additive electronics

The Business Model

Unique Selling Proposition: Fast, in-house prototyping and distributed in-market manufacturing
Miniaturization and increased modules/component integration
Adaptability of structure to given build volume

Unfair Advantage: Industry leading inkjet know-how in 3D printed electronics incl. a modular machine framework as basis for further system development.

Revenue Model: System sales revenues
Recurring revenues: materials, software & services

EMPOWERING 3D-printing for future electronics manufacturing

The Project

Problem: Conventional layer-based manufacturing of electronics is restricting further miniaturization, feature density, component embedding and adaptability of electronics.

Solution: Additive 3D manufacturing of electronics allows for fully adaptive free-form designs of the outer structure and internal electronics, supports embedding of components and increases miniaturization.

Target market: Stage 1: R&D prototyping of electronic applications
Stage 2: low volume electronics manufacturing across various industries

Fraunhofer technology: Hybrid process chain and corresponding process strategies for additively manufactured electronics.

Venture Readiness Level

VRL	Ideation	Incubation	Traction	Growth

Technology Readiness Level

TRL	1	2	3	4	5	6	7	8	9

The Side Facts

Customer Focus: B2B

Searching For: PoC partner, expertise, research partner, investors,

Industry Tags: Materials, industrial goods and services, (semiconductors and semiconductor equipment), technology hardware & equipment

Technology Tags: 3D printing, additive manufacturing, new materials, customization, PCB prototyping, last mile solution, sensors, zero waste, smart factory

The Team

Location: Fraunhofer IPA, Stuttgart / additive electronics GmbH, Gmund

Members: IPA: **Oliver Refle** (Abteilungsleiter); Jan Janhsen (Teamleiter); Tobias Granse (Wissenschaftler)
ae: **Felix Michl** (CEO); Florian Vetter (CCO); Jorin Dinter (COO)

AHEAD Infos   **Batch:** 2022/23   **Phase:** 1   **Track:** Spin-off