Defects	Process	Reliability	Safety	Operation	Recipe	PM	Critical#H/W&S/W Commonality Component	FAB 1 ArF RF³ (70050-5023A) Description/quantity	Part#
							SOFTWARE/COMPUTER/NETWORKING		
			x	x			Software Rev	---	Cypress version will differ on 6/04
			x				Main Controller	Pentium III 600MHz	Windows2000 Server (ML)
							WAFER TRANSPORT		
			x	x		x	Wafersize	8" & 12"	
			x				FOUP & SMIF Capability	FOUP, but no 200mm SMIF	200mm open cassette
x	x	x					Type Of Robot	RF3 TR	
	x						Upper Robot Arm	1	
	x						Lower Robot Arm	1	
		x		x			Main Handler Units (Inter-Cell)	200mm & 300mm capable	End-effector change
	x		x				# MHU Robots	4	
	x		x				Type Of Wafer Detection Sensor (Robot)	Break Beam	
	x	x	x				Type Of Robot	X-Z-Theta	
		x		x			Robot Speed	4 sec	
			x	x			Type Of Indexer Arm	Vac.Less	
			x	x			Type Wafer Detecion Sensor (at Indexer)	Reflective	
x	x		x	x			Interface Unit	ASML /1250 IFB	
x			x	x			Interfaced Stepper Ports	2	
			x	x			Type Of Wafer Detection Sensor	Break beam	
							Facilities connections	Back-side	
							Coat Cell #1 & #2	Size specific (200-300mm)	Divide by 2 to get # modules / cell
							ADHESION PLATES		
			x	x			# Plates	2	
x	x			x	x	x	Type Of Plates	LPAH	
x						x	Heater	Mica - Electrical Element	
x							Proximity Distance	Ceramic.Balls, Dia=3/32"	
x				x	x		Type Of TCU	PID Controls	
x					x		Accuracy Of TCU	+/-0.2deg	
x					x		Temperature Sensor	TC	
			x	x			Location	see drawing	
x			x			x	LPAH Vacuum System	Yes	
							ARC PLATES		
			x	x			# Plates	4	
x	x			x	x	x	Type Of Plates	Hot Plate 250C max	
x						x	Heater	Electrical Element	
x							Proximity Distance	Ceramic.Balls, Dia=3/32"	
x				x	x		Type Of TCU	PID Controls	
x					x		Accuracy Of TCU	+/-0.2deg	
x					x		Temperature Sensor	TC	
			x	x			Location	see drawing	
							SOFTBAKE PLATES		
			x	x			# Plates	6	
x	x			x	x	x	Type Of Plates	Position- Rapid Hot Plates	
x						x	Heater	Heat Pipe w/ integrated cooling arm	
x							Proximity Distance	Ceramic.Balls, Dia=3/32"	
x				x	x		Type Of TCU	PID Controls	
x					x		Accuracy Of TCU	+/-0.2deg	
x					x		Temperature Sensor	TC	
			x	x			Location	see drawing	
							COOL PLATES		
			x	x			# Plates	8	
x	x			x	x	x	Type Of Plates	Cooling Plate	
x						x	Cooling Pipe1	2	
x						x	Cooling Pipe 2	2	
x							Proximity Distance	Ceramic.Balls, Dia=3/32"	
x						x	Type Of TCU	PID Controls	
x				x	x		Accuracy Of TCU	+/-0.2deg	
x					x		Location	see drawing	
x					x		LPAH Vacuum System	Yes for ACP	
c							**COAT CUPS CONTROLLERS**		
x				x		x	# Spin Modules	6	
	x				x		# Spin modules with VPS+ option	6	
							Resist Cups (Upper)	Poly Propylene	
	x				x	x	Resist Cups (Lower)	Poly Propylene	
			x				Baffle Disc (Upper)	Teflon	
	x				x	x	Baffle Disc (Lower)	Teflon	
