

Standards Manager Web Standards List
IPC-Association Connecting Electronic Industries

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123	PERM-WP-022	Mitigation of Pure Tin Risk by Tin-Lead SMT Reflow Results of an Industry Round-Robin Final Report	2018	IPC	28
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216	4101D	Specification for Base Materials for Rigid and Multilayer Printed Boards - Includes Amendment 1: July 2015	2014	IPC	168
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260	J-STD-033C GERM	NULL	2012	IPC	32
261	J-STD-033C HUNG	NULL	2012	IPC	32
262	J-STD-033C	Handling, Packing, Shipping and Use of Moisture/Reflow Sensitive Surface Mount Devices	2012	IPC	28
263	IPC-JEDEC- 9704A	NULL	2012	IPC	32
264	IPC-JPCA-4591	NULL	2012	IPC	36
265	IPC-WHMA-A- 620B GERMAN	NULL	2012	IPC	408
266	IPC-WHMA-A- 620B SPANISH	NULL	2012	IPC	408
267	IPC-WHMA-A- 620B	NULL	2012	IPC	408
268	J-STD-005A	Requirements for Soldering Pastes	2012	IPC	24
269	TM-650 2.1.13B	NULL	2012	IPC	1
270	TM-650 2.3.25D	NULL	2012	IPC	5
271	TM-650 2.3.28B	NULL	2012	IPC	3
272	TM-650 2.5.5.12A	NULL	2012	IPC	24
273	TM-650 2.5.34	NULL	2012	IPC	4
274	TM-650 2.6.2D	NULL	2012	IPC	2
275	TM-650 2.6.25A	NULL	2012	IPC	11
276	2223C GERMAN	Sectional Design Standard for Flexible Printed Boards	2011	IPC	52
277	2223C	Sectional Design Standard for Flexible Printed Boards	2011	IPC	52
278	4103A	Specification for Base Materials for High Speed/High Frequency Applications	2011	IPC	68
279	4204A	Flexible Metal-Clad Dielectrics for Use in Fabrication of Flexible Printed Circuitry	2011	IPC	60

280	6018B	Qualification and Performance Specification for High Frequency (Microwave) Printed Boards	2011	IPC	56
281	7093	Design and Assembly Process Implementation for Bottom Termination Components	2011	IPC	124
282	7525B GERMAN	Stencil Design Guidelines	2011	IPC	36
283	7525B	Stencil Design Guidelines	2011	IPC	36
284	9202	Material and Process Characterization/Qualification Test Protocol for Assessing Electrochemical Performance	2011	IPC	20
285	9850A	Surface Mount Placement Equipment Characterization	2011	IPC	60
286	CH-65B CHINESE	NULL	2011	IPC	215
287	CH-65B	Guidelines for Cleaning of Printed Boards and Assemblies	2011	IPC	216
288	CMDD	IPC Conflict Minerals Due Diligence Guide	2011	IPC	20
289	IPC-JEDEC-9707	NULL	2011	IPC	24
290	JIG-101	Material Composition Declaration for Electrotechnical Products - Ed 4.0	2011	IPC	48
291	TM-650 2.4.3E	NULL	2011	IPC	1
292	TM-650 2.6.21B	NULL	2011	IPC	5
293	J-STD-004B AMD 1	NULL	2011	IPC	8
294	9708	Test Methods for Characterization of Printed Board Assembly Pad Cratering	2010	IPC	25
295	A-600	Acceptability of Printed Boards	2010	IPC	200
296	4821 AMD 1	NULL	2010	IPC	10
297	1071	Best Industry Practices for Intellectual Property Protection in Printed Board Manufacturing	2010	IPC	24
298	1601	Printed Board Handling and Storage Guidelines	2010	IPC	28
299	1751A	Generic Requirements for Declaration Process Management - Incorporates Amendment 1: November 2012	2010	IPC	44
300	1752A	Materials Declaration Management - Incorporates Amendment 1: November 2012	2010	IPC	60
301	1756	Manufacturing Process Data Management - Version 2.0	2010	IPC	36
302	2222A	Sectional Design Standard for Rigid Organic Printed Boards	2010	IPC	44
303	2611	Generic Requirements for Electronic Product Documentation	2010	IPC	36
304	2612-1	Sectional Requirements for Electronic Diagramming Symbol Generation Methodology	2010	IPC	44
305	2612	Sectional Requirements for Electronic Diagramming Documentation (Schematic and Logic Descriptions)	2010	IPC	40
306	2614	Sectional Requirements for Board Fabrication Documentation	2010	IPC	72
307	4202A	Flexible Base Dielectrics for Use in Flexible Printed Circuitry	2010	IPC	36
308	6012C	Qualification and Performance Specification for Rigid Printed Boards	2010	IPC	60
309	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	112
310	9631 GERMAN	Users Guide for IPC-TM-650, Method 2.6.27, Thermal Stress, Convection Reflow Assembly Simulation	2010	IPC	24
311	9631	Users Guide for IPC-TM-650, Method 2.6.27, Thermal Stress, Convection Reflow Assembly Simulation	2010	IPC	24
312	A-600H FRENCH	Acceptability of Printed Boards	2010	IPC	166
313	A-600H RUSSIAN	NULL	2010	IPC	166
314	A-600H	Acceptability of Printed Boards	2010	IPC	168

