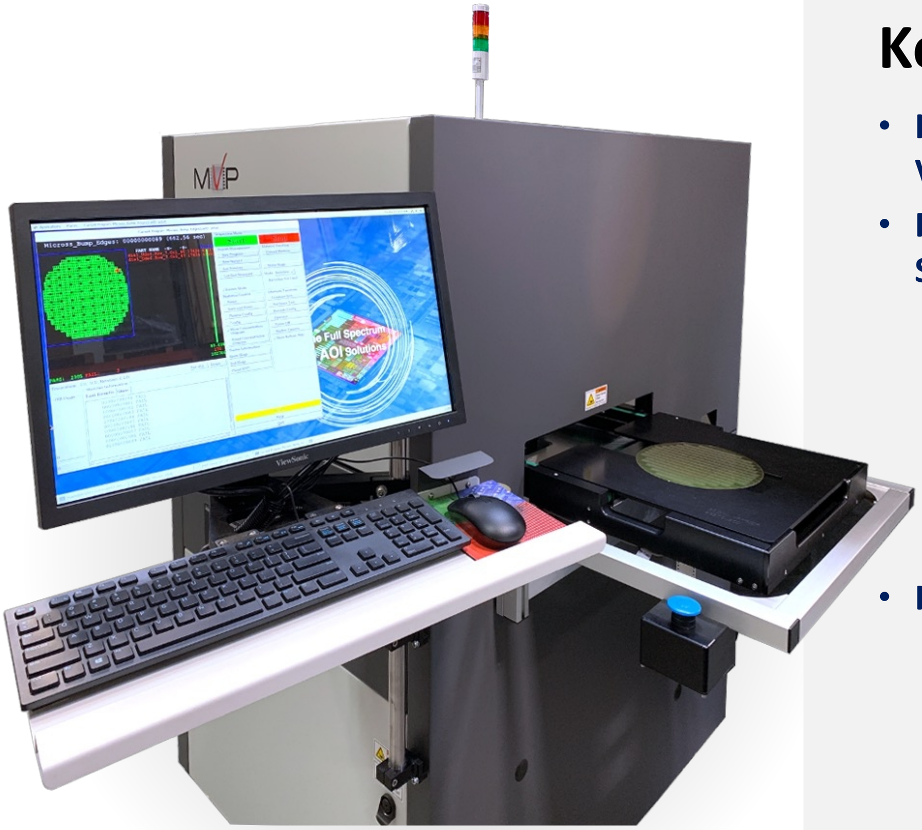
MVP Carta M

Flexible Automated Optical Inspection and Metrology for Wafer, Diced Wafer and Beyond



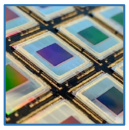
MVP Carta M

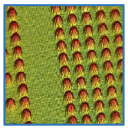
MVPs Carta M system is the first system to provide complete wafer inspection flexibility, in a small footprint. The Carta M system provides the ability to inspect and provide metrology for Wafer, Film/Tape Frames, Trays and Hybrid components in the same system.

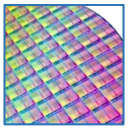
Using MVPs proprietary carrier system any wafer or frame can be loaded into the system. MVP provide either single or groups of carrier's dependant on your requirements for product styles.

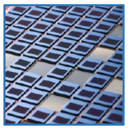
Key Features

- **High Accuracy Ceramic Vacuum Chuck**
- **Flexible Inspection in one System for:**
    - **Wafers 100 to 300mm**
    - **Film Frame 216 to 380mm**
    - **Product in Tray Inspection**
    - **Hybrid and Wire-Bond Assemblies**
    - **Grip Rings on Request**
- **Inspection Capabilities**
    - **Standard High-Speed Cameras**
    - **Standard Microscopic Objective**
    - **Optional: IR Camera or High-Resolution Profiler**
- **Semi-Automated Loading via MVP Carrier System**
- **Outstanding Inspection Performance Across all Applications**