x					x	x	Type Of Chuck	PEEK	
	x				x	x	Size Of Chuck	Substrate dependent	
	x		x	x	x		# Resist Nozzles/cup	6 each	
								U2,U5 & U3,U6 (Resist) -- U1,U4 (BARC)	
x	x						Nozzle#1	2.0/7.0 -- 2.0/7.0	
x	x						Nozzle#2	2.0/7.0 -- 2.0/7.0	
x	x						Nozzle#3	2.0/7.0 -- 2.0/7.0	
x	x						Nozzle#4	2.0/7.0 -- xxxx	
x	x						Nozzle#5	2.0/7.0 -- xxxx	
x	x						Nozzle#6	2.0/7.0 -- xxxx	
	x				x	x	Type Of Resist Nozzle	Teflon Tube w/ Taper	

Defects	Process	Reliability	Safety	Operation	Recipe	PM	Critical H/W&S/W Commonality Component	Description/quantity	Part#
				x	x		Dimensions Of Resist Nozzles	OD/ID=4/3	
x						x	Suck Back Unit	TDV Valve	
x			x				# BARC Cups	2	
x			x				BARC Cups (Upper)	Teflon	
							BARC Cups (Lower)	Poly Propylene	
			x				Baffle Disc (Upper)	Teflon	
	x				x	x	Baffle Disc (Lower)	Teflon	
				x	x		Type Of BARC Chuck	Delrin	
	x				x	x	Size Of BARC Chuck	Dia=80mm	
	x				x	x	# BARC Nozzles/cup	3	
	x		x	x			Type Of BARC Nozzle	Teflon Tube w/ Taper	
	x				x	x	Dimensions Of BARC Nozzles	OD/ID=4/3	
x	x						# Future Development Nozzles/Cup (already plumbed)	1	
				x	x		Dimensions Of EBR Nozzles Orifice	0.3mm	
x						x	BSR Nozzle	2each	
x				x			CR Nozzle	1	
x				x			Exhaust Hose	3	
				x	x		Exhaust Hose (Outer)	3	
							Exhaust Damping	Yes	
x						x	Pot Rinse Flowmeters (with sensors)	Tokyo Keiso	
x						x	BSR Flowmeters (with sensors)	Tokyo Keiso	
x			x				HMDS Flowmeters (with sensors)	Tokyo Keiso	
	x				x		Cup Rinse Flowmeter (with sensor)	Tokyo Keiso	
	x				x		EBR Flowmeters (with sensors)	Tokyo Keiso	
							Develop Cell #3	Size specific (200-300mm)	Divide by 2 to get # modules / cell
							DEVELOP CUPS CONTROLLERS		
	x				x		# Develop Cups	4	5 possible
x						x	Develop Cups (Upper)	PVC	
x						x	Develop Cups (Lower)	PVC	
x						x	Baffle Disc (Upper)	PVC	
x						x	Baffle Disc (Lower)	PVC	
x					x		Type Of Chuck	PEEK	
							Size Of Chuck	Substrate dependent	
				x			# Develop Nozzles/Cup	2	
	x		x	x		x	Type Of Develop Nozzles	Slit-scan Nozzle	
x	x		x				Dimensions Of Develop Nozzles	Whole length/full diameter applicator slit	
x	x			x			# DI Water Nozzle	2	
				x	x		Type Of DI Water Nozzle	Teflon Tube	
x	x			x			Dimensions Of DI Water Nozzle	OD/ID=6/4	
x	x				x		Type Of Develop Flowmeters	Tokyo Keiso	
x	x				x		Sensors	Yes	
				x		x	Type Of DI Water Flow Meter (Stop)	Tokyo Keiso	
x	x			x			Sensors	Yes	
x	x				x		Type Of DI Water Flow Meter (Bottom)	Tokyo Keiso	
x	x			x			Sensors	Yes	
x	x					x	Develop Chemistry Degassing unit	Yes; 1 per nozzle	Miura / MJ-G204-P8
							EEW UNIT		
x	x			x			# EEW Units	2	
x	x			x			Type of EEW	EEW	
		x	x		x		Spin chuck	Wafer Vacuum suction	
x	x		x				Vacuum Seal	AF10-22-8	
x	x	x	x		x	x	Video measure sensor	3X2CA-PLC8-10M	
x							Syncro Belt	420-3M-6	
