

Failure Analysis Materials Analysis Reliability Testing Teardown Analysis

Hello everyone. Fall is here, most kids are back in school and life is slowly returning to a light version of normal. There is a global shortage of components and we do see some quality issues in parts sent to us for failure analysis. If you can only find parts on the grey market, be suspicious. Counterfeit components (often simply rebranded but of unknown history) are not the only problem. Poor plating and poor assembly quality are also common.

We invite you to re-visit some of our YouTube videos. They are less than 5 min each.

Recognizing counterfeit electronics parts Part 1 Recognizing counterfeit electronics parts part 2 Recognizing solderability failures

Photo gallery

We like to show you examples of why products fail. The image below shows a cracked micro-via inside a printed circuit board. A large BGA was soldered at this location, you can just see the ball metal and intermetallic layer at the bottom of the image.



Courses

We do have two half-day training courses available. We will deliver them remotely. Please contact us to get the outlines and to make arrangements if you are interested.

Each course is offered to companies for a flat rate, for five attendees or more. Individuals can apply and a suitable time will be arranged when five requests have been received.

Failure Analysis of Electronic Devices

This half-day course will benefit design engineers, component engineers, and quality engineers who may not be familiar with the physics behind FA tools available to them, internally or externally, to resolve their customer returns or supplier quality issues.

Shining a light on LED technology: construction, reliability, qualification, failure modes

This half-day course will benefit design engineers, component engineers, quality engineers and patent lawyers who may not be familiar with the physics, internal structure and reliability issues of LEDs as components.