

3D X-RAY Inspection Equipment

Model: AX9100vs

VISION SERIES



日联科技



Industrial X-Ray Intelligent Inspection Expert

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01 Demand Positioning

*PART
ONE*



Demand Positioning



①

**Micron close X-ray
tube**



②

High resolution FPD



③

**X-ray 3D scan to
reconstruct the
system**



④

**Planar 3D and
cone-beam 3D all
in one system**

02 Equipment Summary

P A R T
T W O



Equipment Introduction



Machine highlights

Microntube and high resolution FPD, X-ray 3D scan to reconstruct the system.



Imaging system

Planar CT and cone-beam CT dual system



Vision-NAVI

- High-resolution navigation
- Multi-angle image tracking system



Motion control system

- Inspecting by CNC programming
- High detection accuracy and high repeat positioning accuracy

Technical Parameters and Specifications

Configuration Parameter

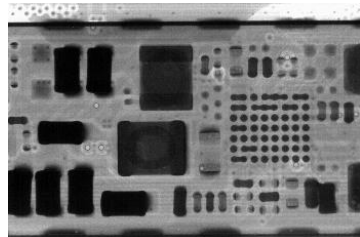
Hardware Configuration	X-Ray Tube	Type	closed	Software System	Software Introduction	Unicomp	Vision series off-line X-ray detection software V2.0
		Tube Voltage	130kV		Functional Characteristics	Inspection function	With 2D plane, 2.5D tilt, 3D scan reconstruction detection
		Tube Current	500μA				Programming detection, High detection accuracy and Repetition accuracy
	Imager	Type	High Resolution FPD				High resolution navigation system, Multi - Angle image tracking system
		AD Conversion	≥14bit	Machine Parameter	Dimension of Equipment	1400(L)*1720(W)*1800(H)mm	
		Image resolution	3μm		Weight	2750kg	
	Computer	Host	AI special industrial computer		Power Supply	220V 50Hz	
		Monitor	High definition display		Maximum Power	4 kW	
	Detectability	Maximum load size (2D/2.5D)	530(X)mm×530(Y)mm		Radiation Leakage Dose	<0.5μSv/h	
		Maximum detection size	500(X)mm×500(Y)mm		Warranty	one year for (whole machine)	
		Maximum load size (3D)	3D-P:450(X)mm×450(Y)mm 3D-A: 80(X)mm×200(Y)mm		Fingerprint Recognition and Radiation Monitoring Functions		
		High precision motion system	7 axis linkage		Supports interworking with MES, ERP, WMS and other systems		
		Maximum sample weight	10kg				
		Magnification	>1500X				

03 Equipment Features

*PART
THREE*



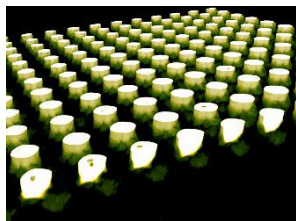
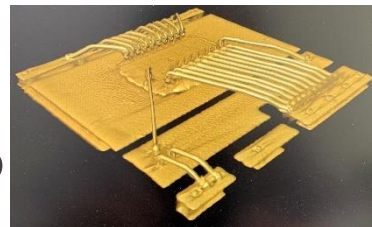
Application Fields



PCBA



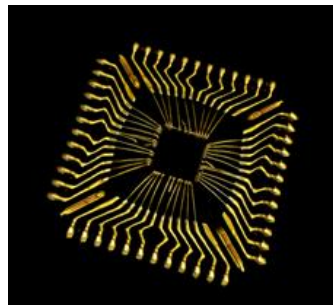
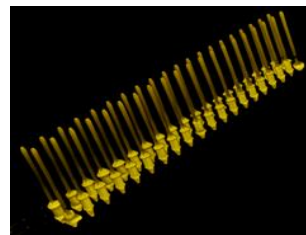
SEMI、LED



