Introduction

X series is a professional deal with all kinds of advanced chip performance test, comprehensive and efficient semi-automatic wafer prober, integrates the electrical, light wave, microwave, etc, to 60 ℃ ~ 300 ℃ high temperature KuanQu and testing precision, can match various test application environment, at the same time super efficient well test run of the system speed > 70 mm/s(Optional for 100mm/sec , 200mm/sec), effectively improve testing efficiency by more than 40%, for all kinds of wafers and provide excellent reliability test device.

Application Direction

All kinds of devices and Wafer, etc., conduct characteristic analysis of I-V, C-V, optical signal, RF, 1/ F noise, RF test, high-power Wafer test, etc

Product Feature

- Super efficient and excellent test running speed >70mm/s, test efficiency increased by more than 40%(optional for 100mm/s, 200mm/s)
- Advanced 3 times patented optical microscopy system, high precision measurement and dynamic monitoring, more convenient operation of the point needle
- -60°C~300°C ultra-high temperature wide area
- Software automation test, precise calibration of mechanical accuracy
- Integrated control system, instrument fast and convenient access test
- Excellent test accuracy, operating efficiency and system stability
- Support automatic expansion and upgrade

Custom design solutions for special dimension or performance are possibile on request

Model		SX-6	SX-8	SX-12
Dimension（W*L*H）		1000mm * 1400mm * 1400mm	1100mm * 1500mm * 1400mm	1200mm * 1600mm * 1400mm
Weight(about)		1000KG	1150KG	1350KG
Electricity Demand		AC220V，50~60Hz		
CDA demand		0.4~0.8Mpa		
Chuck	Size	6″	8″	12″
	X-Y Travel range	200mm * 300mm	250mm * 400mm	350mm * 500mm
	X-Y Resolution	0.1μm		
	X-Y Repeatability	≤±1μm		
	X-Y Move speed	≥70mm/sec(Optional for 100mm/sec , 200mm/sec)		
	Z Travel range	20mm		
	Z Resolution	0.1μm		
	Z Repeatability	≤±1μm		
	Z Move speed	≥20mm/sec		
	Theta Travel range	±10°	Theta resolution	0.0001°
	Sample Fixed mode	Vacuum adsorption , Independent control		
	Sample Exchange	Chuck quickly roll out for wafer fast exchange.		
	Structure	Triaxial ultra-low noise design,Gold plating, Chuck surface is electrical floating		
Platen	Specifications	O shape platen, 12 micropositioners available（When the octagon box is not installed）		

Specification

Model		SX-6	SX-8	SX-12
Microscope X-Y-Z	X-Y Travel range	2″* 2″		
	X-Y Resolution	0.1μm		
	X-Y Repeatability	±2μm		
	X-Y Move speed	≥10mm/sec		
	Z Travel range	5″		
	Z Resolution	0.1μm		
	Z Repeatability	≤ ±1μm		
	Z Move speed	≥10mm/sec		
Microscope	Variable magnification microscope	Zoom:15：1,Three gears and could display low(0.6X) and high(2.5X or 9X) magnification in the same time		
	Camera	Double cameras（200W or 500W Industrial digital camera）		
Micropositioner Specification	Mechanical resolution	10μm / 2μm / 0.7μm		
	X-Y-Z Move range	13mm-13mm-13mm		
	Current leakage	10pA / 100fA / 10fA		
	Connector type	Banana plug adapter/Coaxial /Three-axis/ SMA /SHV etc.		
	Base	Magnetic/vacuum adsorption base		
Temperature specification	Temperature range	- 60℃-200℃ (Standard), other Temperature range upon request		
	Temperature stability	±0.1℃		
	Tmeperature resolution	0.01℃		
	Heating time(12"chuck)	- 60℃ to +25℃ ≤ 10min +25℃ to +200℃ ≤10 min		
	Cooling time(12"chuck)	+ 200℃ to +25℃ ≤ 12min + 25℃ to -60℃ ≤ 25min		
	Noise	＜60dB		
	Heating method	Low Voltage DC(LVDC)/PID control		
	Refrigeration method	Refrigeration compressor		
Anti-Vibration	Anti-Vibration method	Air film anti-vibration system，Ensure nonvisible vibration in the screen when the microscope zooming in at 2000X		
	Vibration suppression	In the process of chuck movement, it can be extremely fast to ensure the stability of the chuck ≤1S, Improve the test efficiency.		
system mask	EMI shielding	> 20 dB (typical) @ 1 kHz to 20GHz		
	Light attenuation	≥ 120 dB		
	Spectral noise floor	≤ -150 dBVrms/rtHz		
	System AC noise	≤15 mVp-p (≤ 1 GHz)		

Software function	
Automatic wafer alignment	Automatic wafer height measurement and compensation
Automatic Die size measurement and auto mapping	Support Z, N shape test
Wafer map edit arbitrary	One touch automatic RF calibrate and probe tips cleaning
Demarcate difference data with Ink mark	Separation of OS and application software, can be upgraded independently.
Real-time test results display	Robust data storage and processing capabilities
Easy data management of the instrument input/output	Automatic data and curves storage and remote access
The test results can be divided into different bin values	Communication interface：R232/485/TCP/IP/GPIB
Multi tester fast integration , support both single Die testing and continuous testing	