

## PHIXEL CMR - OPTICAL INSPECTION FOR CONTACT & CONTACTLESS MODULE

### The only equipment on the market providing full ePassport, bankcard, and e-ID chipset module inspection

Work more efficiently, productively, and accurately with ultra-high-speed 2D vision inspection. This module is built with automatic high-speed reject removal to prevent sequence disruption. The PHIXEL CMR will guarantee your products' quality and eliminate product defects and field recalls - bringing customer complaints close to 0%.



#### Key features

##### Application

- Inspection of Contact/Contactless Dual Interface (CDIF) module substrate to detect encapsulated die, mold defect, bonding wire, and plating defect

##### Key features

- Minimum 5MP colour camera for top and bottom inspection
- 4 stations for 2D inspection, testing, reject punch, and validation
- Throughput: up to 70,000 UPH (subject to package size)
- Post-inspection after reject punch
- Zero balancing capability, total good, and reject counts
- Customized AOI solution
- ID reader
- AOI cellular network architecture for recipe and EMAP management
- Lead frame width: up to 35 mm
- SEMI standard with SECS/GEM interface
- Option: real-time data feeding to MES and eSPC
- Option: auto email alert (defect/batch summary)

#### Specifications

##### Imaging system

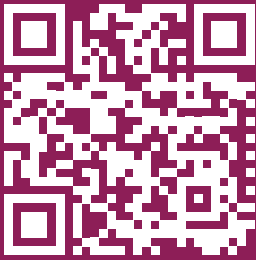
- Imaging system
- Camera: 5M pixels area camera mono
- Number of cameras: 2 (top) + 1 (bottom)
- Resolution/Field of view: 12  $\mu$ m/pixel  
FOV:30 mm
- Minimum object detection: 48  $\mu$ m
- Lighting: Compound lighting

##### Inspection categories

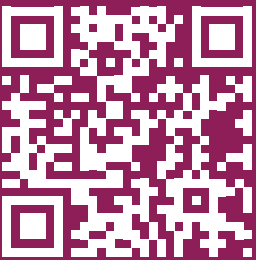
- Program mode: Fast programming for common reject criteria
- Reject treatment: Electronic map
- Inspection view: Top and bottom view

##### Inspection items

- CDIF defects: Incomplete punch. Incorrect punch. Contamination. Splicing connection (distinguish colour, size, and location). Mold void. Chipping. Die contamination. Loose wire
- Chip module defects: Bend lead. Chipping. Mold scratch. Gate remain. Mold contamination. Crack. Lead scratch. Mold flash. Incomplete fill. Scratch Ink mark. Index hole deformation. Cold splicing. Shift punch



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