MVP
MACHINE VISION PRODUCTS

MVP Carta M

MVP “AOI Elevated”

Model	MVP Carta M
Performance	
Inspection Capabilities Include	Die Surface, Metrology, Pattern, FOD, Cracks
Product Handling	Wafer: 100, 150, 200 and 300mm with Standard Carrier Tape/Film Frames: 216mm, 276mm, 380mm with Standard Carrier Tray or Hybrid Part loading with Standard Carrier Grip Rings on Request
Optical Resolution (Macro and Micro Cameras)	Options[2] from 0.3um to 3.5um
Optics	
Optics Cameras[2]	Dual High Speed 25mp and 12mp Cameras
Optics Illumination[2]	Multi-Angle, Multi-Spectral, Laser or IR
Optic Options	
Profiler - Bump Height Measurements	2.5um
Microscopic Objectives[2]	Standard 0.3um. Other Resolutions on Request
IR[2]	Custom Resolutions
Max Component Clearance (mm)[2]	15mm
Software	
Offline Program Generation	AutoGuide, ePro, Various CAD Importers
Program Debug Environment	iPro: Powerful Algorithms & Measurement Capabilities Providing Outstanding Inspection Performance Across all Applications Validate[3]: for Reliable and Predictable Performance
SPC and Reporting	AutoData - Sql Based Data Reporting (Optional) ELSR - End Lot Summary Reporting (Standard)
Defect Review	In-Line or Off-Line defect review using iRepair
Multi-Pass	Programmable heights and lighting per pass
System	
Computer	Intel Based - Multi Processor Architecture Fast 4TB SSD Hard Drive - 128GB Base Memory
Operating System	Linux based Multi-Threading Ubuntu Operating System
Data Integration Options	SECS/GEM, AutoData
Networking	Full Network Integration
Physical	
Inspection Envelope[1]	Up to 300mm
Product Thickness (Standard)	0.254 - 12.5mm (0.01 - 0.5")
Footprint	1290mm (51”) W x 1066mm (42”) D x 1473mm (58”) H
Power	208-240VAC 50/60Hz, 10A (Optional 110V)
Air and Vacuum	60 PSI, 1CFM
Weight	680 kgs (1500 lbs.)
Compliance	CE - (UL Optional)

[1] Dependant on configuration inspection envelope can change, this will be specified with the system configuration.

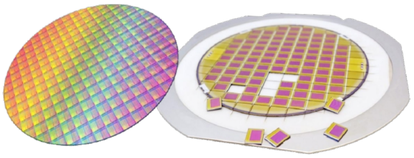
[2] Two objectives are provided as a standard configuration allowing Macro and Micro level inspection.

[3] Usage is Program Dependant.

Carta-6926

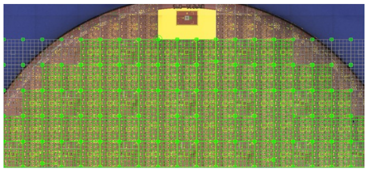
MVPs Carta M Provides Flexible Automated Optical Inspection and Metrology for Wafer, Diced Wafer and Other Tray Based Products.

Focused on Flexibility, Quality, and Metrology the Carta M system provides automated inspection and measurement solutions to manufacturers that need the capability to inspect multiple wafer styles in the same system. From complete wafers, to diced wafers on Frames, to manually loaded parts, the Carta M can accommodate most common formats.



As well as providing flexibility for product handling, MVPs Carta M provides the ability to measure and inspect multiple aspects of a wafer. From inspecting surface patterns, to FOD, to metrology, to die cracking, to bump heights, MVPs Carta M provides class leading capability.

MVPs software architecture allows for easy program generation and mapping of the wafer simplifying the initial program generation. While MVPs diagnostic algorithms provide a unified interface and powerful inspection performance across all application requirements.



For line integration the Carta series uses SECS/GEM, e-Maps and ELSRs to provide accurate manufacturing data.

Carrier Styles

100mm

150mm

200mm

300mm

MVP
Machine Vision Products

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