Welcome

Nano Dimension Tech Day

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April 27, 2023

Agenda

9:30	Welcome Coffee
10:00	Introduction Nano Dimension
10:15	Introduction J.A.M.E.S
10:30	Breaking the packaging to unleash innovation – innovative packaging by AME technology
11:00	Coffee Break
11:15	Revolution: Is AME ready for production?
11:45	Use Case Celtro: Self Sufficient Medical Electronics
12:15	Lunch & Indoor Golf – time to do emails & calls or practice your golf swing
14:00	Flexible solution to place components onto an AME board
14:30	Micro Additive Manufacturing – Shaping the future. One micron at a time
15:00	System demos @application center: DragonFly, Fabrica, Fox
16:00	Coffee, Question & Answers
16:30	After-Work Networking cocktails & beers

THE PRINTING PRESS EXPONENTIALLY ACCELERATED AND EXPANDED THE INDIVIDUAL CAPACITY FOR PRODUCTION

Historical comparison

PDFs are the digital inventory!

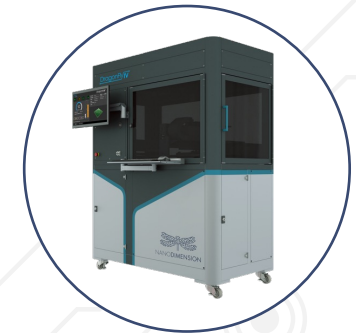**500 BCE → 1436 CE**   **1907**   **1970**   **2008**   **2016**

Similarly, Nano Dimension's AME 3D-Printing Technology diffuses production capacity, expedites innovation and fosters a renaissance and paradigm shift in analogue industries that are over half a century old (non-integrated circuits electronic devices & PCB)
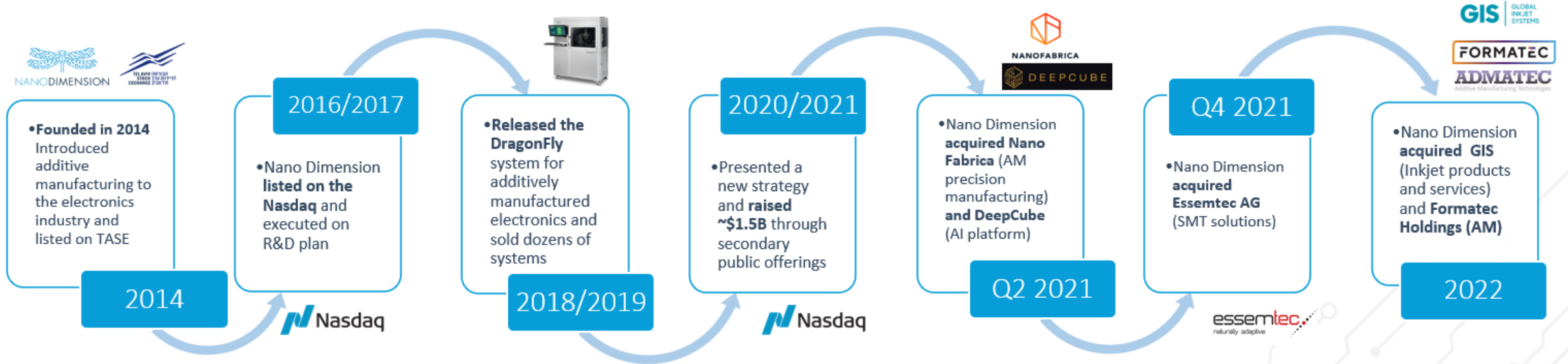
2000   **2022**

THE NANO DIMENSION JOURNEY

AME enables free from 3d electronics design and manufacturing

2014
- **Founded in 2014** Introduced additive manufacturing to the electronics industry and listed on TASE

2016/2017
- Nano Dimension **listed on the Nasdaq** and executed on R&D plan

2018/2019
- **Released the DragonFly** system for additively manufactured electronics and sold dozens of systems

2020/2021
- Presented a new strategy and **raised ~$1.5B** through secondary public offerings

Q2 2021
- Nano Dimension **acquired Nano Fabrica** (AM precision manufacturing) **and DeepCube** (AI platform)

Q4 2021
- Nano Dimension **acquired Essemtec AG** (SMT solutions)