315	A-610E CZECH	Acceptability of Electronic Assemblies	2010	IPC	420
316	A-610E HEBREW	Acceptability of Electronic Assemblies (Hebrew)	2010	IPC	420
317	A-610E HINDI	Acceptability of Electronic Assemblies (Hindi Language)	2010	IPC	420
318	A-610E HUNGARIAN	Acceptability of Electronic Assemblies (Hungarian Language)	2010	IPC	420
319	A-610E ROMANIAN	Acceptability of Electronic Assemblies	2010	IPC	420
320	A-610E	Acceptability of Electronic Assemblies	2010	IPC	420
321	J-STD-609A	Marking and Labeling of Components, PCBs and PCBAs to Identify Lead (Pb), Lead-Free (Pb-Free) and Other Attributes	2010	IPC	24
322	J-STD-001E FRENCH	NULL	2010	IPC	72
323	J-STD-001E HUNGARIAN	Requirements for Soldered Electrical and Electronic Assemblies - Hungarian	2010	IPC	76
324	J-STD-001E	Requirements for Soldered Electrical and Electronic Assemblies	2010	IPC	72
325	J-STD-001ES	Space Applications Electronic Hardware Addendum to IPC J-STD-001E Requirements for Soldered Electrical and Electronic Assemblies	2010	IPC	26
326	SM-840E	Qualification and Performance Specification of Permanent Solder Mask and Flexible Cover Materials	2010	IPC	30
327	SPVC-LAT1	ANALYTICAL PROCEDURES FOR PORTABLE LEAD-FREE ALLOY TEST DATA	2010	IPC	10
328	TM-650 2.6.28	Moisture Content and/or Moisture Absorption Rate, (Bulk) Printed Board	2010	IPC	2
329	TR-586	Immersion Silver Plating Thickness Round Robin Investigation Data Set Compendium	2009	IPC	61
330	2152	Standard for Determining Current Carrying Capacity in Printed Board Design	2009	IPC	108
331	4553A	Specification for Immersion Silver Plating for Printed Boards	2009	IPC	44
332	5704	Cleanliness Requirements for Unpopulated Printed Boards	2009	IPC	16
333	6017	Qualification and Performance Specification for Printed Boards Containing Embedded Passive Devices	2009	IPC	20
334	7094	Design and Assembly Process Implementation for Flip Chip and Die Size Components	2009	IPC	88
335	IPC-JEDEC- 9703	NULL	2009	IPC	48
336	TM-650 2.3.28.2	Bare Printed Board Cleanliness by Ion Chromatography	2009	IPC	3
337	TM-650 2.5.5.11	Propagation Delay of Lines on Printed Boards by TDR	2009	IPC	16
338	TM-650 2.5.7.2A	Dielectric Withstanding Voltage (Hipot Method) - Thin Dielectric Layers for Printed Boards	2009	IPC	3
339	TM-650 2.6.27	Thermal Stress, Convection Reflow Assembly Simulation	2009	IPC	8
340	WP-009	A Summary of Tin Whisker Research References	2009	IPC	20
341	CC-830B AMD 1	NULL	2008	IPC	5
342	4562A	Metal Foil for Printed Board Applications	2008	IPC	36
343	4781	Qualification and Performance Specification of Permanent, Semi-Permanent and Temporary Legend and/or Marking Inks	2008	IPC	28
344	4811	Specification for Embedded Passive Device Resistor Materials for Rigid and Multilayer Printed Boards	2008	IPC	32
345	9252A	Requirements for Electrical Testing of Unpopulated Printed Boards	2008	IPC	24
346	J-STD-020D.1	Moisture/Reflow Sensitivity Classification for Non-hermetic Surface Mount Devices (SMDs)	2008	IPC	24
347	J-STD-075	Classification of Passive and Solid State Devices for Assembly Processes	2008	IPC	20

348	J-STD-004B	Requirements for Soldering Fluxes - Incorporates Amendment 1: November 2011	2008	IPC	32
349	2316	Design Guide for Embedded Passive Device Printed Boards	2007	IPC	64
350	2582	Sectional Requirements for Implementation of Administrative Methods for Manufacturing Data Description	2007	IPC	17
351	2583	Sectional Requirements for Implementation of Design Characteristics for Manufacturing Data Description	2007	IPC	29
352	2584	Sectional Requirements for Implementation of Printed Board Fabrication Data Description	2007	IPC	44
353	2588	Sectional Requirements for Implementation of Part List Product Data Description	2007	IPC	14
354	4554	Specification for Immersion Tin Plating for Printed Circuit Boards - Incorporates Amendment 1: January 2012	2007	IPC	56
355	4563	Resin Coated Copper Foil for Printed Boards Guideline	2007	IPC	28
356	5702	Guidelines for OEMs in Determining Acceptable Levels of Cleanliness of Unpopulated Printed Boards	2007	IPC	24
357	7526	Stencil and Misprinted Board Cleaning Handbook	2007	IPC	32
358	7711B-7721B FRENCH	NULL	2007	IPC	380
359	7711B-7721B KOREAN	NULL	2007	IPC	360
360	7711B-7721B	Rework, Modification and Repair of Electronic Assemblies	2007	IPC	360
361	9201A	Surface Insulation Resistance Handbook	2007	IPC	100
362	9691A GERMAN	NULL	2007	IPC	32
363	9691A	User Guide for the IPC-TM-650, Method 2.6.25, Conductive Anodic Filament (CAF) Resistance Test (Electrochemical Migration Testing)	2007	IPC	32
364	9851	SMEMA Standard Mechanical Equipment Interface Standard	2007	IPC	20
365	DR-572A	Drilling Guidelines for Printed Boards	2007	IPC	32
366	TM-650 2.3.2G	Chemical Resistance of Flexible Printed Board Materials	2007	IPC	3
367	TM-650 2.3.42	Solder Mask - Resistance to Solvents and Cleaning Agents	2007	IPC	1
368	TM-650 2.3	Chemical Test Methods - Revision Y	2007	IPC	2
369	TM-650 2.4.7.1	Solder Mask - Determination of Machineability	2007	IPC	2
370	TM-650 2.4.21F	Land Bond Strength, Unsupported Component Hole	2007	IPC	2
371	TM-650 2.4.28.1F	Solder Mask Adhesion - Tape Test Method	2007	IPC	2
372	TM-650 2.4.29C	Solder Mask - Adhesion to Flexible Circuits	2007	IPC	1
373	TM-650 2.4	Mechanical Test Methods - Revision Z	2007	IPC	3
374	TM-650 2.5.5.13	Relative Permittivity and Loss Tangent Using a Split-Cylinder Resonator	2007	IPC	4
375	TM-650 2.5.6.1B	Solder Mask - Dielectric Strength	2007	IPC	1
376	TM-650 2.5	Electrical Test Methods - Revision X	2007	IPC	2
377	TM-650 2.6.1G	Fungus Resistance of Printed Board Materials	2007	IPC	3
378	TM-650 2.6.3.1E	Solder Mask - Moisture and Insulation Resistance	2007	IPC	5
379	TM-650 2.6.3.7	Surface Insulation Resistance	2007	IPC	4
380	TM-650 2.6.11D	Solder Mask - Hydrolytic Stability	2007	IPC	1

