



AI 3D SPI

真3D+AI 一次检测所有缺陷

True 3D+AI detects all defects at one time

最新自研AAM绝对精度测量系统, 精确检测01005焊盘印刷不良

The latest self-developed AAM absolute precision measuring system, accurate detection of poor pad printing of 0201 mm components.

高精度自动Z轴模组, 可以适应多种复杂制程

High-precision automatic Z-axis module, capable of adapting to various complex processes

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

真3D检测 TRUE 3D DETECTION

小角度2路投影系统, 更大程度消除小间距遮挡

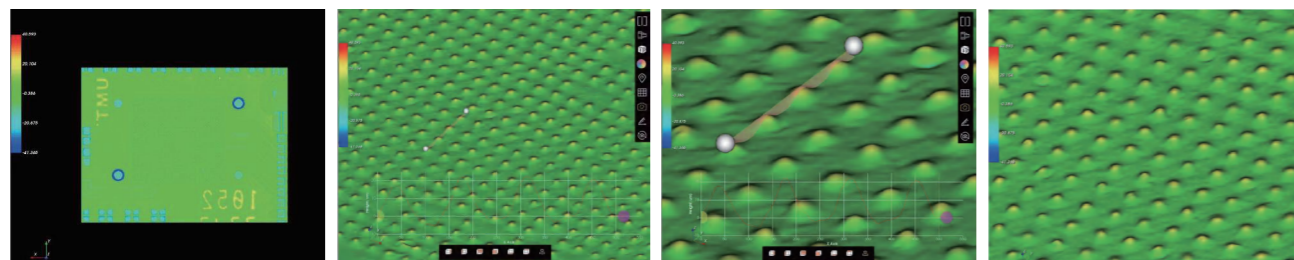
突破性摩尔条纹算法, 进一步减少CT时间

Small Angle 2-way projection system, eliminate small spacing occlusion to a greater extent

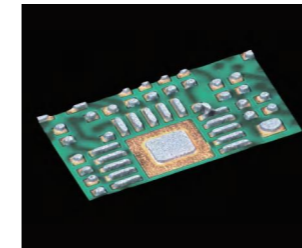
Breakthrough Morie fringe algorithm to further reduce CT time



