

AI+3D检测设备领导品牌

AI 3D AOI



○ *AI 3D AOI*

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**真3D+全2D+AI
一次检测所有缺陷
国际领先的深度学习AOI系统**

True 3D+Full 2D+AI detects all defects at one time,
the world's leading system for deep learning AOI

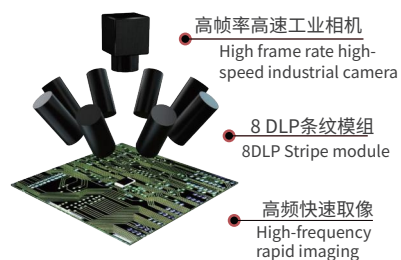
产品特点

PRODUCT FEATURES

- 最新自研 AAM 绝对精度测量系统, 精确检测01005元件焊点不良
The latest self - developed AAM absolute precision measuring system, accurate detection of solder joint defects in 01005 components.
- 多角度光源配合高分辨率相机和远心镜头, 大幅度提升检测效果
Multi-angle light source with high resolution camera and telecentric lens, greatly improve the detection effect
- 高精度运动系统, 确保高速运动下的走停精度
High-precision motion system ensures precise positioning during high-speed movements
- 可根据工厂需求对接集成 MES 系统
Can be integrated with MES according to factory requirements.
- 强大的 SPC 软件, 提供丰富准确的数据统计
Powerful SPC (Statistical Process Control) software provides rich and accurate data statistics.
- 一体式铸造, 高刚性平台
Integrated casting, high-rigidity platform

TRUE 3D DETECTION

Small Angle 4-way or 8-way projection system , eliminate small spacing occlusion to a greater extent

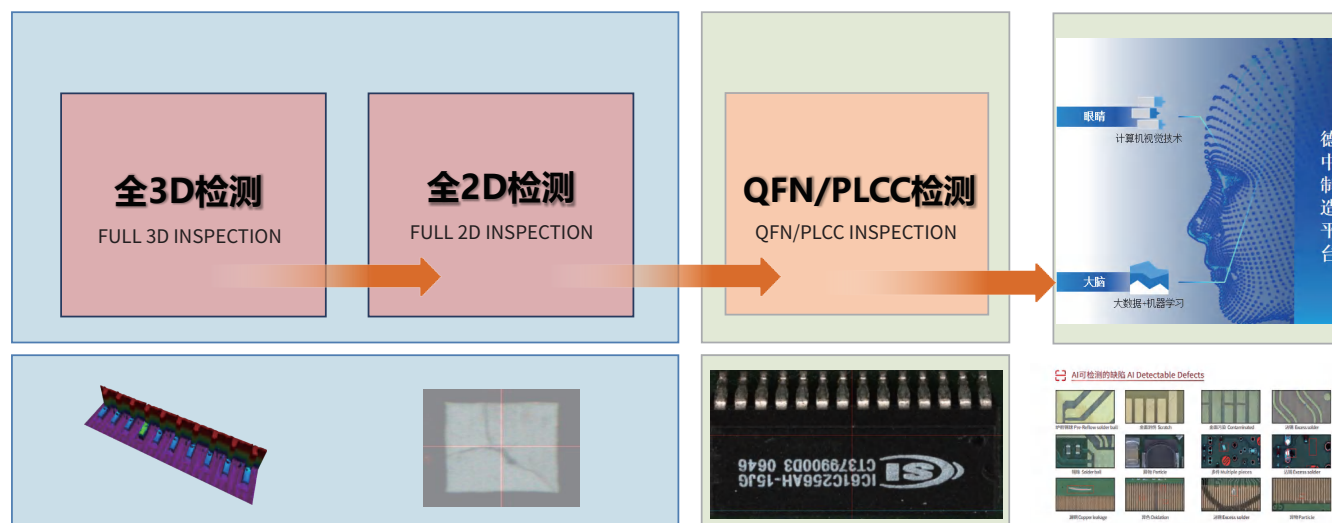


HARDWARE FEATURES

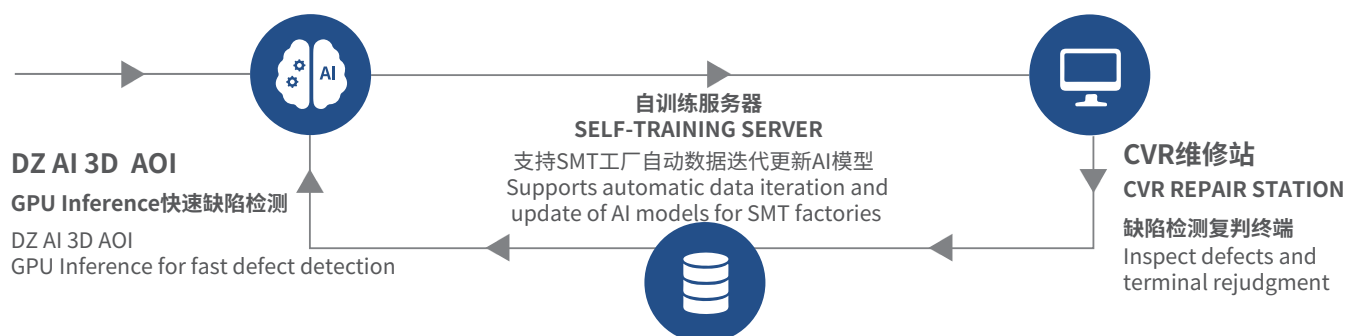
高反光抑制技术
精确检测焊点不良
High anti-reflection suppression technology for accurate detection of solder joint defects

