

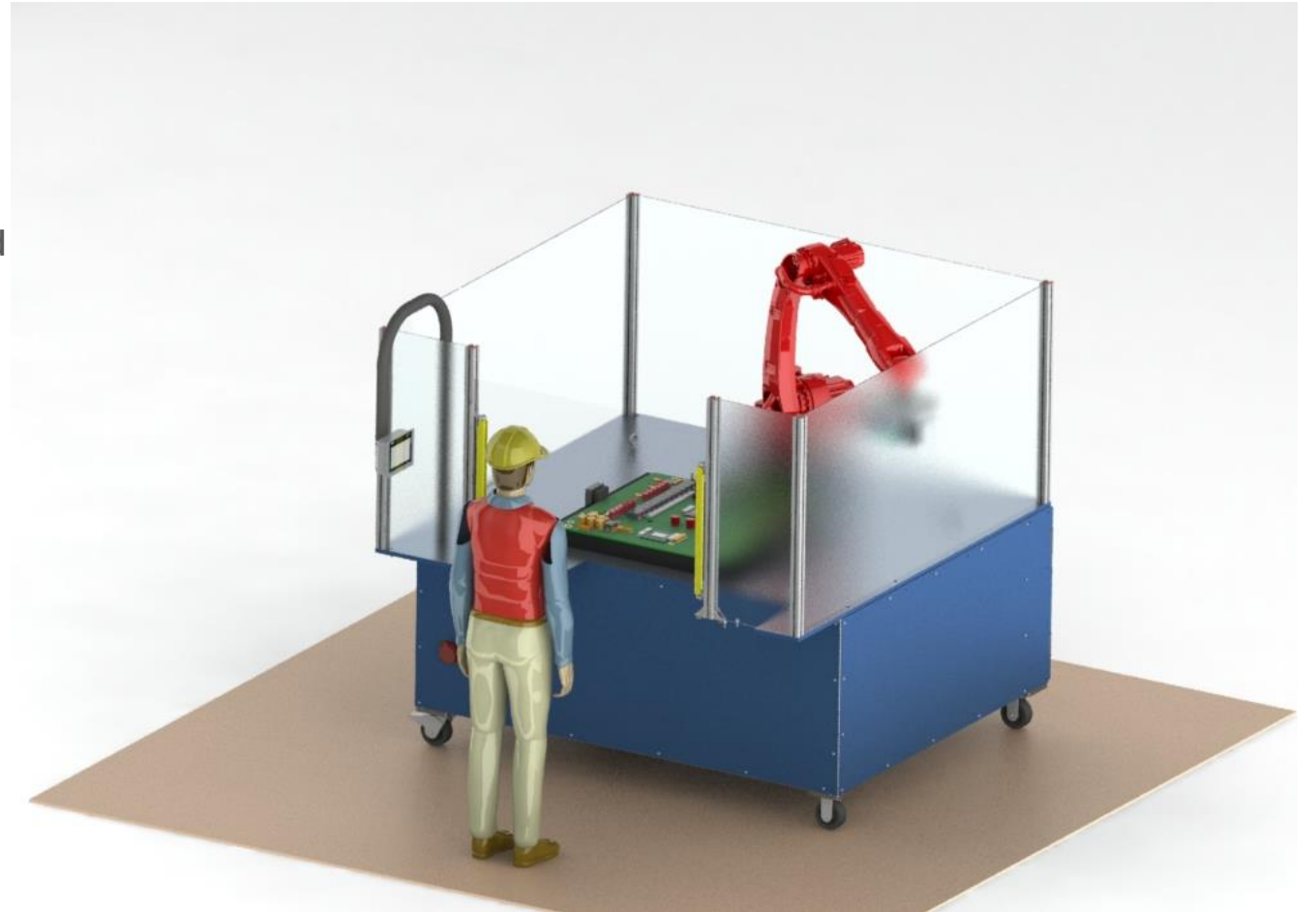


# PCB testing for forensic studies – Case Study

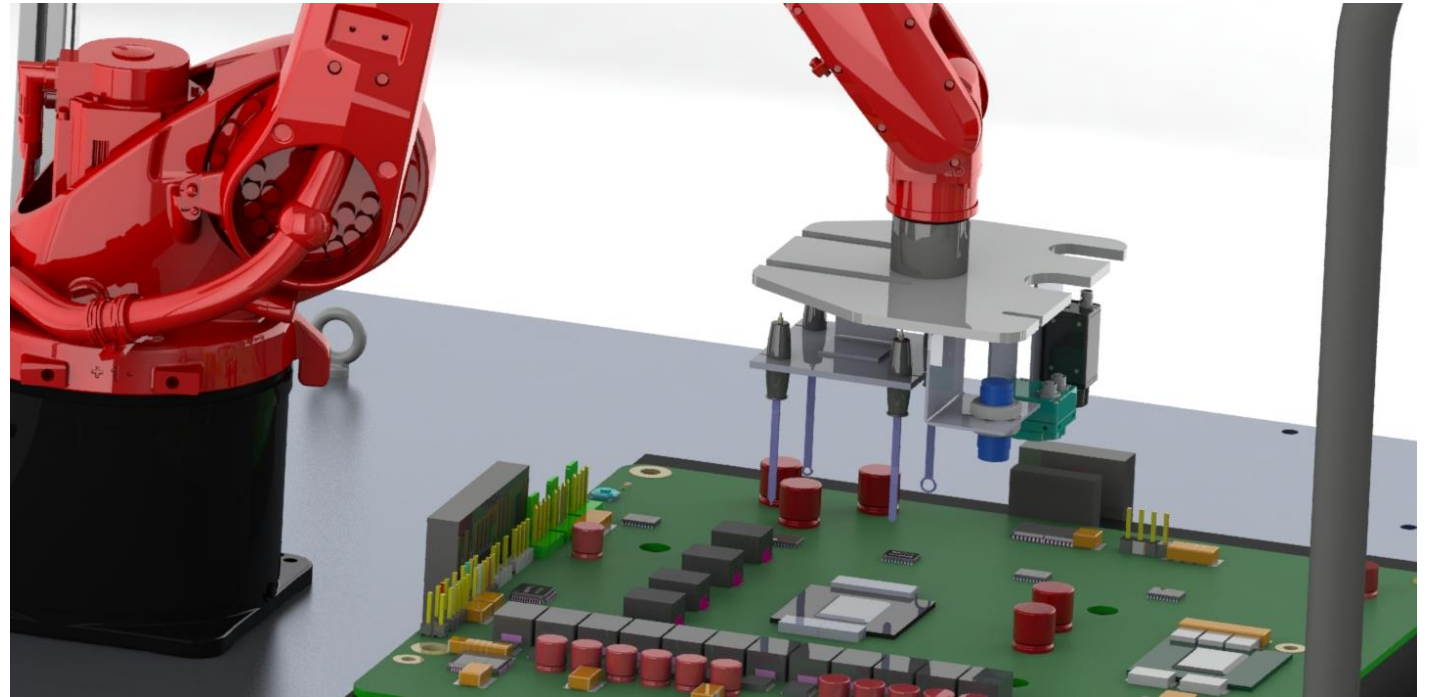
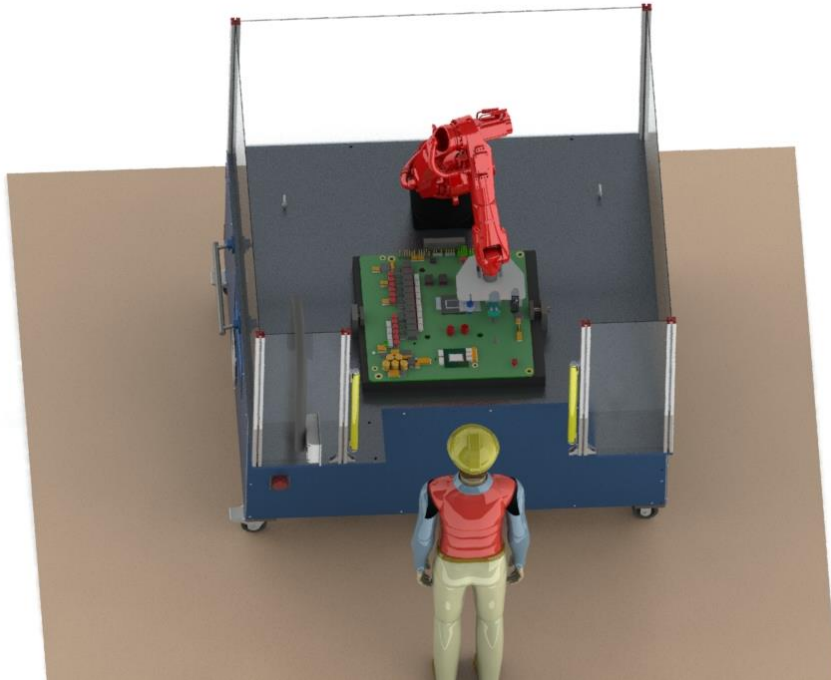


# PCB testing for forensic studies

- To ensure the board will operate as envisioned, then it will need to pass a series of tests during prototyping, full-scale manufacturing, and post-assembly.
- PCB functional testing comprises a range of tests for qualifying board functionality, encompassing everything from signal behavior to checking for short circuits. The following are the some of PCB testing methods:
  - 1) In-circuit Testing (ICT)
  - 2) Flying Probe Testing
  - 3) Automated Optical Inspection(AOI)
  - 4) Burn-in Testing
  - 5) Functional Testing
  - 6) X-ray Inspection/AXI
  - 7) Other Functional Tests



# PCB testing for forensic studies



- The PCBA is tested in a variety of ways to ensure that all of the components present are genuine, including optical sensing, thermal sensing, and EMC sensing.
- Various approaches for thermal measurement were done, and a low-resolution, high-accuracy thermal camera is used for research and failure analysis.
- To avoid damaging the PCB, all testing was done non-invasively, and the accuracy achieved was 1%.

# CONTACT US

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**THANK YOU**