

## *Xceed - PARMi Laser Inline 3D AOI Used / New*

### **I. Description:**

#### **3D AOI Sensor Head (TRSC-I)**

- High Speed CMOS Camera (4Mega-pixel) with Dual Laser Technology
- RGB LED Lights
- Telecentric Lens
- Light Weight, Compact Sensor Head Design
- Industry Leading Inspection Speed: 65 cm<sup>2</sup>/sec @ 14 x 14μm
- Cycle Time: For PCB 260mm x 200mm = 10 seconds including load and unload

#### **Intelligent detection:** Not affected by PCB material, surface and color

- Dark PCB
- White PCB
- Chemical ceramic PCB
- Reflective parts

#### **Real 3D image**

- Advanced signal processing technology to show true and clear 3D images without any noise

#### **Barcode and Bad Marker Scan Recognition**

- In one inspection, both Barcode and Bad Mark are recognized simultaneously. 1D, 2D, QR Laser Marking, and Printing barcodes are recognizable.

#### **All bad types can be detected**

- Dimension, Missing, Misalignment (X/Y/Rotation), Wrong (Body), Side Mount, Tombstone, Text (OCV/OCR), Wrong (Matching), Solder Joint, Lead Offset, Bridge, Color band, Pin, Coplanarity, can be perfectly detected.



### **II. Specification:**

- Equipment Size (W x D x H): 850mm (W) × 1205mm (D) × 1525mm (H)
- Equipment Weight (kg): 750 kg
- Measuring Principle : Shadow Free Dual Laser Optical Triangulation
- Camera System : 4 Mega Pixel
- Light Source : R.G.B.W LED
- Scan Speed (cm<sup>2</sup>/sec) : 65 cm<sup>2</sup>/sec

- X-Y Resolution (um) : 14 x 14 um
- High Resolution : 0.4 um
- High Repeatability :  $3\sigma < 3\mu\text{m}/\text{Height}$
- High Accuracy :  $< 5\mu\text{m}$
- Inspection Type: Dimension, Missing, Misalignment (X/Y/Rotation), Wrong (Body), Side Mount, Tombstone, Text (OCV/OCR), Wrong (Matching), Solder Joint, Lead Offset, Bridge, Color band, Pin, Coplanarity
- PCB Warpage :  $\pm 5\text{mm}$  (2%)
- Barcode : 1D/2D/QR Barcode Inspection using TRSC-I
- Maximum Component Height : 40mm