



# APPLICATION REPORT

## Show me your code and I will tell you who you are

Optical Identification in the Automotive Industry Production Process



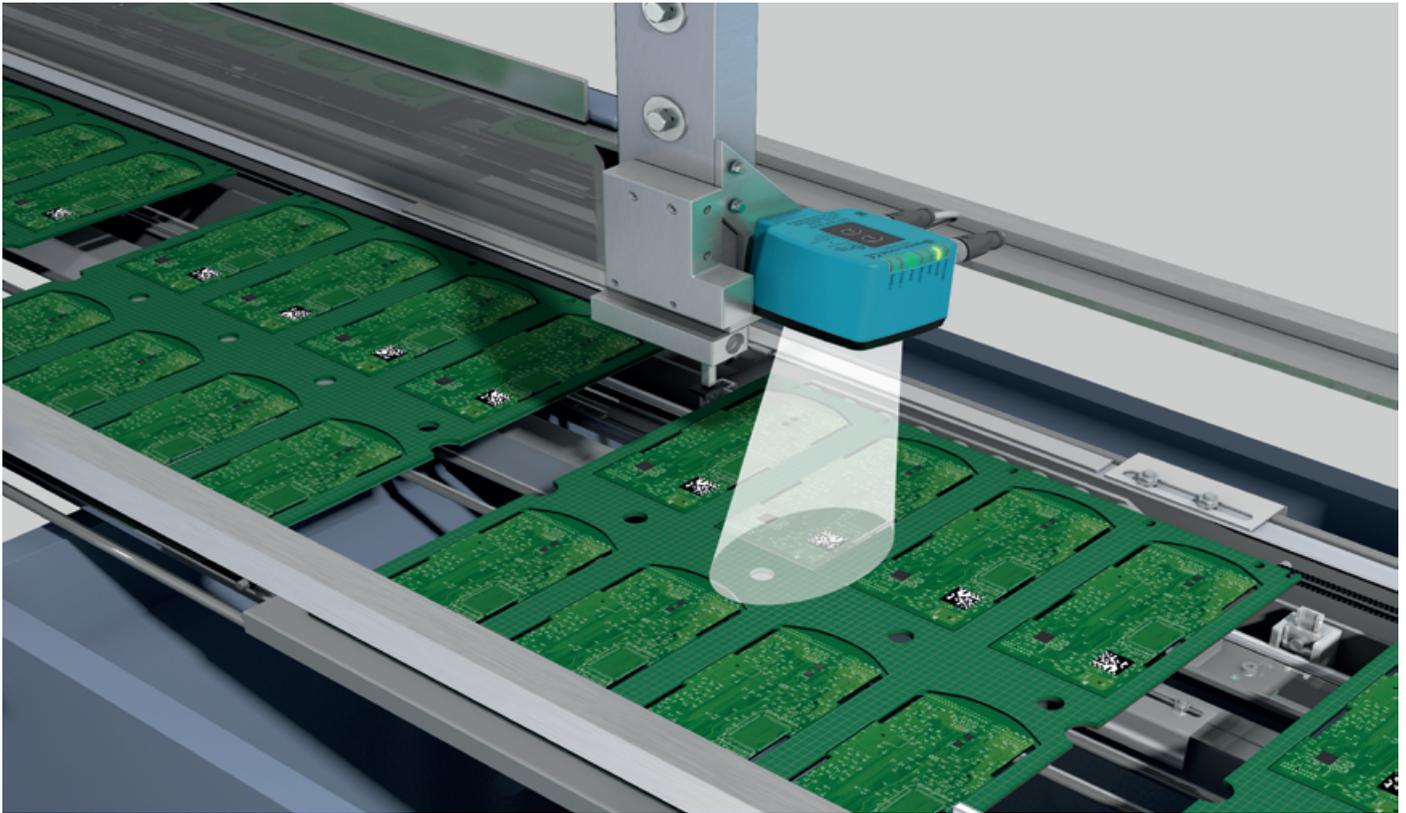
Universal code reader  
ODV120

In the automotive industry production process, individual electronic assemblies come with labels that feature a barcode or a Data Matrix code for tracing back products. These assemblies are ever decreasing in size, which means the space available for labeling is also getting smaller. However, since the volume of data is increasing at the same time, 2D codes, typically Data Matrix ECC 200, are gradually replacing the use of barcodes. Using these codes, products can be uniquely identified before entering the pick-and-place machines, or before and after certain test steps.

### COMPREHENSIVE TRACING IN THE AUTOMOTIVE INDUSTRY

It is vital – in the automotive supply sector in particular – to guarantee comprehensive product tracing. If a fault were to occur in a vehicle at a later date, it must be possible to trace back the affected components over their entire development history. To find out which vehicles were fitted with faulty components, you must precisely define a batch fault.

The better this definition works, the lower the resulting costs for any recall actions. For this reason, it must be possible to identify certain assemblies, such as the PCB in the control electronics in a braking system, throughout the entire production process.



A stamp adds a self-adhesive label containing a Data Matrix code to the individual PCBs of a PCB panel. This code is simultaneously read by the ODV120.

## DESCRIPTION

The labels are printed and automatically applied to the PCB using a stamp. The codes on the labels contain individual data sets, such as the item number, production location, time, date, or serial number.

The ODV120 simultaneously reads the codes while the stamp is applying the labels. Check the code legibility right at the start of this process, since otherwise it will not be possible to identify the PCB later on. These codes are also read at a later date as part of repair work or returns.

## BENEFITS OF THE ODV120 AT A GLANCE

- Reads all standard stationary and moving barcodes and 2D codes
- Label identification in any position in the direction of movement
- Large reading window reads a range of code sizes
- Large depth of focus for reading codes at different distances with a single setting
- Compact plastic housing is available
- Ethernet interface offers simple operation using the web browser