



**Mayura Automation & Robotic Systems**

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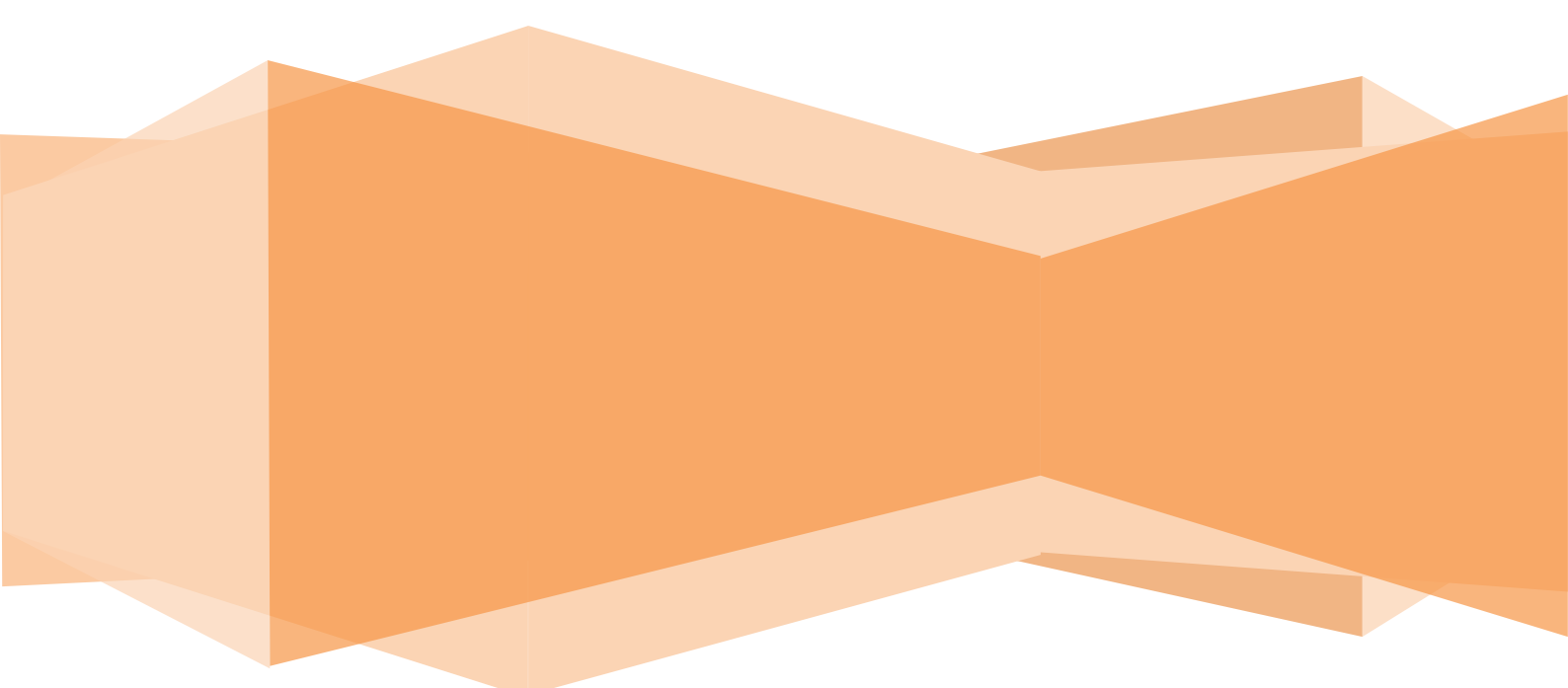
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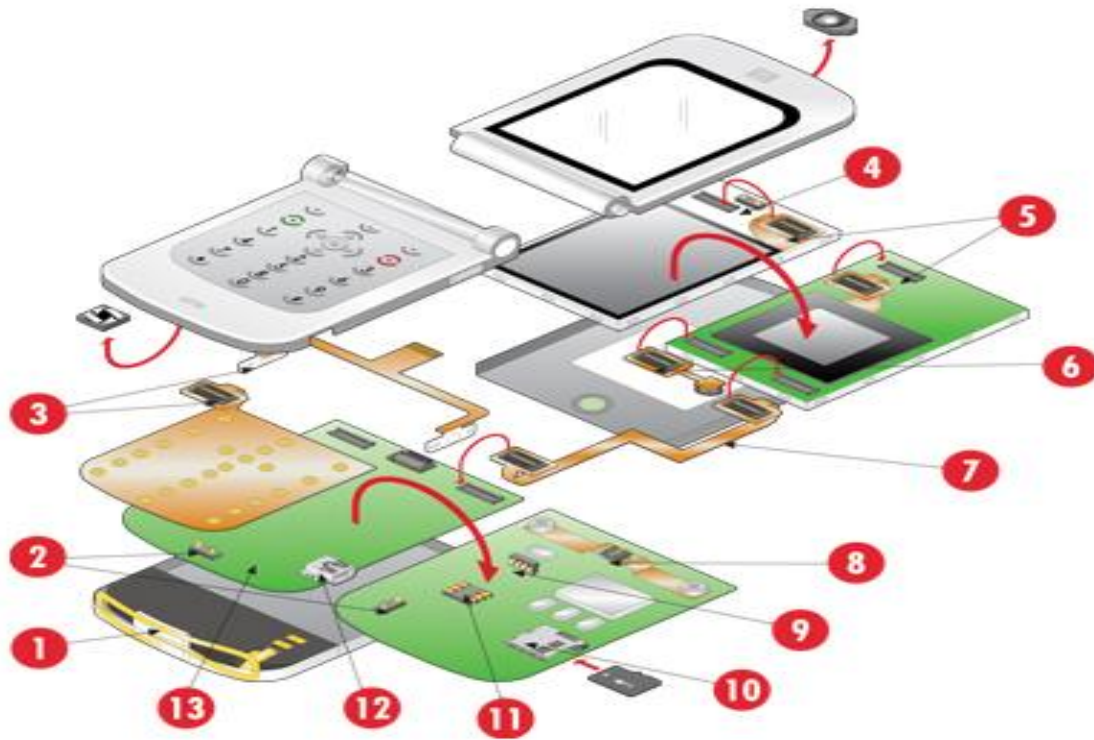
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# **VISION INSPECTION FOR MOBILE COMPONENTS**