BGA/LGA



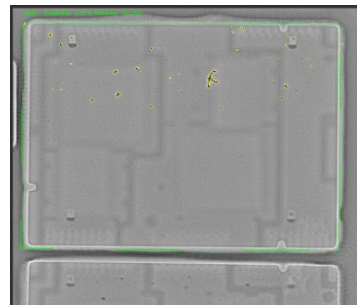
PTH



CSP/QFP



IGBT





Software Home Page



主页



设备状态



轴控制



导航监控



设置



指令



运行日志

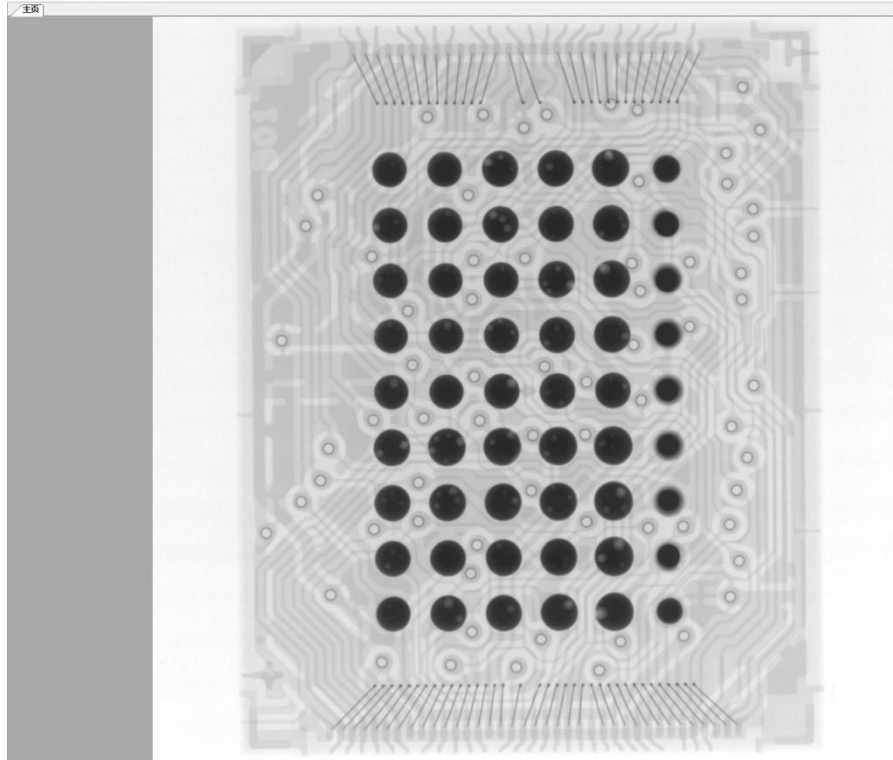


用户管理

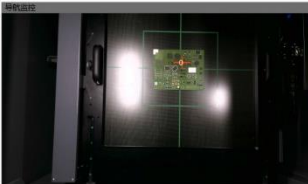


关于





导航监控



轴名	X	Y
PID_0	2239	609

轴控制

位置: 171.719

速度: 136.464

加速度: -43.565

扭矩X: 329.032

扭矩Y: 387.789

扭矩Z: 10.000

扭矩角度: 0.000

工作频率: PID_0

FDD: 16.8236

FDD: 245.882

分辨率: 0.005815822

模式: 2D

分辨率[um]: 5

投影数: 128

分辨率角度: 40.0°

更新参数

开始

目标位置

2.5D轴出

2.5D中心确认

产品尺寸设置

启动

暂停

设置

设备

☐ 轴点 ☐ 十字线

电压值: 129

电流值: 100

更新参数

开始X射线

关闭X射线

FXE

实时

暂停

出料

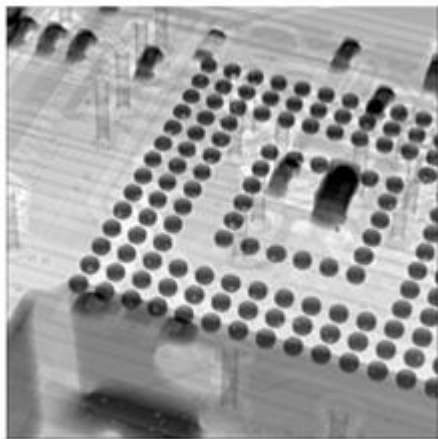
送料



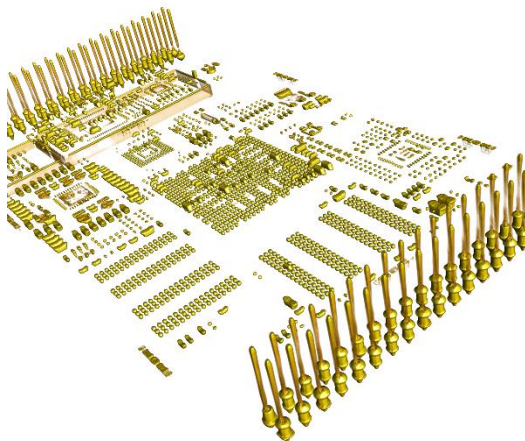
Functional Features



**Satisfy 2D plane and 2.5D tilt
detection**



