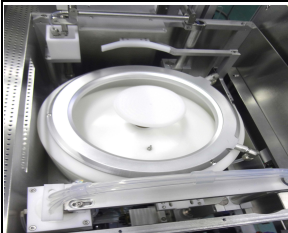






PCT-150CRS TRACK SYSTEM

STANDARD PRODUCTION or R&D WITH DUAL TRACKS (1 COATER, 1 DEVELOPER) TOOL SET

Please contact Sales sales@picotrack.com for more information



Coater Module	Developer Module	VPO Module	HPO Module	CP Module
				

Track System Specification	Description																																		
System designed	US Standard System																																		
System Configuration	<table border="1"> <tr> <td rowspan="4">BLK</td> <td>VPO</td> <td>HPO</td> <td>HPO</td> <td>BLK</td> <td rowspan="4">BLK</td> </tr> <tr> <td>BLK</td> <td>BLK</td> <td>HPO</td> <td>BLK</td> </tr> <tr> <td>BLK</td> <td>BLK</td> <td>CP</td> <td>BLK</td> </tr> <tr> <td>CP</td> <td>CP-CENT</td> <td>CP-CENT</td> <td>BLK</td> </tr> <tr> <td colspan="3">TRACK #1 SHUTTLE ARM</td> <td colspan="3">TRACK #2 SHUTTLE ARM</td> </tr> <tr> <td rowspan="2">COAT</td> <td>SEND</td> <td>SEND</td> <td>SEND</td> <td>SEND</td> <td rowspan="2">DEV</td> </tr> <tr> <td>REC</td> <td>REC</td> <td>REC</td> <td>REC</td> </tr> </table>	BLK	VPO	HPO	HPO	BLK	BLK	BLK	BLK	HPO	BLK	BLK	BLK	CP	BLK	CP	CP-CENT	CP-CENT	BLK	TRACK #1 SHUTTLE ARM			TRACK #2 SHUTTLE ARM			COAT	SEND	SEND	SEND	SEND	DEV	REC	REC	REC	REC
BLK	VPO		HPO	HPO	BLK	BLK																													
	BLK		BLK	HPO	BLK																														
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COAT	SEND	SEND	SEND	SEND	DEV																														
	REC	REC	REC	REC																															
(*Configuration available upon request)																																			
System dimension	Length: 93.5" ; Width: 45" ; Height: 90"																																		
Wafer size (workable dual size)	Up to 6" (150mm) or 4" & 6" auto conversion																																		
Wafer shape	Round/Square/Rectangular/Triangle/Special																																		
Wafer material	Silicon/Sapphire/GaAs/ Ceramic...																																		
Wafer sensor	Optical sensor mapping																																		
System controller	PC & PLC Controller with Windows OS based																																		
Chemical canister cabinet	Solvent (EBR, HMDS, Cleaning...), developer liquid																																		
Pumps cabinet	Photoresist pumps (IDI, Cybor..), dispenser unit, & photoresist bottles																																		
Indexer wafer cassettes capacity	4 or 8 (available upon request)																																		
Shuttle Robot Arm	2 Robot Arm and dual end effectors																																		
System Fan Filter Unit (FFU)	optional																																		
System SECs/GEM	optional																																		
Coater	1 module																																		
Catch Cup Set	Up/down motion																																		
Spindle Unit	Fixed position																																		
Maximum spin speed	7000 rpm																																		
Spin motor type	Servo																																		
Spin speed accuracy	± 3 rpm																																		
Acceleration range	0-50000 rpm/sec																																		
Dispense arm accuracy	± 0.1 mm																																		
Wafer centering	± 0.1 mm																																		
Dispense arm motion control	Stepper motor drive and rotation																																		
Dispense arm # 1 & nozzles	3x or more (3/16" or 1/4" OD) (Standard)																																		
Dispense arm # 2 & nozzles	3x or more (3/16" or 1/4" OD) (Optional)																																		
Dispense method	Static, and radial																																		
Pre-dispense function	Yes																																		
Top/Bottom EBR	Yes																																		
Catch-cup rinse(CCR)	Optional																																		
Cleaning tip nozzle	Optional																																		
Humidity & Temperature control	Optional																																		
Photoresist temperature control	Optional (≤ 1°C; 10-50°C range)																																		
Coating Type	Regular, SOG, PG, and Spray (available upon request)																																		
Developer	1 module																																		
Catch Cup Set	Up/down motion																																		
Spindle Unit	Fixed position																																		
Maximum spin speed	7000 rpm																																		
Spin motor type	Servo																																		
Spin speed accuracy	± 3 rpm																																		

Acceleration range	0-50000 rpm/sec
Spin direction	Clockwise (+) & counter clockwise (-)
Dispense arm motion control	Stepper motor drive and rotation
Dispense arm accuracy	± 0.1 mm
Wafer centering tolerance	± 0.1 mm
Dispense arm # 1 nozzles	1 Spray+ 1 Stream or 2 spray+ 2 stream (Standard)
Dispense arm # 2 nozzles	1 Spray+ 1 Stream or 2 spray+ 2 stream (Optional)
Negative developer nozzles	Cone or fan spray with N2 air assist (Upon request)
Developer dispense type	Stream, Puddle, Fan spray, Cone spray....
Dispense method	Static, radial and sweep
DI water top and back side rinse	Yes
N2 Air Ring back side	Yes
N2 Blow-off top nozzle	Optional
Developer liquid Temp. controller	Optional (≤ 1°C; 10-50°C range)
Vapor Prime Ovent (VPO)	1 module (Stack up)
VPO block type	Aluminum anodized with vacuum slots
VPO Temperature controller	Watlow P.I.D with over heating protection
Temperature thermal probe	RTD or TC
Temperature range	Up to 200°C, Δt: 50°C ≤ 200s
Temperature uniformity	± 1°C (25-150°C), ± 2°C (151-200°C)
HMDS prime method	Fume shower nozzles on top by pressurized N2 with bubbler
Wafer contact angle	≥ 65° on prime silicon wafer
Contact angle uniformity	≤ 1.5° on prime base silicon wafer
Wafer Carrier	3 pins controlled by stepper motor
Bake method	Contact, vacuum & purge bake
Hot Plate Oven (HPO)	3 modules (Stack up)
HPO block type	Aluminum anodized with vacuum slots or standoff proximity
HPO Temperature controller	Watlow P.I.D with over heating protection
Temperature thermal probe	RTD or TC
Temperature range	25-250°C, Δt: 50°C ≤ 200s (>250°C option)
Temperature uniformity	± 1°C (25-150°C), ± 2°C (151-250°C)
Wafer Carrier	3 pins controlled by stepper motor
Bake method	Contact/ Proximity bake/ or fixed proximity
Chill Plate & Centering (CP-CENT)	4 or 8 modules (Stack up)
Chill Plate block type	Aluminum anodized with vacuum slots
Chill Plate Temperature control	House cooling water with flowmeter (18°C to 30°C)
Chill method	Contact
Cooling Water Temperature controller	Optional
Wafer carrier	3 pins controlled by stepper motor and cylinder
Wafer Centering	Integrated