3D AOI SOLUTION

It is a latest generation inspection technology that deeply integrates 3D+2D, AI rapid programming, AI "Golden Finger" inspection, and AI intelligent rejudgment systems. It has become the best 3D AOI solution.



AI DETECTION SYSTEM STRUCTURE



AI可检测缺陷

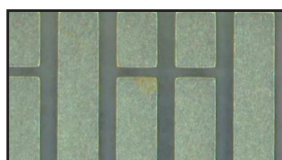
AI DETECTABLE DEFECTS



炉前锡球
Pre reflow solder ball



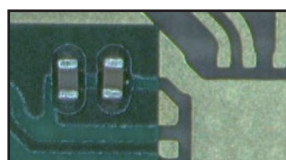
金面划伤
Gold surface scratch



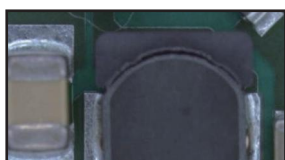
金面污染
Gold surface contamination



沾锡
Excess solder



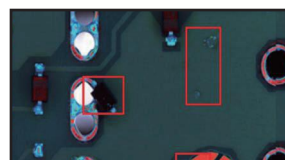
锡珠
Solder ball



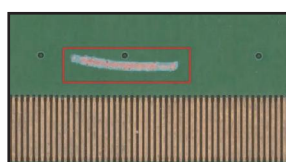
异物
Foreign material



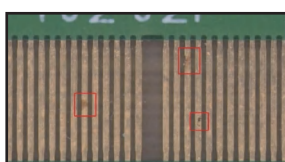
多件
Extra components



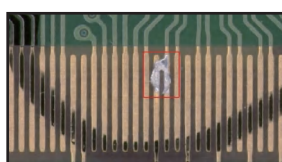
沾锡
Excess solder



漏铜
Copper Leakage



异色
Oxidation



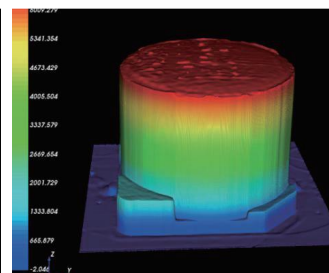
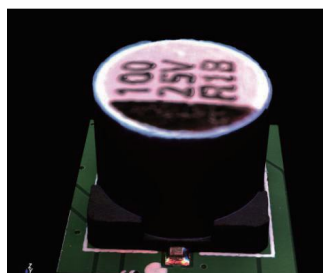
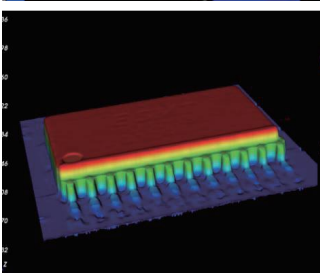
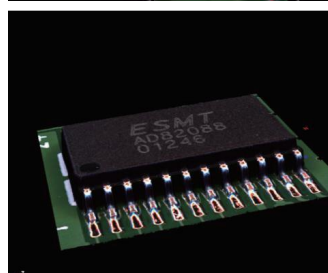
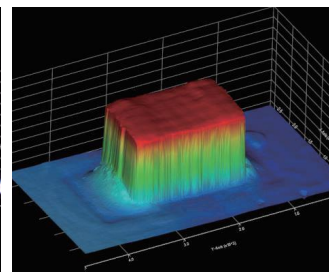
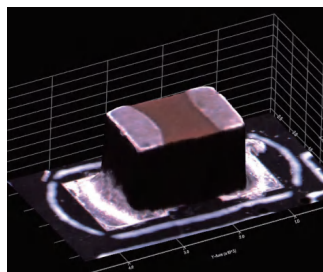
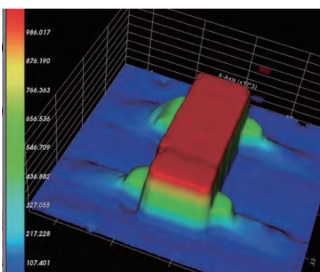
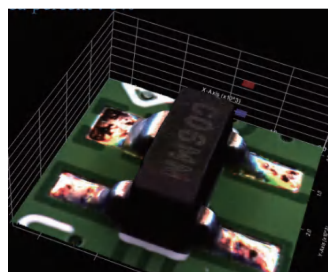
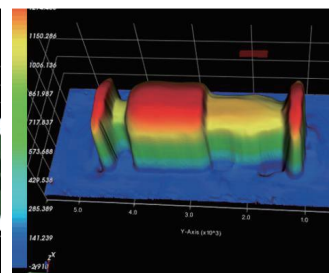
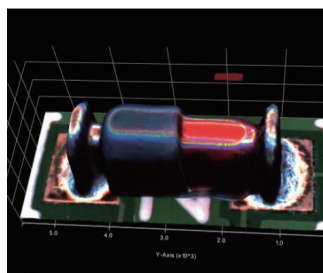
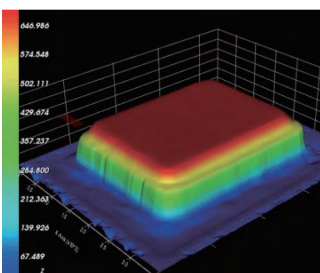
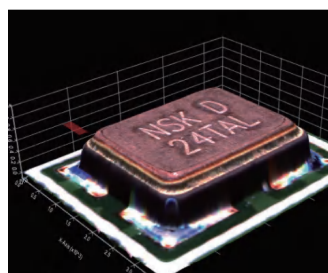
沾锡
Excess solder



