Subject index for papers in Volume 37

Each index below is accompanied by an author's name and a page number; the author index contains the title of the paper and the names of coauthors, if any

page number; the author index contains the title of the paper and the names of coauthors, if any.			patterned electrodeposition In situ surface pH measurement	Dukovic	125
			during electrolysis using a rotating pH electrode The quartz resonator:	Deligianni	85
Subject	Author	Page	Electrochemical applications	Kanazawa	157
Alloys A rotating ring-disk stripping technique used to study electroplating of Sn-Pb from			Films, metal Conduction mechanisms in contaminant layers on printed circuit boards	White	243
methane sulfonic acid solutions	Horkans	97	Corrosion and protection of thin-line	_	
Analytical models			conductors in VLSI structures	Brusic	173
Modeling the cost of data communication for multi-node computer networks operating in the United States	Irvin	537	Films, oxide Application of X-ray spectroscopy to the study of electrochemically formed surface oxide films	Schrott	191
Computer organization and design A load-instruction unit for pipelined processors Proof of correctness of high-performance 3-1 interlock	Eickemeyer	547	Films, permalloy In situ surface pH measurement during electrolysis using a rotating pH electrode	Deligianni	85
collapsing ALUs	Phillips	12	Finite element analysis		
Copper Electroless plating of copper at a low pH level Mechanistic insights into metal-	Jagannathan	117	Finite element analysis for Solder Ball Connect (SBC) structural design optimization Head actuator dynamics of an IBM	Corbin	585
mediated electroless copper plating employing hypophosphite as a reducing agent	Gaudiello	107	5¼-inch disk drive Thermal modeling of the infrared reflow process for Solder Ball Connect (SBC)	Fazzio Mahaney	479 609
Corrosion Corrosion and protection of thin-line conductors in VLSI structures	Brusic	173	I/O devices, systems, and technology Architecture and performance of the	,	
Dielectrics Electrical characterization and performance limits of a flexible			ESPER-2 hard-disk drive servo writer	Ono	3
cable	Deutsch	22	Imaging technology Modeling X-ray proximity		
Electrodeposition A rotating ring-disk stripping technique used to study			lithography Infrared studies	Guo	331
electroplating of Sn-Pb from methane sulfonic acid solutions	Horkans	97	In situ infrared spectroscopy of the electrode-electrolyte interface	Seki	227

Feature-scale simulation of resist-

109

Interconnection technology Attachment of Solder Ball Connect (SBC) packages to circuit cards	Ries	597	Resist materials and processes for X-ray lithography The Helios 1 compact	Seeger	435
Finite element analysis for Solder Ball Connect (SBC) structural design optimization	Corbin	585	superconducting storage ring X-ray source X-ray lithography beamlines in the	Wilson	351
Solder Ball Connect (SBC) assemblies under thermal loading:	Coroni	363	IBM Advanced Lithography Facility	Silverman	395
I. Deformation measurement via moiré interferometry, and its			X-ray lithography from 500 to 30 nm: X-ray nanolithography	Smith	319
interpretation Solder Ball Connect (SBC) assemblies under thermal loading: II. Strain analysis via image	Guo	635	X-ray lithography in IBM, 1980–1992, the development years X-ray mask repair	Wilson Blauner	299 421
processing, and reliability considerations Thermal modeling of the infrared	Choi	649	Logic design and technology Proof of correctness of high- performance 3-1 interlock		
reflow process for Solder Ball Connect (SBC)	Mahaney	609	collapsing ALUs	Phillips	12
Interfaces	·		Management science		
Anodic dissolution of metals at high rates	Dotto	207	Modeling the cost of data communication for multi-node		
Contact charging of organic	Datta		computer networks operating in the United States	Irvin	537
materials: Ion vs. electron transfer In situ infrared spectroscopy of the	Diaz	249	Manufacturing		
electrode-electrolyte interface Interferometry	Seki	227	Architecture and performance of the ESPER-2 hard-disk drive servo writer	Ono	3
Solder Ball Connect (SBC) assemblies under thermal loading: I. Deformation measurement via			Attachment of Solder Ball Connect (SBC) packages to circuit cards Component procurement and	Ries	597
moiré interferometry, and its interpretation Solder Ball Connect (SBC) assemblies under thermal loading:	Guo	635	allocation for products assembled to forecast: Risk-pooling effects Flexible simulation of a complex	Grotzinger	523
II. Strain analysis via image processing, and reliability considerations	Choi	649	semiconductor manufacturing line using a rule-based system Statistical modeling in manufacturing: Adapting a diagnostic tool to real-	Tibbitts	507
Knowledge systems			time applications	Osborn	491
Flexible simulation of a complex semiconductor manufacturing line using a rule-based system	Tibbitts	507	Masks, X-ray Electron beam lithography tool for manufacture of X-ray masks Modeling X-ray proximity	Groves	411
Large-scale computing			lithography X-ray lithography from 500 to 30 nm:	Guo	331
A load-instruction unit for pipelined processors	Eickemeyer	547	X-ray nanolithography X-ray mask repair	Smith Blauner	319 421
Liquids Mass transfer of an impinging jet confined between parallel plates The quartz resonator:	Moreno	143	Materials technology Attachment of Solder Ball Connect (SBC) packages to circuit cards	Ries	597
Electrochemical applications	Kanazawa	157	·	11100	571
Lithography, electron-beam Electron beam lithography tool for manufacture of X-ray masks	Groves	411	Mathematics (applied) Component procurement and allocation for products assembled to forecast: Risk-pooling effects Statistical modeling in manufacturing:	Grotzinger	523
Lithography, X-ray Design considerations for the IBM	T	205	Adapting a diagnostic tool to real- time applications	Osborn	491
X-ray lithography facility Early history of X-ray lithography	Leavey	385	Mechanical design Head actuator dynamics of an IBM		
at IBM Electron beam lithography tool for	Spiller	291	5 ¹ / ₄ -inch disk drive	Fazzio	479
manufacture of X-ray masks Modeling X-ray proximity	Groves	411	Mechanics and mechanisms		
lithography Performance of the IBM synchrotron	Guo	331	Architecture and performance of the ESPER-2 hard-disk drive servo		
X-ray source for lithography	Archie	373	writer	Ono	3