**Satisfy 3D scanning and 3D
reconstruction**



**3D Micron close ray
detection system**



功率	焦点尺寸	功率	焦点尺寸	功率	焦点尺寸
$P < 4W$	$\leq 8\mu m$	$16W \leq P < 24W$	$\leq 35\mu m$	$40W \leq P < 50W$	$\leq 65\mu m$
$4W \leq P < 8W$	$\leq 12\mu m$	$24W \leq P < 32W$	$\leq 45\mu m$	$50W \leq P < 60W$	$\leq 75\mu m$
$8W \leq P < 16W$	$\leq 22\mu m$	$32W \leq P < 40W$	$\leq 55\mu m$	$60W \leq P < 65W$	$\leq 80\mu m$



Functional Features



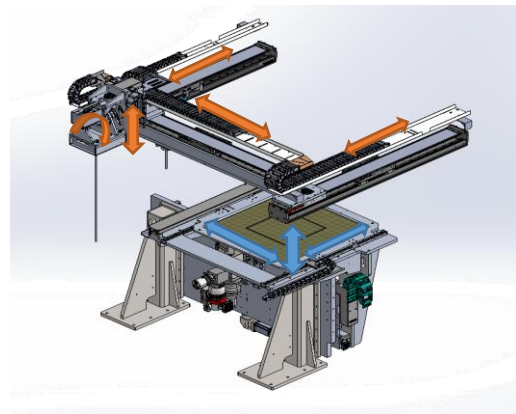
The loading platform

- It is driven by the loading platform motor.
- Adopt grinding screw and high precision guide rail.



Detector

- The detector is driven by high precision linear motor.
- The rotary function is realized by hollow turntable.