2022
- Nano Dimension **acquired GIS** (Inkjet products and services) and **Formatec Holdings (AM)**

NANO**DIMENSION**
Electrifying Additive Manufacturing®

Local, Secure, Flexible, and Sustainable

All of This

Replaced by a Few of These

LEADERSHIP IN SUSTAINABILITY

Traditional Manufacturing vs. Sustainable AM Solutions

Before

After

94% Less
CO² (kg/iteration)

100% Less
Water (L/iteration)

99% Less
Waste (kg/iteration)

82% Less
Chemicals (L/iteration)

98% Less
Materials (kg/iteration)
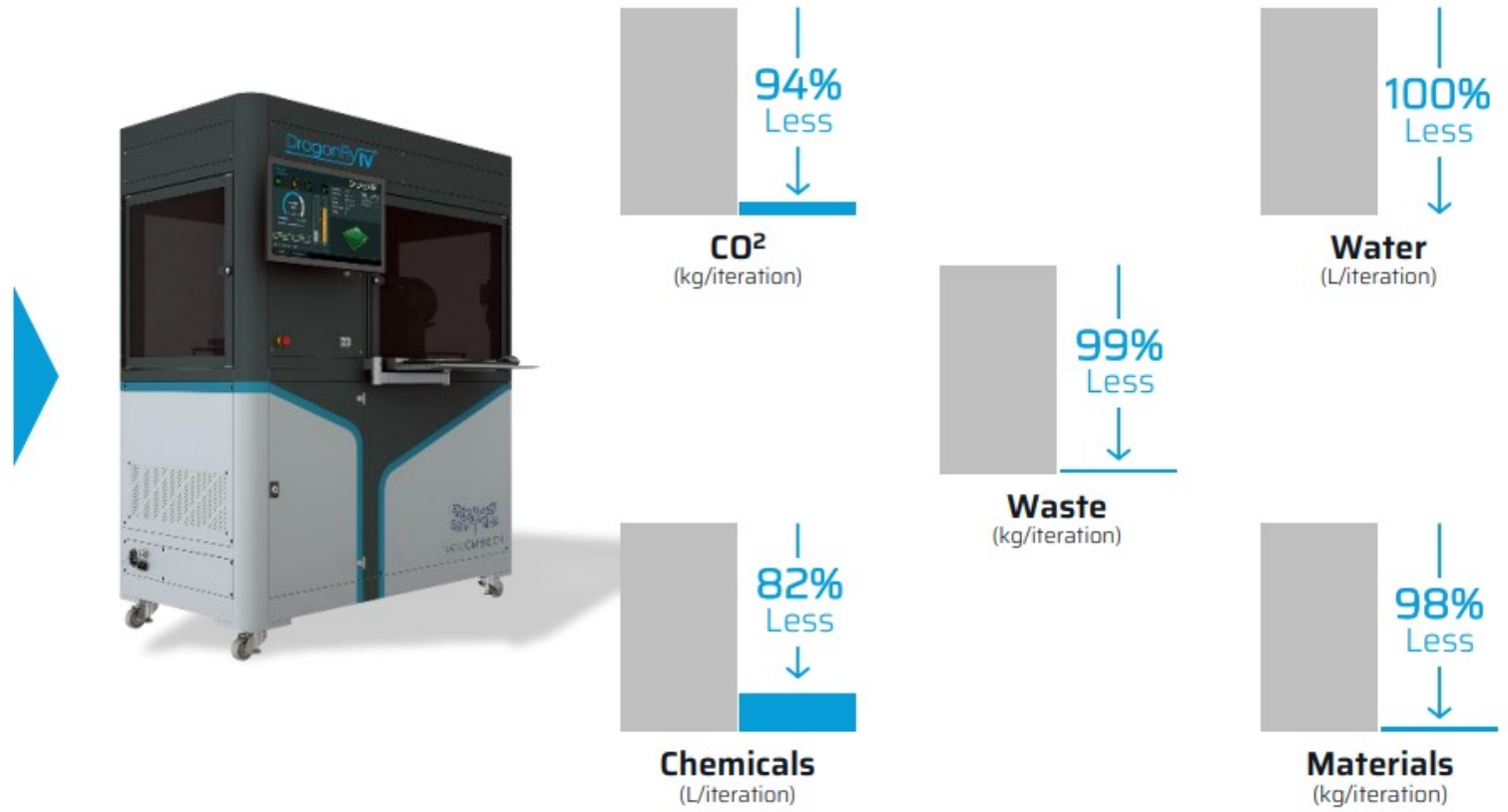
1 Based on a 2021 study by HSSMI, a UK based sustainability consultant