110

Metallurgy Anodic dissolution of metals at high rates	Datta	207	The quartz resonator: Electrochemical applications	Kanazawa	157
Attachment of Solder Ball Connect (SBC) packages to circuit cards	Ries	597	Polymers Contact charging or organic materials: Ion vs. electron transfer	Diaz	249
Models and modeling Component procurement and allocation for products assembled to forecast: Risk-pooling effects Electrical characterization and performance limits of a flexible	Grotzinger	523	Printed circuits Conduction mechanisms in contaminant layers on printed circuit boards	White	243
cable Feature-scale simulation of resist-	Deutsch	22	Reliability Finite element analysis for Solder		
patterned electrodeposition Head actuator dynamics of an IBM	Dukovic	125	Ball Connect (SBC) structural design optimization	Corbin	585
5¼-inch disk drive Mass transfer of an impinging jet	Fazzio	479	Thermal-mechanical strain characterization for printed wiring		
confined between parallel plates Modeling the cost of data	Moreno	143	boards Simulation	Wu	621
communication for multi-node computer networks operating in the United States Statistical model in manufacturing:	Irvin	537	Flexible simulation of a complex semiconductor manufacturing line using a rule-based system	Tibbitts	507
Adapting a diagnostic tool to real- time applications	Osborn	491	Solder ball connect (SBC) technology Attachment of Solder Ball Connect		
Monte Carlo methods Component procurement and allocation for products assembled			(SBC) packages to circuit cards Finite element analysis for Solder Ball Connect (SBC) structural	Ries	597
to forecast: Risk-pooling effects	Grotzinger	523	design optimization Solder Ball Connect (SBC)	Corbin	585
Optical science and technology X-ray lithography beamlines in the IBM Advanced Lithography Facility	Silverman	395	assemblies under thermal loading: I. Deformation measurement via moiré interferometry, and its interpretation Solder Ball Connect (SBC)	Guo	635
Packaging Attachment of Solder Ball Connect (SBC) packages to circuit cards Finite element analysis for Solder	Ries	597	assemblies under thermal loading: II. Strain analysis via image processing, and reliability considerations	Choi	649
Ball Connect (SBC) structural design optimization Solder Ball Connect (SBC)	Corbin	585	Thermal-mechanical strain characterization for printed wiring boards	Wu	621
assemblies under thermal loading: I. Deformation measurement via moiré interferometry, and its			Thermal modeling of the infrared reflow process for Solder Ball Connect (SBC)	Mahaney	609
interpretation Solder Ball Connect (SBC) assemblies under thermal loading: II. Strain analysis via image processing, and reliability	Guo	635	Solid modeling Head actuator dynamics of an IBM 51/4-inch disk drive	Fazzio	479
considerations Thermal-mechanical strain characterization for printed wiring	Choi	649	Statistics Statistical modeling in manufacturing: Adapting a diagnostic tool to real-		
boards Thermal modeling of the infrared	Wu	621	time applications Surface passivation	Osborn	491
reflow process for Solder Ball Connect (SBC)	Mahaney	609	Application of X-ray spectroscopy to the study of electrochemically formed surface oxide films	Schrott	191
Photoresists Resist materials and processes for X-ray lithography	Seeger	435	X-ray technology Performance of the IBM synchrotron X-ray source for lithography	Archie	373
Plating Electroless plating of copper at a low pH level Mechanistic insights into metal-	Jagannathan	117	The Helios 1 compact superconducting storage ring X-ray source	Wilson	351
mediated electroless copper plating employing hypophosphite as a reducing agent	Gaudiello	107			