

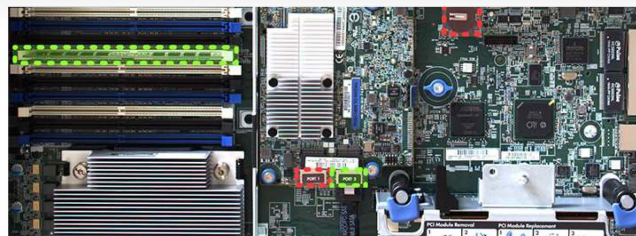
QA SOLUTION FOR ELECTRONICS

ABOUT RELIMETRICS

Relimetrics is part of the Industry 4.0 movement, helping companies to digitally transform. Relimetrics is a platform solution applicable to numerous industries, including automotive, manufacturing, electronics and construction. Our software uses computer vision and machine learning to automate inspections and perform predictive maintenance. This increases productivity, cuts costs and helps companies to innovate at a more rapid rate.

OUR CUSTOMER

Our customer is a leading global manufacturer of servers, storage and networking hardware. As part of its digital transformation strategy, it plans to fully automate and modernize its assembly processes and facilities, adopting Industry 4.0 technology.



BOM list

Part Name	Serial Number	Time	Status
ABCD1234	ABCD1234	10:02 AM	⚠️
ABCD1234	ABCD1234	11:12 AM	✅
ABCD1234	ABCD1234	11:52 AM	⚠️

Figure shows a snapshot of Relimetrics user interface identifying wrongly (red) and correctly (green) assembled parts of a server

CHALLENGE

Customer has a complex and highly customized portfolio of server products.

The quality assurance of server assembly today is done manually by human operators.

Each server is checked against the bill of materials (BOM) for quality.

This is a labor-intensive process prone to error due to human fatigue and lack of ability of the human eye to detect certain defects.

SOLUTION

Relimetrics developed an automated final quality audit system for the assembly line. It uses advanced algorithms and machine learning techniques to provide reliable, automated inspections. The system:

- Compares quality and configuration of a final assembled server with configuration data received from the manufacturing execution system (MES)
- Learns new parts and configurations automatically
- Provides full traceability of quality via blockchain technology

IMPACT



10 seconds

Inspection time for an entire server



>99.9%

Probability of detection



50%

Cost decrease related to quality audit