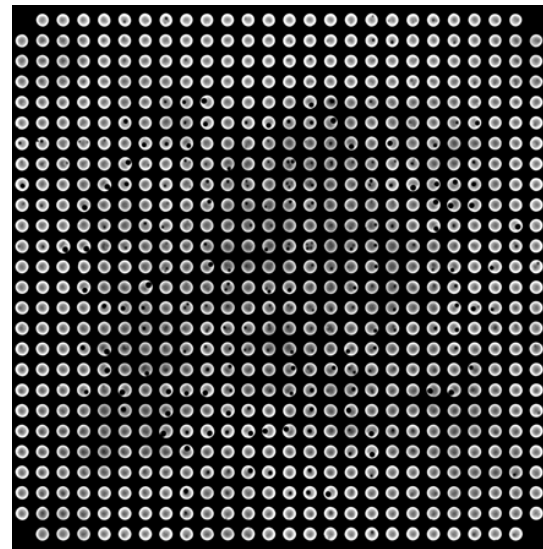
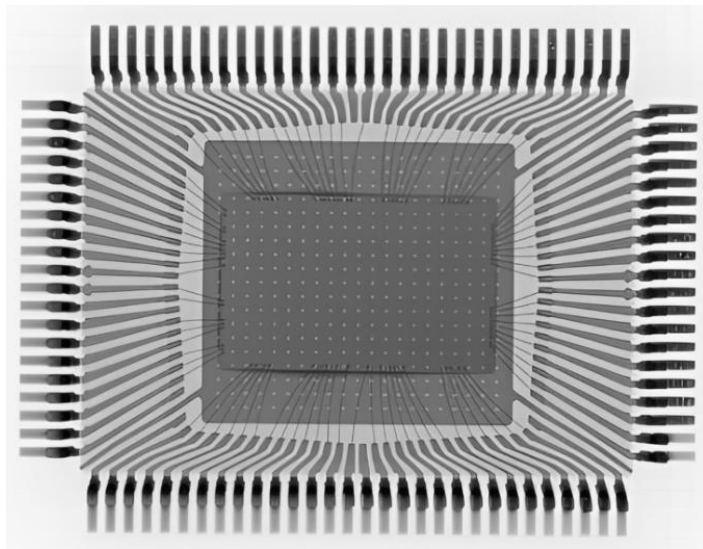
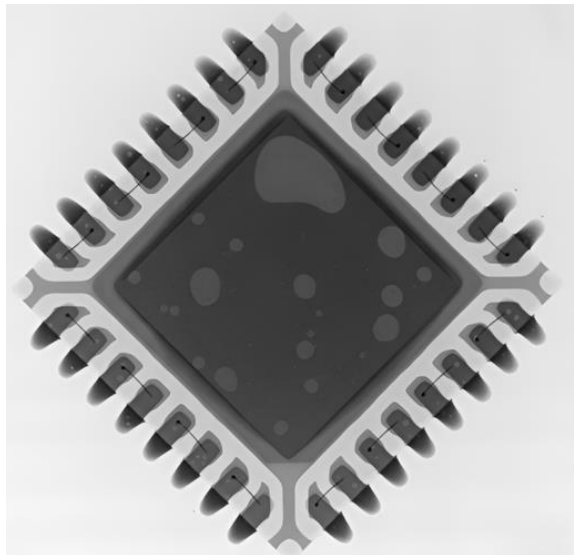


04 Image Results Show

P A R T
F O U R

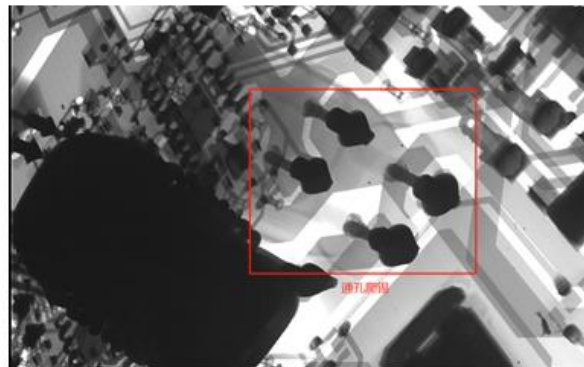
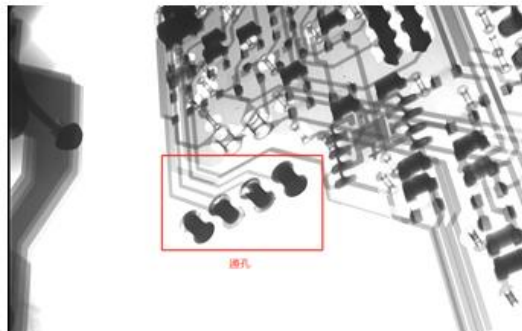
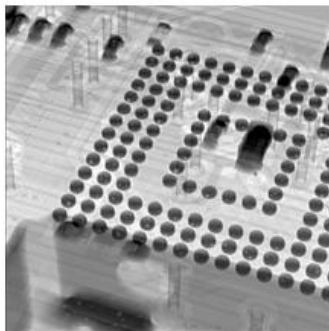
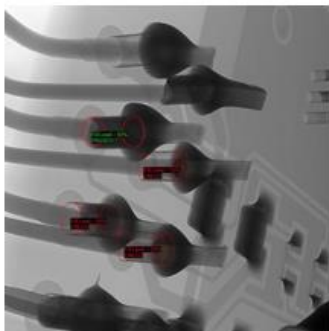