381	TM-650 2.6.14D	Solder Mask - Resistance to Electrochemical Migration	2007	IPC	4
382	TM-650 2.6	Environmental Test Methods - Revision Y	2007	IPC	2
383	TM-650	TEST METHODS MANUAL	2007	IPC	1034
384	WP-TR-584A	IPC White Paper and Technical Report on the Use of Halogenated Flame Retardants in Printed Circuit Boards and Assemblies	2007	IPC	40
385	2586	Sectional Requirements for Implementation of Printed Board Assembly Manufacturing Data Description	2007	IPC	
386	4761	Design Guide for Protection of Printed Board Via Structures	2006	IPC	28
387	4821	Specification for Embedded Passive Device Capacitor Materials for Rigid and Multilayer Printed Boards	2006	IPC	40
388	9261A	In-Process DPMO and Estimated Yield for PCAs	2006	IPC	24
389	9591	Performance Parameters (Mechanical, Electrical, Environmental and Quality/Reliability) for Air Moving Devices	2006	IPC	28
390	9701A	Performance Test Methods and Qualification Requirements for Surface Mount Solder Attachments	2006	IPC	36
391	HDBK-005	Guide to Solder Paste Assessment	2006	IPC	60
392	HDBK-840	Solder Mask Handbook	2006	IPC	84
393	JP002	Current Tin Whiskers Theory and Mitigation Practices Guideline	2006	IPC	32
394	TM-650 2.3.41	Test Method for Total Halogen Content in Base Materials	2006	IPC	3
395	TM-650 2.4.24.6	TEST METHODS MANUAL	2006	IPC	2
396	TR-585	Time, Temperature and Humidity Stress of Final Board Finish Solderability	2006	IPC	64
397	1065	Material Declaration Handbook	2005	IPC	72
398	2546 AMD 2	Sectional Requirements for Shop-Floor Equipment Communication Messages (CAMX) for Printed Circuit Board Assembly	2005	IPC	92
399	8497-1	Cleaning Methods and Contamination Assessment for Optical Assembly	2005	IPC	48
400	J-STD-001D ROMANIAN	Requirements for Soldered Electrical and Electronic Assemblies	2005	IPC	76
401	TM-650 2.5.5.10	High Frequency Testing to Determine Permittivity and Loss Tangent of Embedded Passive Materials	2005	IPC	8
402	WP-008	Setting Up Ion Chromatography Capability	2005	IPC	16
403	2577	Sectional Requirements for Supply Chain Communication of Manufacturing Quality Assessment - Product Data eXchange (PDX)	2005	IPC	
404	1710A	OEM Standard for Printed Board Manufacturers' Qualification Profile	2004	IPC	46
405	1720A	Assembly Qualification Profile	2004	IPC	57
406	2141A	Design Guide for High-Speed Controlled Impedance Circuit Boards	2004	IPC	64
407	7912A	End-Item DPMO for Printed Circuit Board Assemblies	2004	IPC	24
408	9194	Implementation of Statistical Process Control (SPC) Applied to Printed Board Assembly Manufacture Guideline	2004	IPC	36
409	CM-770E	Guidelines for Printed Board Component Mounting	2004	IPC	164
410	D-326A	Information Requirements for Manufacturing Printed Boards and Other Electronic Assemblies	2004	IPC	20
411	IPC-JEDEC- 9702	NULL	2004	IPC	28
412	TM-650 2.1.1.2A	Microsectioning-Semi or Automatic Technique Microsection Equipment (Alternate)	2004	IPC	5
413	TM-650 2.1.1E	Microsectioning, Manual Method	2004	IPC	5
414	TM-650 2.1	Visual Test Methods - Revision K	2004	IPC	1

415	TM-650 2.3.13A	Determination of Acid Value of Liquid Solder Flux - Potentiometric and Visual Titration Methods	2004	IPC	3
416	TM-650 2.3.15D	Purity, Copper Foil or Plating	2004	IPC	2
417	TM-650 2.3.28.1	Halide Content of Soldering Fluxes and Pastes	2004	IPC	3
418	TM-650 2.3.32D	Flux Induced Corrosion (Copper Mirror Method)	2004	IPC	2
419	TM-650 2.3.33D	Presence of Halides in Flux, Silver Chromate Method	2004	IPC	2
420	TM-650 2.3.34C	Solids Content, Flux	2004	IPC	2
421	TM-650 2.3.35.1A	Fluorides by Spot Test, Fluxes - Qualitative	2004	IPC	1
422	TM-650 2.3.35.2A	Fluoride Concentration, Fluxes - Quantitative	2004	IPC	3
423	TM-650 2.3.35C	Halide Content, Quantitative (Chloride & Bromide)	2004	IPC	2
424	TM-650 2.3.38C	Surface Organic Contaminant Detection Test	2004	IPC	2
425	TM-650 2.3.39C	Surface Organic Contaminant Identification Test (Infrared Analytical Method)	2004	IPC	4
426	TM-650 2.4.1E	Adhesion, Tape Testing	2004	IPC	1
427	TM-650 2.4.14.2A	Liquid Flux Activity, Wetting Balance Method	2004	IPC	3
428	TM-650 2.4.18.1A	Tensile Strength and Elongation, In-House Plating	2004	IPC	3
429	TM-650 2.4.36C	Rework Simulation, Plated-Through Holes for Leaded Components	2004	IPC	2
430	TM-650 2.4.41.2A	Coefficient of Thermal Expansion-Strain Gage Method	2004	IPC	4
431	TM-650 2.4.46A	Spread Test, Liquid, Paste or Solid Flux, or Flux Extracted from Solder Paste, Cored Wires or Preforms	2004	IPC	2
432	TM-650 2.5.5.7A	Characteristic Impedance of Lines on Printed Boards by TDR	2004	IPC	23
433	TM-650 2.5.7D	Dielectric Withstanding Voltage, PCB	2004	IPC	2
434	TM-650 2.6.3.3B	Surface Insulation Resistance, Fluxes	2004	IPC	4
435	TM-650 2.6.3.5	Bare Board Cleanliness by Surface Insulation Resistance	2004	IPC	4
436	TM-650 2.6.3.6	Surface Insulation Resistance - Fluxes - Telecommunications	2004	IPC	3
437	TM-650 2.6.3F	Moisture and Insulation Resistance, Printed Boards	2004	IPC	4
438	TM-650 2.6.4B	Outgassing, Printed Boards	2004	IPC	2
439	TM-650 2.6.5D	Physical Shock, Multilayer Printed Wiring	2004	IPC	1
440	TM-650 2.6.7.2B	Thermal Shock, Continuity and Microsection, Printed Board	2004	IPC	3
441	TM-650 2.6.8E	Thermal Stress, Plated-Through Holes	2004	IPC	2
442	TM-650 2.6.9B	Vibration, Rigid Printed Wiring	2004	IPC	1

