# NEWSLETTER



**Edition: December 2025** 

#### **PUBLICATIONS**

## From Closed-Loop Supply Chains to Circular Ecosystems

Circular Business Models in the Dutch Microelectronics Industry. This <u>publication</u> offers both academic understanding and practical capabilities in ecosystem-level CBM development. We can provide insights for industries and policymakers, enabling them to systematically address barriers, leverage drivers, and foster sustainable value creation in a collaborative ecosystem. The publication was written by Meihui Jiang, Koen Dittrich and Stef Lemmens

## Advancements in TLP Bonding for Power Electronics Die-Attach Applications

This review outlines the current state of research on TLP Bonding in die-attach applications, covering key processing conditions, reliability aspects, and optimization strategies. It aims to unify terminology, contextualize experimental approaches, and highlight the key challenges to be addressed for successful industrial adoption. It also discusses emerging trends, such as the use of nanostructured interfaces to accelerate the TLP bonding process, offering new pathways to enhance the scalability of this technology. The publication was written by Circular Circuits' colleague Fatin Battal, together with Davey Boss, René H. Poelma, Elias Vlieg, and John J. Schermer.

## Simulate the effect of voids on fractures printed circuit boards

The material point method (MPM) was used to simulate the effect of voids on fractures in the underfill. The findings are presented at the <u>EPTC conference</u> in Singapore, by Sjoerd de Jong

## **MEDIA**

## Amounts and monitoring of WEEE, Design for Recycling, and new business models

This article in <u>CircularIT</u> gives a short overview of the recent outcomes of these themes in the Circular Circuits project.

#### What kind of materials do we have in our phones and why is this important?

To answer this question a mobile phone is put in a blender by Circular Circuits PhD Dorien van Dolderen (TU Delft) and Arjan Dijkstra of the Twente University. <u>Let's see</u> what happens! (text in Dutch, but select English subtitles in YouTube video (11m52s)).

#### **OTHER**

Difficulties in choosing design for repair or design for recycling was a major topic at the Retail2Recycling congress on November 3rd by the faculty of Industrial Design at the TU Delft and Techniek Nederland. A video impression.

Please check for frequent updates the project website <u>www.circularcircuits.nl</u> and our LinkedIn page.