异物
Foreign material

3D 检测效果

3D INSPECTION EFFECT



设备参数EQUIPMENT PARAMETERS

系列产品 Series		Alpha X510	Alpha X510-D	Alpha X850
类型 Type		单轨 Single-rail	双轨 Dual-rail	单轨 Single-rail
视觉系统 Visual System	成像 Imaging	标配 Standard: 1200W ; 选配 Optional: 2100W		
	分辨率 Resolution Ratio	5μm/10μm/15μm		
	FOV尺寸 FOV Size	20mm*15mm/40mm*30mm/60mm*45mm		
	速度 Speed	10cm ² /s 30cm ² /s 67.5cm ² /s		
运动机构 Motion Mechanism	投影仪 Projector	4投影头, 可选8投影头/Standard: 4-way Projector,Optional: 8-way Projector		
	丝杆精度 Accuracy	±1μm		
	XY运动 XY Motion	10μm		
	流向 Direction	左到右或右到左, 可定制Left--Right or Right--Left Customizable		
	轨道高度 Rail Height	900±30mm		
电气 Electrical	电源 Power Supply	AC220V		
	功率 Power	3KW		
	气压 Air pressure	0.4-0.6MPa		
检查规格 Checking Specifications	基板尺寸 PCB Size	510*460mm	510*300mm*2(双轨模式/dual-rail) 510*590mm (单轨模式/single-rail)	850*650mm
	测量高度 Inspection Height	标配 Standard: 25mm ; 选配 Optional: 40mm		
选配功能 Optional Function	人工智能 Artificial Intelligence	AI大数据训练中心/AI mass data training center		
	辅助功能 Auxiliary functions	MES、条码读取/Barcode reading、远程集中复判/Remote repair		
检查项目 Inspection Item	本体缺陷检测 Body defect detection	缺件、偏移、反向、浮高、侧立、立碑、焊点不良、锡珠、氧化污染、异物、划伤等 Missing component、Offset、Reverse、polarity、Excessive component height、Billborading、Tombstoning、Poor solder joint、Solder ball、Oxidation contamination、Foreign object、Scratches, etc		
	金手指及AI检测 Golden finger and AI detection	金面划伤、金面污染、漏铜、异色、沾锡、多件、炉前锡球等 Gold surface scratches, Gold surface contamination, Copper leakage, oxidation, Excess solder, Multiple components, Pre-reflow solder balls		

系列产品Series		Alpha X1200	Alpha X1500	Alpha X2000	Alpha X2500
类型Type		单轨或双轨/Single-rail or Dual-rail			
视觉系统 Visual System	成像 Imaging	标配 Standard: 1200W ; 选配 optional: 2100W			
	分辨率 Resolution Ratio	5μm/10μm/15μm			
	FOV尺寸FOV Size	20mm*15mm/40mm*30mm/60mm*45mm			
	速度 Speed	10cm ² /s 30cm ² /s 67.5cm ² /s			
运动机构 Motion Mechanism	投影仪 Projector	4投影头, 可选8投影头/Standard: 4-way Projector,Optional: 8-way Projector			
	丝杆精度 Accuracy	±1μm			
	XY运动 XY Motion	10μm			
	流向 Direction	左到右或右到左, 可定制/Left--Right or Right--Left Customizable			
	轨道高度 Rail Height	900±30mm			
电气 Electrical	电源 Power Supply	AC220V			
	功率 Power	3KW			
	气压 Air pressure	0.4-0.6MPa			
检查规格 Checking Specifications	基板尺寸 PCB Size	1200 *510mm	1500*510mm	2000*510mm	2500*510mm
	测量高度 Inspection Height	标配 Standard: 25mm ; 选配 Optional: 40mm			
选配功能 Optional Function	人工智能 Artificial Intelligence	AI大数据训练中心/AI mass data training center			
	辅助功能 Auxiliary functions	MES、条码读取/Barcode reading、远程集中复判/Remote repair			
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