443	TM-650 2.6.15C	Corrosion, Flux	2004	IPC	3
444	0040	Optoelectronics Assembly and Packaging Technology	2003	IPC	176
445	2226	Sectional Design Standard for High Density Interconnect (HDI) Printed Boards	2003	IPC	60
446	2251	Design Guide for the Packaging of High Speed Electronic Circuits	2003	IPC	100
447	2501	Definition for Web-Based Exchange of XML Data (Message Broker)	2003	IPC	36
448	4411A	Specification and Characterization Methods for Nonwoven Para-Aramid Reinforcement	2003	IPC	32
449	5701	Users Guide for Cleanliness of Unpopulated Printed Boards	2003	IPC	12
450	8413-1	Specification for Process Carriers Used to Handle Optical Fibers in Manufacturing	2003	IPC	28
451	J-STD-027	Mechanical Outline Standard for Flip Chip and Chip Size Configurations	2003	IPC	20
452	SPVC-WP-006	ROUND ROBIN TESTING AND ANALYSIS LEAD-FREE ALLOYS TIN, SILVER and COPPER	2003	IPC	25
453	TM-650 1.2A	Calibration	2003	IPC	1
454	TM-650 1.6A	Numerical Reporting	2003	IPC	1
455	TM-650 1.7A	Reporting, Invalid Test Results	2003	IPC	1
456	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	5
457	TM-650 1.8A	Measurement Precision Estimation for Binary Data	2003	IPC	6
458	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	10
459	TM-650 1.9A	Measurement Precision Estimation for Variables Data	2003	IPC	10
460	TM-650 2.6.3.4A	Moisture and Insulation Resistance - Conformal Coating	2003	IPC	2
461	2252	Design Guide for RF/Microwave Circuit Boards	2002	IPC	40
462	2511B	Generic Requirements for Implementation of Product Manufacturing Description Data and Transfer MXL Schema Methodology	2002	IPC	182
463	2547	Sectional Requirements for Shop-Floor Equipment Communication Messages (CAMX) for Printed Circuit Board Test, Inspection and Rework	2002	IPC	56
464	9199	Statistical Process Control (SPC) Quality Rating	2002	IPC	52
465	CC-830B	Qualification and Performance of Electrical Insulating Compound for Printed Wiring Assemblies - Incorporates Amendment 1: October 2008	2002	IPC	24
466	D-356B	Bare Substrate Electrical Test Data Format	2002	IPC	72
467	J-STD-032	Performance Standard for Ball Grid Array Balls	2002	IPC	20
468	TR-583	An In-Depth Look At Ionic Cleanliness Testing	2002	IPC	231
469	HDBK-610	Handbook and Guide to IPC-A-610 (Includes IPC-A-610B to C Comparison)	2002	IPC	
470	2541	Generic Requirements for Electronics Manufacturing Shop-Floor Equipment Communication Messages (CAMX)	2001	IPC	175
471	2546	Sectional Requirements for Shop-Floor Equipment Communication Messages (CAMX) for Printed Circuit Board Assembly - Incorporates Amendment 1: January 2003	2001	IPC	114
472	2571	Generic Requirements for Electronics Manufacturing Supply Chain Communication - Product Data eXchange (PDX)	2001	IPC	43
473	2576	Sectional Requirements for Electronics Manufacturing Supply Chain Communication of As-Built Product Data - Product Data eXchange (PDX)	2001	IPC	14
474	2578	Sectional Requirements for Supply Chain Communication of Bill of Material and Product Design Configuration Data - Product Data eXchange (PDX)	2001	IPC	34
475	7530	Guidelines for Temperature Profiling for Mass Soldering Processes (Reflow & Wave)	2001	IPC	26

476	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	56
477	1131	Information Technology (IT) Guide for PWB Manufacturers	2000	IPC	20
478	1331	Voluntary Safety Standard for Electrically Heated Process Equipment	2000	IPC	14
479	1730A	Laminator Qualification Profile	2000	IPC	38
480	1731	Strategic Raw Materials Supplier Qualification Profile	2000	IPC	36
481	2512A	Sectional Requirements for Implementation of Administrative Methods for Manufacturing Data Description [ADMIN]	2000	IPC	18
482	2513A	Sectional Requirements for Implementation of Drawing Methods for Manufacturing Data Description [DRAWG]	2000	IPC	26
483	2514A	Sectional Requirements for Implementation of Printed Board Fabrication Data Description [BDFAB]	2000	IPC	23
484	2515A	Sectional Requirements for Implementation of Bare Board Product Electrical Testing Data Description [BDTST]	2000	IPC	20
485	2516A	Sectional Requirements for Implementation of Assembled Board Product Manufacturing Data Description [BDASM]	2000	IPC	19
486	2517A	Sectional Requirements for Implementation of Assembly In-Circuit Testing Data Description [ASEMT]	2000	IPC	24
487	2518A	Sectional Requirements for Implementation of Part List Product Data Description [PTLST]	2000	IPC	18
488	2615	Printed Board Dimensions and Tolerances	2000	IPC	76
489	4121	Guidelines for Selecting Core Constructions for Multilayer Printed Wiring Board Applications	2000	IPC	20
490	9251	Test Vehicles for Evaluating Fine Line Capability	2000	IPC	4
491	IPC-JPCA-2315	NULL	2000	IPC	40
492	IPC-JPCA-6801	NULL	2000	IPC	41
493	TM-650 2.3.25.1	Ionic Cleanliness Testing of Bare PWBs	2000	IPC	4
494	TM-650 2.4.5.1	Flexibility - Conformal Coating	2000	IPC	1
495	TM-650 2.6.11.1	Hydrolytic Stability - Conformal Coating	2000	IPC	2
496	2524	PWB Fabrication Data Quality Rating System	1999	IPC	19
497	2531	SMEMA Standard Recipe File Format Specification	1999	IPC	132
498	6016	Qualification and Performance Specification for High Density Interconnect (HDI) Layers or Boards	1999	IPC	28
499	9191	General Guidelines for Implementation of Statistical Process Control (SPC)	1999	IPC	52
500	9502	PWB Assembly Soldering Process Guideline for Electronic Components	1999	IPC	23
501	IPC ENVIRONME NT	Printed Circuit Board Industry an Environmental Best Practice Guide	1999	IPC	112
502	IPC-EIA J- STD-026	Semiconductor Design Standard for Flip Chip Applications	1999	IPC	48
503	IPC-EIA J- STD-028	Performance Standard for Construction of Flip Chip and Chip Scale Bumps	1999	IPC	36
504	J-STD-035	Acoustic Microscopy for Nonhermetic Encapsulated Electronics Devices	1999	IPC	20
505	IPC-JPCA-4104	NULL	1999	IPC	58
506	IPC-JPCA-6202	NULL	1999	IPC	107
507	QE-605A	Printed Board Quality Evaluation Handbook	1999	IPC	56
508	TM-650 2.4.22C	Bow and Twist (Percentage)	1999	IPC	5
509	2224	Sectional Standard for Design of PWBs for PC Cards	1998	IPC	31
510	2225	Sectional Design Standard for Organic Multichip Modules (MCM-L) and MCM-L Assemblies	1998	IPC	32
511	4110	Specification and Characterization Methods for Nonwoven Cellulose Based Paper for Printed Boards	1998	IPC	23