Example for 2D Testing Images



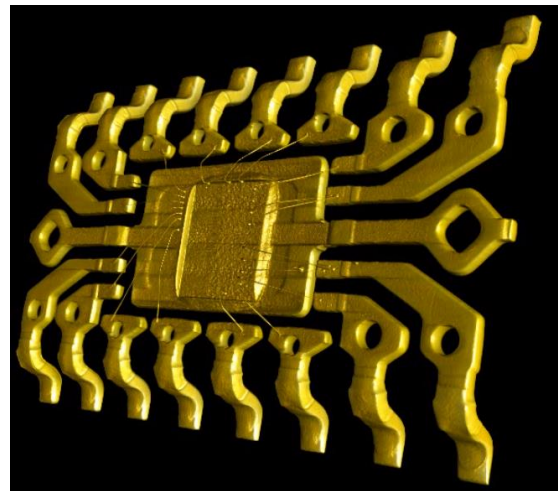
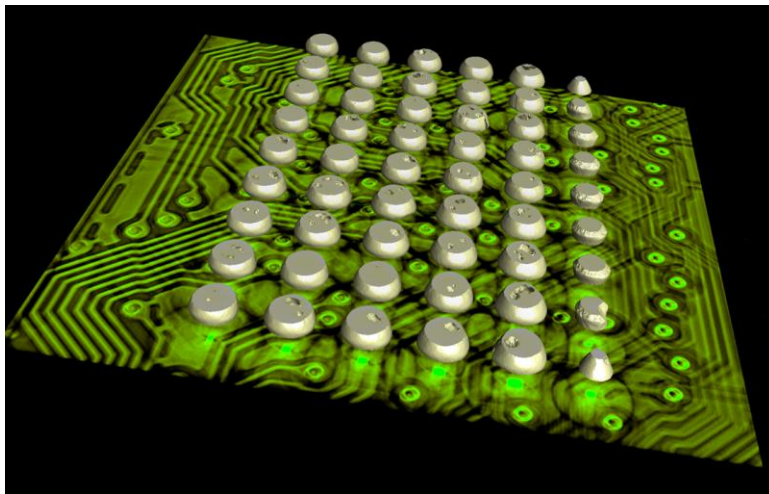
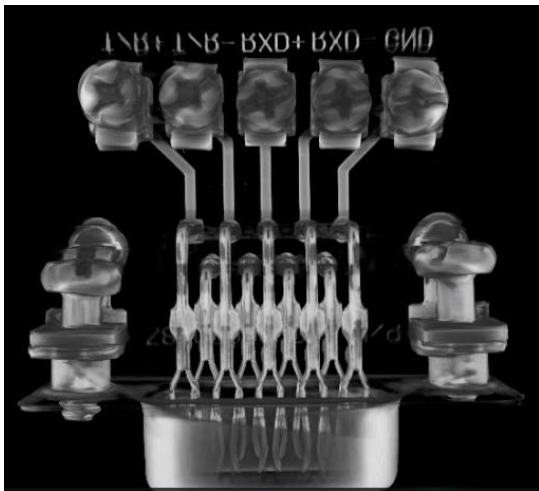


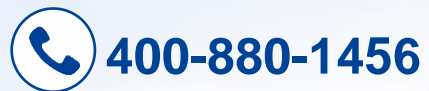
Example for 2.5D Testing Images





Example For 3D testing images





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