**Machine Vision Testing**

**LabVIEW / Vision BASED SOLUTION**





## **PROJECT DESCRIPTION**

The reliability of any inspection system depends to a very great extent on the image acquired. A high resolution color camera which will be able to acquire a much better image was used. Upon capturing the image on the falling edge of the sensor an alarm is activated for defective components.

## **PRODUCTS USED**

NI-LabVIEW  
NI-EMBEDDED VISION SYSTEM

## **THE CHALLENGE**

Developing the vision based data acquisition system for verifying various parameters of a handset device which were specified by the company. To view production quality or any defects reported in the devices.

## **THE SOLUTION**

National Instruments LabVIEW and NI-EMBEDDED VISION SYSTEM were used to develop a highly reliable and flexible Data Acquisition and Control System resulting in improved accuracy and reliability.

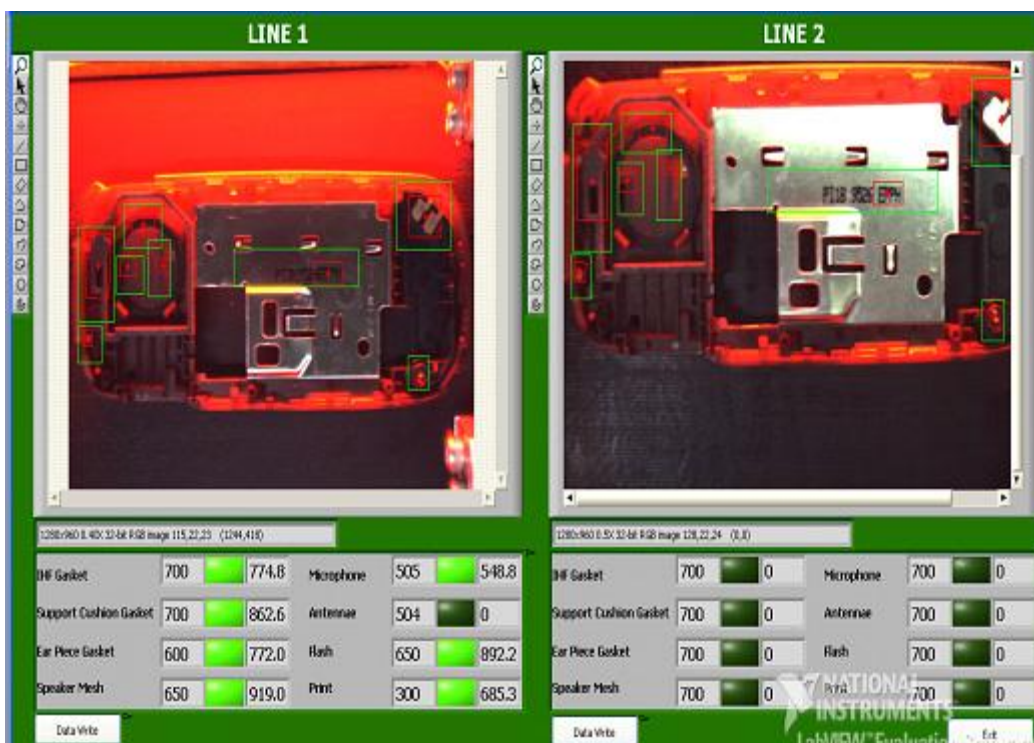
## **Requirement**

### **Model 1**

- Detection of Microphone
- Detection of Flash Light
- Printing on the Metal Piece of Panel
- Detection of FM antenna left and right side.
- Detection of Copper contacts
- Detection of Ear Phone Jack rubber cover.
- Detection of Circular Gasket
- Detection of Outer Gasket
- Detection of Earphone covers
- Detection of Sim Sticker

## Model 2

- Detection of Circular Gasket
- Detection of Outer Gasket
- Detection of FM antenna left and right
- Detection of microphone
- Detection of Copper contacts
- Detection of volume buttons
- Detection of Earphone covers
- Detection of antenna on backside
- Detection of Sim Sticker



## **NI EMBEDDED VISION SYSTEM**

NI Vision Builder for Automated Inspection is an interactive and easy to use menu driven configurable environment for building, benchmarking and deploying complete machine vision applications without the complexities of programming.

### **FEATURES**

- Real time machine vision system
- High performance, multicore processor for flat inspection
- Connectivity to multiple cameras for simultaneous inspections
- Configure with Vision Builder for Automated Inspection or Program with Vision Development.
- Reliable, rugged, industrial system with no moving parts
- High I/O count for synchronization and industrial communication.