512	4130	Specification and Characterization Methods for Nonwoven "E" Glass Mat	1998	IPC	23
513	6015	Qualification and Performance Specification for Organic Multichip Module (MCM-L) Mounting and Interconnecting Structures	1998	IPC	32
514	9504	Assembly Process Simulation for Evaluation of Non-IC Components (Preconditioning Non-IC Components)	1998	IPC	27
515	FC-234	PSA Assembly Guidelines for Single-Sided and Double-Sided Flexible Printed Circuits	1998	IPC	31
516	TA-724	Technology Assessment Series on Cleanrooms	1998	IPC	197
517	TM-650 2.0	Printed Wiring Board Test Methods	1998	IPC	1
518	TM-650 2.2.4C	Dimensional Stability, Flexible Dielectric Materials	1998	IPC	2
519	TM-650 2.2.21	Planarity of Dielectrics for High Density Interconnection (HDI)/Microvia Technology	1998	IPC	4
520	TM-650 2.3.10.1	Flammability of Soldermask on Printed Wiring Laminate	1998	IPC	4
521	TM-650 2.3.17.1B	Resin Flow of Adhesive Coated Films and Unsupported Adhesive Films	1998	IPC	1
522	TM-650 2.3.37B	Volatile Content of Adhesive Coated Dielectric Films	1998	IPC	3
523	TM-650 2.4.9.1	Peel Strength of Flexible Circuits	1998	IPC	1
524	TM-650 2.4.9.2	Bonding Process	1998	IPC	2
525	TM-650 2.4.13F	Solder Float Resistance Flexible Printed Wiring Materials	1998	IPC	1
526	TM-650 2.4.19C	Tensile Strength and Elongation, Flexible Printed Wiring Materials	1998	IPC	2
527	TM-650 2.4.24.4	Glass Transition and Modulus of Materials Used in High Density Interconnection (HDI) and Microvias - DMA Method	1998	IPC	5
528	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	5
529	TM-650 2.4.42.2	Die Shear Strength	1998	IPC	2
530	TM-650 2.4.42.3	Wire Bond Pull Strength	1998	IPC	3
531	TM-650 2.5.5.5.1	Stripline Test for Complex Relative Permittivity of Circuit Board Materials to 14 GHz	1998	IPC	11
532	TM-650 2.5.5.5C	Stripline Test for Permittivity and Loss Tangent (Dielectric Constant and Dissipation Factor) at X-Band	1998	IPC	25
533	TM-650 2.5.5.9	Permittivity and Loss Tangent, Parallel Plate, 1 MHz to 1.5 GHz	1998	IPC	5
534	TM-650 2.5.10.1	Insulation Resistivity for Adhesive Interconnection Bonds	1998	IPC	2
535	TM-650 2.5.17.2	Volume Resistivity of Conductive Materials Used in High Density Interconnection (HDI) and Microvias, Two-Wire Method	1998	IPC	3
536	TM-650 2.5.17E	Volume Resistivity and Surface Resistance of Printed Wiring Materials	1998	IPC	2
537	TM-650 2.5.33.1	Measurement of Electrical Overstress from Soldering Hand Tools - Ground Measurements	1998	IPC	3
538	TM-650 2.5.33.2	Measurement of Electrical Overstress from Soldering Hand Tools - Transient Measurements	1998	IPC	4
539	TM-650 2.5.33.3	Measurement of Electrical Overstress from Soldering Hand Tools - Current Leakage Measurements	1998	IPC	3

