thermal Expansion, Organic Films	1995	IPC	0
524	TM-650 2.4.41.4	Volumetric Thermal Expansion Polymer Coatings on Inorganic Substrates	1995	IPC	0
525	TM-650 2.4.43	Solder Paste - Solder Ball Test	1995	IPC	0
526	TM-650 2.4.44	Solder Paste - Tack Test	1995	IPC	0
527	TM-650 2.4.45	Solder Paste - Wetting Test	1995	IPC	0
528	TM-650 2.4.47	Flux Residue Dryness	1995	IPC	0
529	TM-650 2.4.48	Spitting of Flux-Cored Wire Solder	1995	IPC	0
530	TM-650 2.4.49	Solder Pool Test	1995	IPC	0
531	TM-650 2.4.50	Thermal Conductivity, Polymer Films	1995	IPC	0
532	TM-650 2.4.51	Self Shimming Thermally Conductive Adhesives	1995	IPC	0
533	TM-650 2.5.5.8	Low Frequency Dielectric Constant and Loss Tangent, Polymer Films	1995	IPC	0
534	TM-650 2.6.9.1	Test to Determine Sensitivity of Electronic Assemblies to Ultrasonic Energy	1995	IPC	0
535	TM-650 2.6.9.2	Test to Determine Sensitivity of Electronic Components to Ultrasonic Energy	1995	IPC	0
536	TR-466	Wetting Balance Standard Weight Comparison Test	1995	IPC	0
537	CI-408	Solderless Surface Mount Connector Design Characteristics and Application Guidelines	1994	IPC	0
538	ML-960	Qualification and Performance Specification for Mass Laminated Panels for Multilayer Printed Boards	1994	IPC	0

539	TM-650 2.1.6.1	Weight of Fabric Reinforcements	1994	IPC	0
540	TM-650 2.1.7C	Thread Count of Glass Fabric	1994	IPC	0
541	TM-650 2.1.8B	Workmanship	1994	IPC	0
542	TM-650 2.1.10A	Visual Inspection for Undissolved Dicyandiamide	1994	IPC	0
543	TM-650 2.2.18.1	Determination of Thickness of Metallic Clad Laminates, Cross- Sectional	1994	IPC	0
544	TM-650 2.2.18	Determination of Thickness of Laminates by Mechanical Measurement	1994	IPC	0
545	TM-650 2.2.19.1	Length, Width and Perpendicularity of Laminate and Prepreg Panels	1994	IPC	0
546	TM-650 2.3.7.2A	Alkaline Etching Method	1994	IPC	0
547	TM-650 2.3.10B	Flammability of Laminate	1994	IPC	0
548	TM-650 2.3.16.2	Treated Weight of Prepreg	1994	IPC	0
549	TM-650 2.3.16B	Resin Content of Prepreg, by Burn-Off	1994	IPC	0
550	TM-650 2.4.4.1A	Flexural Strength of Laminates (at Elevated Temperature)	1994	IPC	0
551	TM-650 2.4.4B	Flexural Strength of Laminates (at Ambient Temperature)	1994	IPC	0
552	TM-650 2.4.8.2A	Peel Strength of Metallic Clad Laminates at Elevated Temperature (Hot Fluid Method)	1994	IPC	0
553	TP-1113	Circuit Board Ionic Cleanliness Measurement: What Does It Tell Us?	1994	IPC	0
554	TR-581	IPC Phase 3 Controlled Atmosphere Soldering Study	1994	IPC	0
555	TR-582	Cleaning and Cleanliness Testing Program Test Results for: Phase 3 - Low Solids Fluxes and Pastes Processed in Ambient Air	1994	IPC	0
556	MS-810	Guidelines for High Volume Microsection	1993	IPC	0
557	OI-645	Standard for Visual Optical Inspection Aids	1993	IPC	0
558	S-816	SMT Process Guideline and Checklist	1993	IPC	0
559	SMC-WP-003	Chip Mounting Technology (CMT)	1993	IPC	0
560	TM-650 2.4.22.1C	Bow and Twist - Laminate	1993	IPC	0
561	TM-650 2.4.37.2	Evaluation of Hand Soldering Tools on Heavy Thermal Loads	1993	IPC	0
562	TM-650 2.6.23	Test Procedure for Steam Ager Temperature Repeatability	1993	IPC	0
563	TR-465-1	Round Robin Test on Steam Ager Temperature Control Stability	1993	IPC	0
564	TR-465-2	Effect of Steam Aging Time and Temperature on Solderability Test Results	1993	IPC	0
565	TR-551	Quality Assessment of Printed Boards Used for Mounting and Interconnecting Electronic Components	1993	IPC	0
566	D-330	Design Guide Manual	1992	IPC	0
567	D-350D	Printed Board Description in Digital Form	1992	IPC	0
568	FA-251	Assembly Guidelines for Single-Sided and Double- Sided Flexible Printed Circuits	1992	IPC	0
569	MC-790	Guidelines for Multichip Module Technology Utilization	1992	IPC	0
570	QF-143	Specification for Finished Fabric Woven from Quartz (Pure Fused Silica) for Printed Boards	1992	IPC	0
571	SG-141	Specification for Finished Fabric Woven from "S" Glass for Printed Boards	1992	IPC	0

