

Research Needs

Green ECS: Green materials and integration technologies

Specific Objectives:

- Reducing the environmental impact of electronics, in particular production and supply chain effects,
- and supporting better circularity of products and materials

Main Research Needs:

- Long term: Novel inherently green materials, incl. hazard-free, recycling system compatible and bio-based materials
- Mid term: Renewed modularity and reparability, heterogeneous integration (incl. chiplets), 3D-printed, large area, flexible, structural electronics
- Short term: Integrate environmental prioritization in more design steps to reduce footprint based on existing, market-ready materials and technologies
- Overarching topic: better transparency of trade-offs; better quantification of improvement potentials and baselines

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