

MVP Aura

Automated In-Line Inspection And Metrology For Packaged ICs, BGAs, Leaded And Hybrid SMT Devices



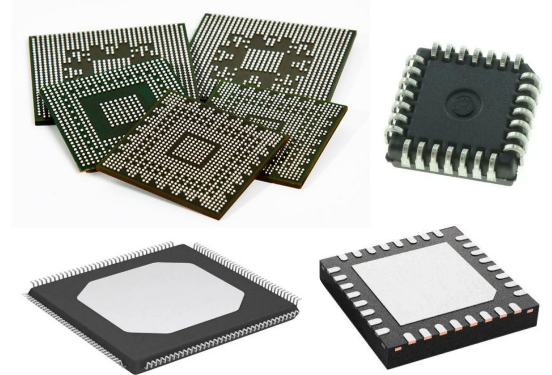
Key Features

- Full Inspection: Height, Position, Metrology and Coplanarity Measurements
- In-Line JEDEC Tray Handling
 - Sorting to Defect Tray.
 - Interchangeable Vacuum Nozzles for Large and Small Packages
- Inspect Parts Independent of Camera FOV
- Single Sided Inspection
- Small Footprint

Inspect Ball Grid Array (BGA), Quad Flatpacks (QFP), Quad Flatpacks No-Leads (QFN), Plastic Leaded Chip Carriers (PLCC), and More

MVP Aura

MVP's Aura platform takes in-line package inspection to the next level. Key features include; top side inspection, Automated in-line tray loading, Automated part sorting, Pin/ball Position, Height, and Coplanarity measurements. Additionally, MVP's Aura uses the latest advanced 3D high-resolution imaging to provide inspection and measurement capabilities for todays most demanding devices and packages.

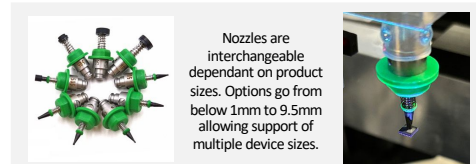


Model	MVP Aura	
Performance		
In-Line Handling From JEDEC Tray	Leaded, no-lead and array packages including: BGA, CGA, CSP, MCM, SIP, SGA, SOP, QFP, TSOP, LGA, QFN, MFL, LCC	
Inspection Capability	Coplanarity, ball/Pin presence, position, offset, pitch, extra ball, discolored balls, body width, tip-to-tip, lead width, ball damage, surface inspection and SMT.	
Sorting	Tray to Tray	
Loading	In-Line	
3D Optics Options		
3D FOV	24.1mm	60mm
3D Accuracy	+ 10um	+ 20um
Software		
Offline Program Generation	ePro	
Program Debug Environment	iPro and Validate	
SPC and Reporting	AutoData DPC - Sql based data reporting ELSR - End Lot Summary Reporting Optional: AutoData, line integration to paste systems	
CAD and Gerber Inputs	Standard, Placement, Gerber and ODB++ data import	
Defect Review	In-Line or Off-Line defect review using iRepair	
Multi-Pass	Programmable heights and lighting per pass	
System		
Computer	Xeon Processor Based Fast 1TB SSD Hard Drive - 64GB Memory	
Operating System	Linux based Multi-Threading Ubuntu Operating System	
Data Integration Options	SECS/GEM, AutoData, DPC	
Networking	Full network integration (TCP/IP, NFS Protocol)	
Physical		
Tray Handling	JEDEC Standards 95-1 & IEC 60286-5	
Footprint	990mm (39") W x 1100mm (43") D x 1580mm (62") H	
Power	208-240VAC 50/60Hz, 10A (Optional 110V)	
Air	60 PSI, 1CFM	
Vacuum	20kPa or Optional Vacuum Ejector	
Weight	Approximately 500 kgs (1100 lbs.)	
Compliance	CE - (UL Optional)	

MVP Aura – Full Automated In-Line Inspection For BGA, Bumped, LGA, QFP, J-Lead And Custom Array Or Leaded Devices

The Aura system automates the in-line packaging inspection process while retaining the highest level of inspection quality. Packages in JEDEC Trays are loaded as an in-line process and Parts inspected in a Dead Bug* orientation. For defect sorting empty trays loaded for defect parts and our pick and place capability sorts defective parts to the empty tray.

High resolution 3D optics are used ball/Pin, coplanarity, metrology and inspection.



For defect sorting, multiple nozzles and grippers can be used for part sorting. For data integration the MVP Aurora system uses the optional SECS/GEM, E142 e-Maps and ELSRs to provide accurate manufacturing data.

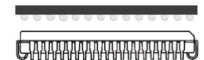
MVPs optional AutoData system provides SQL database integration for full traceability and image archiving for all devices.

*Dead Bug



Aura

*Live Bug

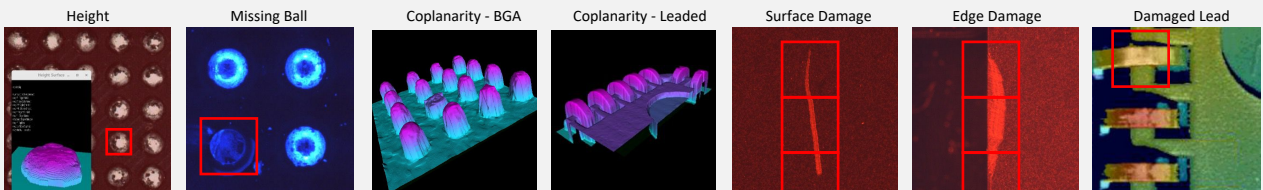


Aurora

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Defect Examples



Provides Packaged IC and Component Inspection.

Use for Your Outgoing Quality Control (OQC) for all package types; Ball Grid Arrays (BGA), Quad Flat Packs (QFP), Thin Quad Flat Package (TQFP), Chip Scale Package (CSP), Wafer-Level Package (WLP), Quad Flatpack No-Leads (QFN), Bump Chip Carrier (BCC), Land Grid Array (LGA), Micro-Coil Spring Arrays and more...



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