572	SM-785	Guidelines for Accelerated Reliability Testing of Surface Mount Solder Attachments	1992	IPC	0
573	D-310C	Guidelines for Phototool Generation and Measurement Techniques	1991	IPC	0
574	SMC-WP-001	Soldering Capability	1991	IPC	0
575	TA-723	Technology Assessment of Surface Mounting	1991	IPC	0
576	TM-650 2.4.3.2C	Flexural Fatigue and Ductility, Flexible Metal-Clad Dielectrics	1991	IPC	0
577	TM-650 2.4.12A	Solderability, Edge Dip Method	1991	IPC	0
578	TM-650 2.4.37A	Evaluation of Hand Soldering Tools for Terminal Connections	1991	IPC	0
579	TM-650 2.6.8.1	Thermal Stress, Laminate	1991	IPC	0
580	TR-485	Results of Copper Foil Rupture Strength Test Round Robin Study	1991	IPC	0
581	A-142	Specification for Finished Fabric Woven from Aramid for Printed Boards	1990	IPC	0
582	C-406	Design and Application Guidelines for Surface Mount Connectors	1990	IPC	0
583	DW-425A	Design and End Product Requirements for Discrete Wiring Boards	1990	IPC	0
584	MB-380	Guidelines for Molded Interconnection Devices	1990	IPC	0
585	SM-784	Guidelines for Chip-on- Board Technology Implementation	1990	IPC	0
586	TM-650 2.4.8.4	Carrier Release, Thin Copper	1990	IPC	0
587	TA-722		1990	IPC	0
588	D-859	Design Standard for Thick Film Multilayer Hybrid Circuits	1989	IPC	0
589	SM-817	General Requirements for Dielectric Surface Mounting Adhesives	1989	IPC	0
590	SMC-TR-001	Introduction to Tape Automated Bonding & Fine Pitch Technology	1989	IPC	0
591	TF-870	Qualification and Performance of Polymer Thick Film Printed Boards	1989	IPC	0
592	TM-650 2.5.5.6	Non-Destructive Full Sheet Resonance Test for Permittivity of Clad Laminates	1989	IPC	0
593	TR-580	Cleaning and Cleanliness Test Program Phase 1 Test Results	1989	IPC	0
594	D-390A	Automated Design Guidelines	1988	IPC	0
595	SM-780	Component Packaging and Interconnecting with Emphasis on Surface Mounting	1988	IPC	0
596	TA-721	Technology Assessment of Multilayer Boards	1988	IPC	0
597	TM-650 2.3.8.1	Flammability of Flexible Printed Wiring	1988	IPC	0
598	TM-650 2.3.23.1A	Cure (Permanency) UV Initiated Dry Film Solder Masks	1988	IPC	0
599	TM-650 2.6.3.2B	Insulation and Moisture Resistance, Flexible Base Dielectric	1988	IPC	0
600	TR-579	Round Robin Reliability Evaluation of Small Diameter Plated Through Holes in Printed Wiring Boards	1988	IPC	0
601	D-354	Library Format Description for Printed Boards in Digital Form	1987	IPC	0
602	DW-426	Specifications for Assembly of Discrete Wiring	1987	IPC	0
603	HM-860	Specification for Multilayer Hybrid Circuits	1987	IPC	0
604	TM-650 2.2.12.1	Overall Thickness and Profile Factor of Copper Foils Treated and Untreated	1987	IPC	0
605	TM-650 2.4.1.4	Adhesion, Overglaze (Hybrid Circuits)	1987	IPC	0
606	TM-650 2.4.40	Inner Layer Bond Strength of Multilayer Printed Circuit Boards	1987	IPC	0
607	TM-650 2.5.5.2A	Dielectric Constant and Dissipation Factor of Printed Wiring Board Material - Clip Method	1987	IPC	0