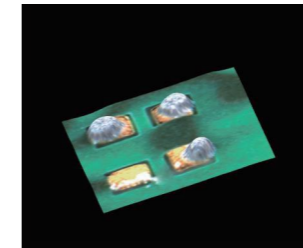
3D 检测效果 3D INSPECTION EFFECT



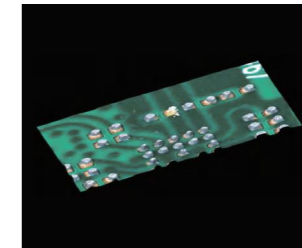
常见缺陷检测 COMMON DEFECTS



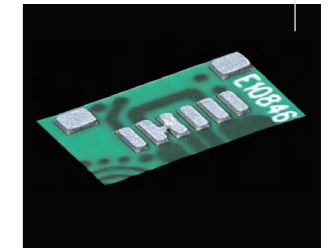
多锡
Excess solder



漏印
Print leakage



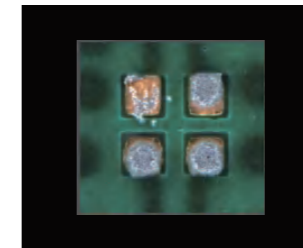
偏移
Skew



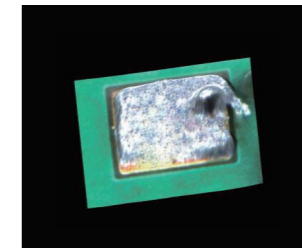
桥连
Short circuit



桥连
Short circuit



少锡
Insufficient solder

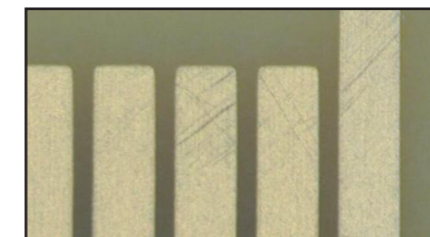


锡膏拉尖
Irregular solder paste

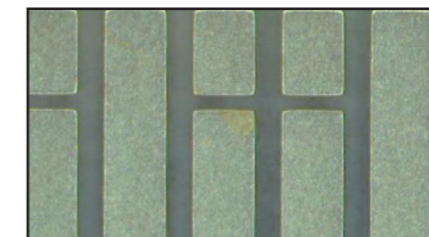


异形
Odd-shaped

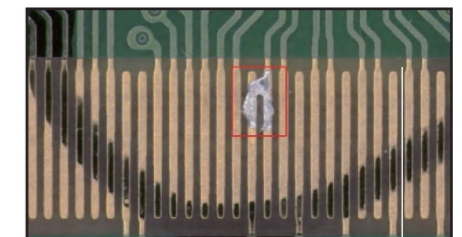
AI可检测缺陷 AI DETECTABLE DEFECTS



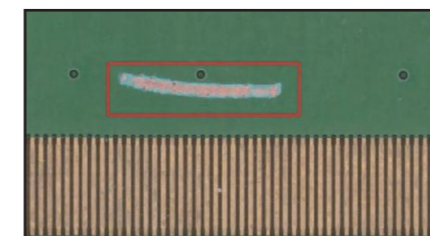
金面划伤
Gold surface scratch



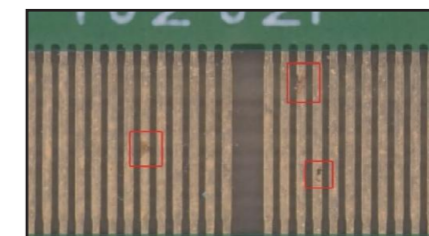
金面污染
Gold surface contamination



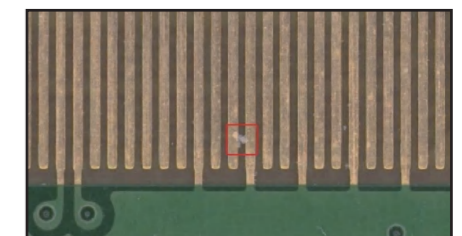
沾锡
Excess solder



漏铜
Copper Leakage



异色
Oxidation



异物
Foreign material

设备参数 EQUIPMENT PARAMETERS

系列产品 Series	Alpha H400	Alpha H510	Alpha H400D
类型 Type	标准 Standard	大尺寸 Large size	双轨 Dual-Lane
视觉系统 Visual System	成像 Imaging	标配 Standard: 12MP; 选配 Optional: 21MP	
	分辨率 Resolution Ratio	5μm/10μm/15μm/20μm	
	FOV尺寸 FOV Size	20mm*15mm/40mm*30mm/60mm*45mm	
	速度 Speed	0.34s/FOV	
	镜头类型 Type of lens	远心镜头 Telecentric lens	
	投影头 Projector	双投影头 Dual projector head	
运动机构 Motion Mechanism	丝杆精度 Accuracy	±1μm	
	XY定位精度 XY positioning accuracy	10μm	
	Z轴实时升降板弯补偿 Z-axis real-time lifting plate bending compensation	标配 Standard	
	XY运动 XY motion	AC伺服马达 AC Servo motor	
	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	200V-230V AC 50/60Hz	
	功率 Power	3KW	
	气压 Air pressure	0.4-0.6MPa	
检查规格 Checking Specification	基板尺寸 PCB size	400*400mm	510*460mm 400*300mm*2 (双轨Dual-Lane) 400*590mm (单轨Single-Lane) 可选510D型: 510*330mm*2 (Optional 510D model): 510*330mm*2
重复性 Repeatability	重复精度 Repeated accuracy	4Sigma: 高度 height<1μm; 体积 volume<1%; 面积 area<1%	
	检测重复性 Detection repeatability	<10%	
SPC	支持常规数据统计 Support for routine data statistics	Histogram; Xbar-R chart, Xbar-s Chart; CP&CPK; GRR; SPI Daily/weekly/Monthly report	
Gerber和CAD导入 Gerber and CAD import	Gerber和CAD导入 Gerber and CAD import	支持Gerber格式 (274X, 274D), 支持CAD和Gerber合并输出SPI档 Support Gerber format (274X, 274D), support combine CAD and Gerber then output SPI file	
选配功能 Optional Functions	人工智能 Artificial Intelligence	AI大数据训练中心 AI Data Training Center	
	辅助功能 Additional function	远程集中复判 Remote centralized rejudgment、条码读取 barcode reading	
检查项目 Inspection Item	检查项目 Inspection item	高度, 面积, 体积, 偏移, 形状 Height, Area, Dimension, Offset, Shape	
	检测不良类型 Types of Defects Detection	漏印, 少锡, 多锡, 连锡, 偏位, 形状不良, 异物, 沾锡 Print leakage, insufficient solder, excess solder, solder-connection, skew, odd-shaped, foreign material, Excess solder	

设备参数 EQUIPMENT PARAMETERS

系列产品 Series	Alpha H1200	Alpha H1500	Alpha H2000	Alpha H2500	
类型 Type	单头单轨 Single-head Single-Lane				
视觉系统 Visual System	成像 Imaging	标配 Standard: 12MP; 选配 Optional: 21MP			
	分辨率 Resolution Ratio	5μm/10μm/15μm/20μm			
	FOV尺寸 FOV Size	20mm*15mm/40mm*30mm/60mm*45mm			
	速度 Speed	0.34s/FOV			
	镜头类型 Type of lens	远心镜头 Telecentric lens			
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轨道高度 Rail Height	900±30mm				
电气 Electrical	电源 Power Supply	200V-230V AC 50/60Hz			
	功率 Power	3KW			
	气压 Air pressure	0.4-0.6MPa			
检查规格 Checking Specification	基板尺寸 PCB size	1200*510mm	1500*510mm	2000*510mm	2500*510mm
重复性 Repeatability	重复精度 Repeated accuracy	4Sigma: 高度 height<1μm; 体积 volume<1%; 面积 area<1%			
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