x			x			x	Photomicrosemnsor	EE-SX670	
	x				x		Photomicrosemnsor	EE-SX671	
		x	x				Solenoid Valve	V050E1-21-5W	
	x		x			x	UV Lamp	L6190	
	x		x				Quartz Fiber	A5875-70	
			x				Stepping motor	PX243G01-01B	
	x	x	x		x	x	Stepping motor	PH566-A-A40	
	x				x		Stepping motor	RH-8-50-PM-SP-2	
	x			x			Motor driver	RD021M81R1	
		x					Motor driver	CSD5814VN	
x	x			x	x		Motor Driver	RD021M8R56	
							POST EXPOSURE BAKE PLATES		
			x	x			# Plates	6	
x	x			x	x	x	Type Of Plates	3 P-RHP (300mm) and 3 P-SRHP(200mm)	
x						x	Heater	Heat Pipe w/ integrated cooling arm	
x							Proximity Distance	Ceramic.Balls, Dia=3/32"	
x				x	x		Type Of TCU	PID Controls	
x					x		Accuracy Of TCU	+/-0.2deg	
x					x		Temperature Sensor	TC	
			x	x			Location	see drawing	
							COOL PLATES		
			x	x			# Plates	2	
x	x			x	x	x	Type Of Plates	Cooling Plate	

Defects	Process	Reliability	Safety	Operation	Recipe	PM	Critical H/W&S/W Commonality Component	Description/quantity	Part#
x						x	Cooling Pipe1	2	
x						x	Cooling Pipe 2	2	
x							Proximity Distance	Ceramic.Balls, Dia=3/32"	
x						x	Type Of TCU	PID Controls	
x			x		x		Accuracy Of TCU	+/-0.2deg	
x					x		Location	see drawing	
x					x		LPAH Vacuum System	Yes for ACP	
							CHEMICAL DELIVERY SYSTEM		
x			x	x	x	x	System Name	DNS	
x			x	x	x	x	Temperature Control Of Resist Lines	Controlled from Mainbody - Nozzle tip	
							Placement	Vertical	
							Chemical containers	Nowpaks(4 Liter)	
							Source Bottles/pump	1/pump; no bottle switching	
x			x				Type Of Pumps	PDS-105G-KV5C	
x	x				x		Chemical supply	Bulk	Canister Cabinet req'd
		x					Drain Configuration	Direct gravity to fac line	Pump to Catch-can Fab 1?
		x			x		Interface signal for bulk chemical supply	Yes	
x	x	x			x		Quick-change Filters	PALL EZD-2; 0.04um	
							ENVIRONMENTAL FILTERS		
x	x		x	x	x		Temperature Control	Yes	Integrated:each spin module(coat & dev
x	x				x	x	Humidity Control	Yes	Integrated; each coat module
							Spike Control	No	
x			x				Amine Sensor ports	Yes	In-line
x			x				Environmental Filters	Yes	ESI Vaporsorb II
							ALARM SETTINGS - LAYOUT		
x			x			x	Light Tower	Yes	Cypress 4 color -remote connection
x						x	EMO	Yes	
							Interlocks	Yes	
			x				Remote Panel	Yes	
		x	x				Orientation	R-L	
							CABINETS	L x W x H (mm)	
			x				SC Cabinet	1000 x 780 x 1750	Able to be remotely located
			x				SD Cabinet	1300 x 780 x 1750	Able to be remotely located
							Source Bottle Cabinet	NONE	All 4L Nowpacks in Mainbody
			x				IF-B ACU	700x800x2000	Able to be remotely located
			x				ETU Controller Cabinet	540x780x1750	Able to be remotely located
			x				Contoller Cabinet	860 x 780 x 1750	Able to be remotely located
			x				Power Box	900 x 1400 x 1910	Able to be remotely located