608	TM-650 2.5.31	Current Leakage (Through Overglaze Films)	1987	IPC	0
609	TM-650 2.5.32	Resistance Test, Plated Through Holes	1987	IPC	0
610	TR-462	Solderability Evaluation of Printed Boards with Protective Coatings over a Long Term Storage	1987	IPC	0
611	TA-720	Technology Assessment of Laminates	1986	IPC	0
612	TM-650 2.1.9	Surface Scratch Examination Metal-Clad Foil	1986	IPC	0
613	TM-650 2.2.7A	Hole Size Measurement, Plated	1986	IPC	0
614	TM-650 2.3.1.1B	Chemical Cleaning of Metal Clad Laminate	1986	IPC	0
615	TM-650 2.3.4.3	Chemical Resistance of Core Materials to Methylene Chloride	1986	IPC	0
616	TM-650 2.3.18A	Gel Time for Prepreg Materials	1986	IPC	0
617	TM-650 2.4.30	Impact Resistance, Polymer Film	1986	IPC	0
618	TM-650 2.4.32A	Fold Temperature Testing, Flexible Flat Cable	1986	IPC	0
619	TM-650 2.4.39A	Dimensional Stability, Glass Reinforced Thin Laminates	1986	IPC	0
620	TM-650 2.4.41	Coefficient of Linear Thermal Expansion of Electrical Insulating Materials	1986	IPC	0
621	TM-650 2.5.1B	Arc Resistance of Printed Wiring Material	1986	IPC	0
622	TM-650 2.5.5.1B	Permittivity (Dielectric Constant) and Loss Tangent (Dissipation Factor) of Insulating Material at 1 MHz (Contacting Electrode Systems)	1986	IPC	0
623	TM-650 2.5.6.3	Dielectric Breakdown Voltage and Dielectric Strength	1986	IPC	0
624	TM-650 2.5.6B	Dielectric Breakdown of Rigid Printed Wiring Material	1986	IPC	0
625	TR-484	Results of IPC Copper Foil Ductility Round Robin Study	1986	IPC	0
626	NC-349	Computer Numerical Control Formatting for Drillers and Routers	1985	IPC	0
627	TM-650 2.5.25A	Dielectric Withstand Voltage Flexible Flat Cable	1985	IPC	0
628	D-322	Guidelines for Selecting Printed Wiring Board Sizes Using Standard Panel Sizes	1984	IPC	0
629	MI-660	Guidelines for Incoming Inspection of Printed Board Materials	1984	IPC	0
630	TM-650 2.5.18B	Characteristic Impedance Flat Cables (Unbalanced)	1984	IPC	0
631	TM-650 2.5.19A	Propagation Delay of Flat Cables Using Time Domain Reflectometer	1984	IPC	0
632	TR-460A	Trouble Shooting Checklist for Wave Soldering of Printed Wiring Boards	1984	IPC	0
633	TR-464	Accelerated Aging for Solderability Evaluations - Incorporates Addendum: December 1987	1984	IPC	0
634	TR-483	Dimensional Stability Testing of Thin Laminates - Incorporates Addendum II: March 1991	1984	IPC	0
635	TR-578	Leading Edge Manufacturing Technology Report Results of a Round Robin Study on Minimum Conductor Width and Plated-Through Holes in Rigid, Bare Copper, Double Sided Printed Wiring Boards	1984	IPC	0
636	D-422	Design Guide for Press Fit Rigid Printed Board Backplanes	1982	IPC	0
637	TM-650 2.3.8A	Flammability, Flexible Insulating Materials	1982	IPC	0
638	TM-650 2.4.16A	Initiation Tear Strength, Flexible Insulating Materials	1982	IPC	0
639	TR-481	Results of Multilayer Test Program Round Robin V	1981	IPC	0
640	TM-650 2.4.14.1	Solderability, Wave Solder Method	1979	IPC	0

641	TR-461	Solderability Evaluation of Thick and Thin Fused Coatings	1979	IPC	0
642	TR-468	Factors Affecting Insulation Resistance Performance of Printed Boards	1979	IPC	0
643	TM-650 2.3.3A	Chemical Resistance of Insulated Materials	1978	IPC	0
644	TM-650 2.3.24	Porosity of Gold Plating (Chemical Method)	1978	IPC	0
645	TM-650 2.1.2A	Pinhole Evaluation, Dye Penetration Method	1976	IPC	0
646	TM-650 2.2.12A	Thickness of Copper by Weight	1976	IPC	0
647	TM-650 2.4.2A	Ductility of Copper Foil	1976	IPC	0
648	TM-650 2.4.15A	Surface Finish, Metal Foil	1976	IPC	0
649	TM-650 2.5.14A	Resistivity of Copper Foil	1976	IPC	0
650	TR-482	New Developments in Thin Copper Foils	1976	IPC	0
651	TM-650 2.3.6A	Etching Ammonium Persulfate Method	1975	IPC	0
652	TM-650 2.3.7A	Etching Ferric Chloride Method	1975	IPC	0
653	TM-650 2.4.7A	Machinability, Printed Wiring Materials	1975	IPC	0
654	TM-650 2.5.2A	Capacitance of Insulating Materials	1975	IPC	0
655	TM-650 2.5.5A	Dielectric Constant of Printed Wiring Materials	1975	IPC	0
656	TR-470	Thermal Characteristics of Multilayer Interconnection Boards	1974	IPC	0
657	TM-650 2.4.5	Folding Endurance, Flexible Printed Wiring Materials	1973	IPC	0
658	TM-650 2.4.6	Hot Oil	1973	IPC	0
659	TM-650 2.4.11	Shear Strength Flexible Dielectric Materials	1973	IPC	0
660	TM-650 2.4.14	Solderability of Metallic Surfaces	1973	IPC	0
661	TM-650 2.5.4	Current Carrying Capacity, Multilayer Printed Wiring	1973	IPC	0
662	TM-650 2.5.12	Interconnection Resistance, Multilayer Printed Wiring	1973	IPC	0
663	4202A- AMD 2	NULL	0	IPC	0
664	2141A ERRATE	NULL	0	IPC	0
665	1752A ERRATE	NULL	0	IPC	0

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