540	TM-650 2.5.33.4	Measurement of Electrical Overstress from Soldering Hand Tools - Shielded Enclosure	1998	IPC	3
541	TM-650 2.5.33	Measurement of Electrical Overstress from Soldering Hand Tools	1998	IPC	5
542	TM-650 2.6.16.1	Moisture Resistance of High Density Interconnection (HDI) Materials Under High Temperature and Pressure (Pressure Vessel)	1998	IPC	2
543	TM-650 2.6.24	Junction Stability Under Environmental Conditions	1998	IPC	3
544	TP-1114	Laymans ¹ s Guide to Qualifying a Process to J-STD-001B	1998	IPC	14
545	TP-1115	Selection and Implementation Strategy for a Low-Residue No-Clean Process	1998	IPC	116
546	CF-152B	Composite Metallic Material Specification for Printed Wiring Board	1997	IPC	33
547	PE-740A	Troubleshooting for Printed Board Manufacture and Assembly	1997	IPC	0
548	QL-653A	Certification of Facilities That Inspect/Test Printed Boards, Components and Materials	1997	IPC	28
549	SMC-WP-004	Design for Success	1997	IPC	88
550	SMC-WP-005	PWB Surface Finishes	1997	IPC	49
551	TM-650 2.2.1A	Mechanical Dimensional Verification	1997	IPC	1
552	TM-650 2.2.2B	Optical Dimensional Verification	1997	IPC	1
553	TM-650 2.2.5A	Dimensional Inspections Using Microsections	1997	IPC	1
554	TM-650 2.3.24.2A	Porosity of Metallic Coatings on Copper-Base Alloys and Nickel (Nitric Acid Vapor Test)	1997	IPC	2
555	TM-650 2.5.3B	Current Breakdown, Plated Through-Holes	1997	IPC	1
556	TR-476A	Electrochemical Migration: Electrically Induced Failures in Printed Wiring Assemblies	1997	IPC	22
557	3406	Guidelines for Electrically Conductive Surface Mount Adhesives	1996	IPC	23
558	3408	General Requirements for Anisotropically Conductive Adhesive Films	1996	IPC	21
559	6011	Generic Performance Specification for Printed Boards	1996	IPC	23
560	A-311	Process Controls for Phototool Generation and Use	1996	IPC	18
561	D-279	Design Guidelines for Reliable Surface Mount Technology Printed Board Assemblies	1996	IPC	146
562	TP-1090	Layman ¹ s Guide to Qualifying New Fluxes for MIL-STD-2000A or MT-0002	1996	IPC	32
563	TR-465-3	Evaluation of Steam Aging on Alternative Finishes Round Robin Test Program Phase IIA	1996	IPC	21
564	TR-467	Supporting Data and Numerical Examples for ANSI/J-STD-001B: Appendix D (Control of Fluxes)	1996	IPC	22
565	9501	PWB Assembly Process Simulation for Evaluation of Electronic Components	1995	IPC	24
566	CA-821	General Requirements for Thermally Conductive Adhesives	1995	IPC	17
567	D-325A	Documentation Requirements for Printed Boards, Assemblies and Support Drawings	1995	IPC	102
568	D-355	Printed Board Assembly Description in Digital Form	1995	IPC	40
569	DW-424	General Specification for Encapsulated Discrete Wire Interconnection Board	1995	IPC	43
570	TM-650 2.2.14	Solder Powder Particle Size Distribution - Screen Method for Types 1-4	1995	IPC	2
571	TM-650 2.2.20	Solder Paste Metal Content by Weight	1995	IPC	2
572	TM-650 2.3.27.1	Rosin Flux Residue Analysis - HPLC Method	1995	IPC	3
573	TM-650 2.3.27	Cleanliness Test - Residual Rosin	1995	IPC	5
574	TM-650 2.3.34.1B	Percentage of Flux on/in Flux-Coated and/or Flux-Cored Solder	1995	IPC	1
575	TM-650 2.3.40	Thermal Stability	1995	IPC	1
576	TM-650 2.4.1.5A	Determination of Treatment Transfer	1995	IPC	2

577	TM-650 2.4.1.6	Adhesion, Polymer Coating	1995	IPC	2
578	TM-650 2.4.18.3	Tensile Strength, Elongation, and Modulus	1995	IPC	3
579	TM-650 2.4.22.2	Substrate Curvature: Silicon Wafers with Deposited Dielectrics	1995	IPC	2
580	TM-650 2.4.24.2	Glass Transition Temperature of Organic Films - DMA Method	1995	IPC	2
581	TM-650 2.4.24.3	Glass Transition Temperature of Organic Films - TMA Method	1995	IPC	2
582	TM-650 2.4.27.1B	Abrasion (Taber Method) Solder Mask and Conformal Coating	1995	IPC	1
583	TM-650 2.4.34.1	Solder Paste Viscosity - T-Bar Spindle Method (Applicable at Less Than 300,000 Centipoise)	1995	IPC	2
584	TM-650 2.4.34.2	Solder Paste Viscosity - Spiral Pump Method (Applicable for 300,000 to 1,600,000 Centipoise)	1995	IPC	2
585	TM-650 2.4.34.3	Solder Paste Viscosity - Spiral Pump Method (Applicable at Less Than 300,000 Centipoise)	1995	IPC	2
586	TM-650 2.4.34.4	Paste Flux Viscosity - T-Bar Spindle Method	1995	IPC	1
587	TM-650 2.4.34	Solder Paste Viscosity - T-Bar Spin Spindle Method (Applicable for 300,000 to 1,600,000 Centipoise)	1995	IPC	2
588	TM-650 2.4.35	Solder Paste - Slump Test	1995	IPC	3
589	TM-650 2.4.41.3	In-Plane Coefficient of Thermal Expansion, Organic Films	1995	IPC	2
590	TM-650 2.4.41.4	Volumetric Thermal Expansion Polymer Coatings on Inorganic Substrates	1995	IPC	1
591	TM-650 2.4.43	Solder Paste - Solder Ball Test	1995	IPC	3
592	TM-650 2.4.44	Solder Paste - Tack Test	1995	IPC	1
593	TM-650 2.4.45	Solder Paste - Wetting Test	1995	IPC	1
594	TM-650 2.4.47	Flux Residue Dryness	1995	IPC	2
595	TM-650 2.4.48	Spitting of Flux-Cored Wire Solder	1995	IPC	2
596	TM-650 2.4.49	Solder Pool Test	1995	IPC	2
597	TM-650 2.4.50	Thermal Conductivity, Polymer Films	1995	IPC	1
598	TM-650 2.4.51	Self Shimming Thermally Conductive Adhesives	1995	IPC	1
599	TM-650 2.5.5.8	Low Frequency Dielectric Constant and Loss Tangent, Polymer Films	1995	IPC	5
600	TM-650 2.6.9.1	Test to Determine Sensitivity of Electronic Assemblies to Ultrasonic Energy	1995	IPC	5
601	TM-650 2.6.9.2	Test to Determine Sensitivity of Electronic Components to Ultrasonic Energy	1995	IPC	4
602	TR-466	Wetting Balance Standard Weight Comparison Test	1995	IPC	16
603	CI-408	Solderless Surface Mount Connector Design Characteristics and Application Guidelines	1994	IPC	41
604	ML-960	Qualification and Performance Specification for Mass Laminated Panels for Multilayer Printed Boards	1994	IPC	29
605	TM-650 2.1.6.1	Weight of Fabric Reinforcements	1994	IPC	1
606	TM-650 2.1.7C	Thread Count of Glass Fabric	1994	IPC	1
607	TM-650 2.1.8B	Workmanship	1994	IPC	1
608	TM-650 2.1.10A	Visual Inspection for Undissolved Dicyandiamide	1994	IPC	3

