

We help designers and manufacturers

- Reduce design cycle time
- Minimize customer product returns
- Maximize product yields

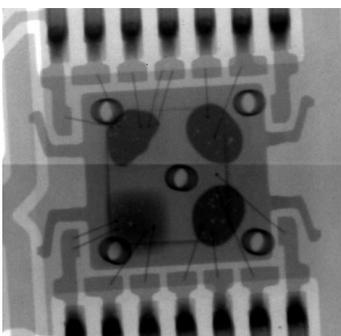
*Failure Analysis Materials Analysis Reliability Testing Teardown Analysis*

As summer has arrived, I would like to draw your attention to the **International Conference for Electronics Hardware Enabling Technologies (ICEHET)**. It is usually held near Toronto and we participate every year. The conference was cancelled last year but this year it is held online and all papers and presentations will be accessible until September 1. You can participate at your own pace. We're already planning 2022 and hope to see you then in person.

## Photo gallery

We like to show you examples of why products fail. The IC on the XRAY image is not properly heatsinked. There are 4 dabs of solder on its heat pad. One (upper left) corner has not reflowed at all, and the other three have barely started to reflow.

The cross-section below shows solder wetting on the board side, but something akin to a head-on-pillow geometry.



## 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.