609	TM-650 2.2.18.1	Determination of Thickness of Metallic Clad Laminates, Cross- Sectional	1994	IPC	1
610	TM-650 2.2.18	Determination of Thickness of Laminates by Mechanical Measurement	1994	IPC	2
611	TM-650 2.2.19.1	Length, Width and Perpendicularity of Laminate and Prepreg Panels	1994	IPC	1
612	TM-650 2.3.7.2A	Alkaline Etching Method	1994	IPC	2
613	TM-650 2.3.10B	Flammability of Laminate	1994	IPC	3
614	TM-650 2.3.16.2	Treated Weight of Prepreg	1994	IPC	2
615	TM-650 2.3.16B	Resin Content of Prepreg, by Burn-Off	1994	IPC	1
616	TM-650 2.4.4.1A	Flexural Strength of Laminates (at Elevated Temperature)	1994	IPC	2
617	TM-650 2.4.4B	Flexural Strength of Laminates (at Ambient Temperature)	1994	IPC	2
618	TM-650 2.4.8.2A	Peel Strength of Metallic Clad Laminates at Elevated Temperature (Hot Fluid Method)	1994	IPC	3
619	TP-1113	Circuit Board Ionic Cleanliness Measurement: What Does It Tell Us?	1994	IPC	8
620	TR-581	IPC Phase 3 Controlled Atmosphere Soldering Study	1994	IPC	96
621	TR-582	Cleaning and Cleanliness Testing Program Test Results for: Phase 3 - Low Solids Fluxes and Pastes Processed in Ambient Air	1994	IPC	166
622	MS-810	Guidelines for High Volume Microsection	1993	IPC	42
623	OI-645	Standard for Visual Optical Inspection Aids	1993	IPC	51
624	S-816	SMT Process Guideline and Checklist	1993	IPC	46
625	SMC-WP-003	Chip Mounting Technology (CMT)	1993	IPC	35
626	TM-650 2.4.22.1C	Bow and Twist - Laminate	1993	IPC	2
627	TM-650 2.4.37.2	Evaluation of Hand Soldering Tools on Heavy Thermal Loads	1993	IPC	4
628	TM-650 2.6.23	Test Procedure for Steam Ager Temperature Repeatability	1993	IPC	3
629	TR-465-1	Round Robin Test on Steam Ager Temperature Control Stability	1993	IPC	21
630	TR-465-2	Effect of Steam Aging Time and Temperature on Solderability Test Results	1993	IPC	54
631	TR-551	Quality Assessment of Printed Boards Used for Mounting and Interconnecting Electronic Components	1993	IPC	126
632	D-330	Design Guide Manual	1992	IPC	645
633	D-350D	Printed Board Description in Digital Form	1992	IPC	83
634	FA-251	Assembly Guidelines for Single-Sided and Double- Sided Flexible Printed Circuits	1992	IPC	44
635	MC-790	Guidelines for Multichip Module Technology Utilization	1992	IPC	139
636	QF-143	Specification for Finished Fabric Woven from Quartz (Pure Fused Silica) for Printed Boards	1992	IPC	20
637	SG-141	Specification for Finished Fabric Woven from "S" Glass for Printed Boards	1992	IPC	20
638	SM-785	Guidelines for Accelerated Reliability Testing of Surface Mount Solder Attachments	1992	IPC	58
639	D-310C	Guidelines for Phototool Generation and Measurement Techniques	1991	IPC	86
640	SMC-WP-001	Soldering Capability	1991	IPC	38
641	TA-723	Technology Assessment of Surface Mounting	1991	IPC	453

642	TM-650 2.4.3.2C	Flexural Fatigue and Ductility, Flexible Metal-Clad Dielectrics	1991	IPC	3
643	TM-650 2.4.12A	Solderability, Edge Dip Method	1991	IPC	3
644	TM-650 2.4.37A	Evaluation of Hand Soldering Tools for Terminal Connections	1991	IPC	2
645	TM-650 2.6.8.1	Thermal Stress, Laminate	1991	IPC	1
646	TR-485	Results of Copper Foil Rupture Strength Test Round Robin Study	1991	IPC	30
647	A-142	Specification for Finished Fabric Woven from Aramid for Printed Boards	1990	IPC	17
648	C-406	Design and Application Guidelines for Surface Mount Connectors	1990	IPC	48
649	DW-425A	Design and End Product Requirements for Discrete Wiring Boards	1990	IPC	53
650	MB-380	Guidelines for Molded Interconnection Devices	1990	IPC	37
651	SM-784	Guidelines for Chip-on- Board Technology Implementation	1990	IPC	53
652	TM-650 2.4.8.4	Carrier Release, Thin Copper	1990	IPC	1
653	TA-722		1990	IPC	479
654	D-859	Design Standard for Thick Film Multilayer Hybrid Circuits	1989	IPC	88
655	SM-817	General Requirements for Dielectric Surface Mounting Adhesives	1989	IPC	0
656	SMC-TR-001	Introduction to Tape Automated Bonding & Fine Pitch Technology	1989	IPC	73
657	TF-870	Qualification and Performance of Polymer Thick Film Printed Boards	1989	IPC	30
658	TM-650 2.5.5.6	Non-Destructive Full Sheet Resonance Test for Permittivity of Clad Laminates	1989	IPC	12
659	TR-580	Cleaning and Cleanliness Test Program Phase 1 Test Results	1989	IPC	114
660	D-390A	Automated Design Guidelines	1988	IPC	62
661	SM-780	Component Packaging and Interconnecting with Emphasis on Surface Mounting	1988	IPC	168
662	TA-721	Technology Assessment of Multilayer Boards	1988	IPC	720
663	TM-650 2.3.8.1	Flammability of Flexible Printed Wiring	1988	IPC	1
664	TM-650 2.3.23.1A	Cure (Permanency) UV Initiated Dry Film Solder Masks	1988	IPC	2
665	TM-650 2.6.3.2B	Insulation and Moisture Resistance, Flexible Base Dielectric	1988	IPC	4
666	TR-579	Round Robin Reliability Evaluation of Small Diameter Plated Through Holes in Printed Wiring Boards	1988	IPC	90
667	D-354	Library Format Description for Printed Boards in Digital Form	1987	IPC	51
668	DW-426	Specifications for Assembly of Discrete Wiring	1987	IPC	31
669	HM-860	Specification for Multilayer Hybrid Circuits	1987	IPC	35
670	TM-650 2.2.12.1	Overall Thickness and Profile Factor of Copper Foils Treated and Untreated	1987	IPC	2
671	TM-650 2.4.1.4	Adhesion, Overglaze (Hybrid Circuits)	1987	IPC	1
672	TM-650 2.4.40	Inner Layer Bond Strength of Multilayer Printed Circuit Boards	1987	IPC	1
673	TM-650 2.5.5.2A	Dielectric Constant and Dissipation Factor of Printed Wiring Board Material - Clip Method	1987	IPC	2
674	TM-650 2.5.31	Current Leakage (Through Overglaze Films)	1987	IPC	1
675	TM-650 2.5.32	Resistance Test, Plated Through Holes	1987	IPC	2
676	TR-462	Solderability Evaluation of Printed Boards with Protective Coatings over a Long Term Storage	1987	IPC	74
677	TA-720	Technology Assessment of Laminates	1986	IPC	426

678	TM-650 2.1.9	Surface Scratch Examination Metal-Clad Foil	1986	IPC	1
679	TM-650 2.2.7A	Hole Size Measurement, Plated	1986	IPC	1
680	TM-650 2.3.1.1B	Chemical Cleaning of Metal Clad Laminate	1986	IPC	1
681	TM-650 2.3.4.3	Chemical Resistance of Core Materials to Methylene Chloride	1986	IPC	1
682	TM-650 2.3.18A	Gel Time for Prepreg Materials	1986	IPC	1
683	TM-650 2.4.30	Impact Resistance, Polymer Film	1986	IPC	1
684	TM-650 2.4.32A	Fold Temperature Testing, Flexible Flat Cable	1986	IPC	1
685	TM-650 2.4.39A	Dimensional Stability, Glass Reinforced Thin Laminates	1986	IPC	3
686	TM-650 2.4.41	Coefficient of Linear Thermal Expansion of Electrical Insulating Materials	1986	IPC	3
687	TM-650 2.5.1B	Arc Resistance of Printed Wiring Material	1986	IPC	2
688	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	5
689	TM-650 2.5.6.3	Dielectric Breakdown Voltage and Dielectric Strength	1986	IPC	3
690	TM-650 2.5.6B	Dielectric Breakdown of Rigid Printed Wiring Material	1986	IPC	3
691	TR-484	Results of IPC Copper Foil Ductility Round Robin Study	1986	IPC	26
692	NC-349	Computer Numerical Control Formatting for Drillers and Routers	1985	IPC	16
693	TM-650 2.5.25A	Dielectric Withstand Voltage Flexible Flat Cable	1985	IPC	1
694	D-322	Guidelines for Selecting Printed Wiring Board Sizes Using Standard Panel Sizes	1984	IPC	14
695	MI-660	Guidelines for Incoming Inspection of Printed Board Materials	1984	IPC	0
696	TM-650 2.5.18B	Characteristic Impedance Flat Cables (Unbalanced)	1984	IPC	4
697	TM-650 2.5.19A	Propagation Delay of Flat Cables Using Time Domain Reflectometer	1984	IPC	3
698	TR-460A	Trouble Shooting Checklist for Wave Soldering of Printed Wiring Boards	1984	IPC	17
699	TR-464	Accelerated Aging for Solderability Evaluations - Incorporates Addendum: December 1987	1984	IPC	26
700	TR-483	Dimensional Stability Testing of Thin Laminates - Incorporates Addendum II: March 1991	1984	IPC	132
701	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	100
702	D-422	Design Guide for Press Fit Rigid Printed Board Backplanes	1982	IPC	27
703	TM-650 2.3.8A	Flammability, Flexible Insulating Materials	1982	IPC	7
704	TM-650 2.4.16A	Initiation Tear Strength, Flexible Insulating Materials	1982	IPC	2
705	TR-481	Results of Multilayer Test Program Round Robin V	1981	IPC	90
706	TM-650 2.4.14.1	Solderability, Wave Solder Method	1979	IPC	3
707	TR-461	Solderability Evaluation of Thick and Thin Fused Coatings	1979	IPC	34
708	TR-468	Factors Affecting Insulation Resistance Performance of Printed Boards	1979	IPC	70
709	TM-650 2.3.3A	Chemical Resistance of Insulated Materials	1978	IPC	1
710	TM-650 2.3.24	Porosity of Gold Plating (Chemical Method)	1978	IPC	2

711	TM-650 2.1.2A	Pinhole Evaluation, Dye Penetration Method	1976	IPC	1
712	TM-650 2.2.12A	Thickness of Copper by Weight	1976	IPC	1
713	TM-650 2.4.2A	Ductility of Copper Foil	1976	IPC	1
714	TM-650 2.4.15A	Surface Finish, Metal Foil	1976	IPC	1
715	TM-650 2.5.14A	Resistivity of Copper Foil	1976	IPC	3
716	TR-482	New Developments in Thin Copper Foils	1976	IPC	54
717	TM-650 2.3.6A	Etching Ammonium Persulfate Method	1975	IPC	1
718	TM-650 2.3.7A	Etching Ferric Chloride Method	1975	IPC	1
719	TM-650 2.4.7A	Machinability, Printed Wiring Materials	1975	IPC	1
720	TM-650 2.5.2A	Capacitance of Insulating Materials	1975	IPC	1
721	TM-650 2.5.5A	Dielectric Constant of Printed Wiring Materials	1975	IPC	1
722	TR-470	Thermal Characteristics of Multilayer Interconnection Boards	1974	IPC	26
723	TM-650 2.4.5	Folding Endurance, Flexible Printed Wiring Materials	1973	IPC	1
724	TM-650 2.4.6	Hot Oil	1973	IPC	1
725	TM-650 2.4.11	Shear Strength Flexible Dielectric Materials	1973	IPC	1
726	TM-650 2.4.14	Solderability of Metallic Surfaces	1973	IPC	1
727	TM-650 2.5.4	Current Carrying Capacity, Multilayer Printed Wiring	1973	IPC	1
728	TM-650 2.5.12	Interconnection Resistance, Multilayer Printed Wiring	1973	IPC	1
729	4202A- AMD 2	NULL	0	IPC	1
730	2141A ERRATE	NULL	0	IPC	4
731	1752A ERRATE	NULL	0	IPC	2

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