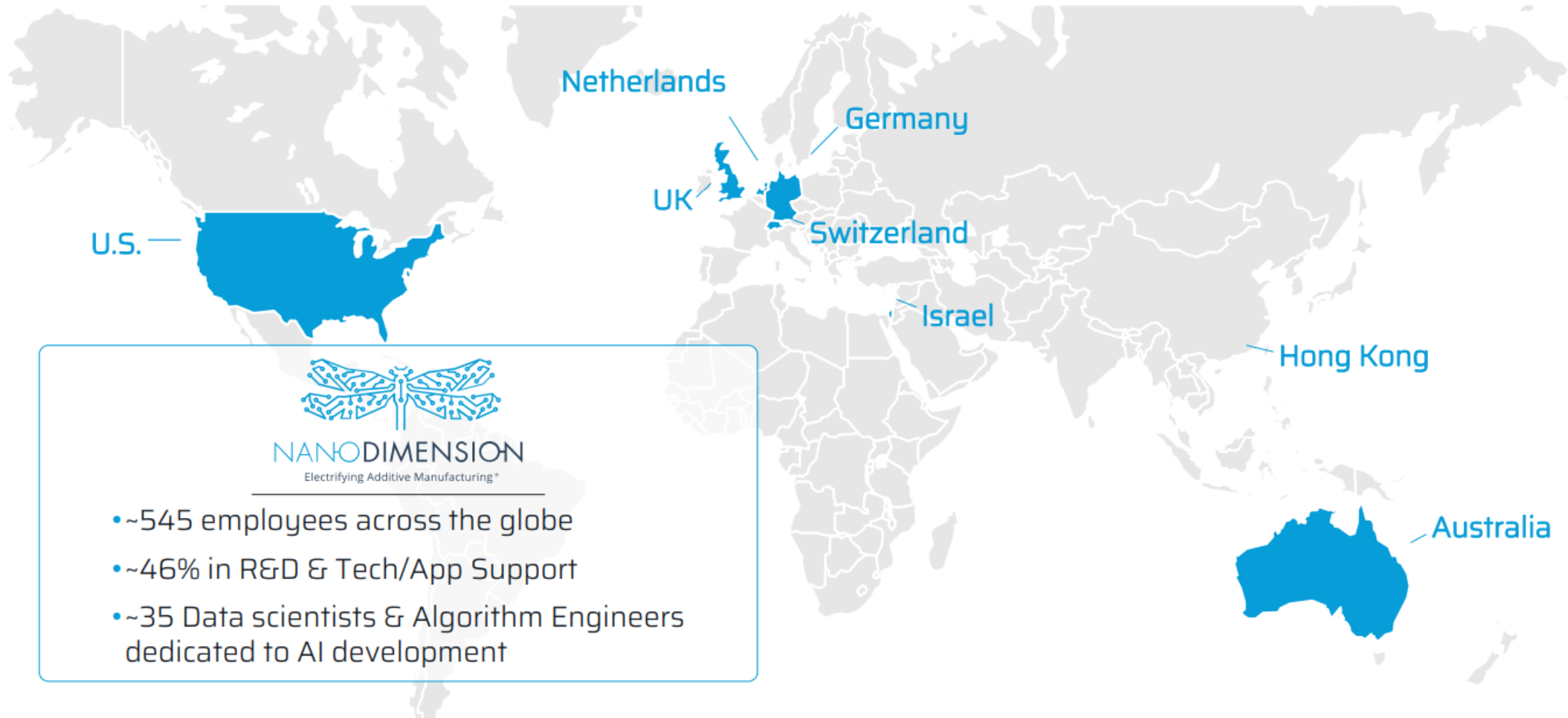WE STARTED HERE
↓

Additively Manufactured Electronics (AME)

Critical Technologies to Advancing 3D Printed Electronics

WORLDWIDE PRESENCE POISED FOR ACCELERATED GROWTH

Nano Dimension

Netherlands

Germany

UK

Switzerland

U.S.

Israel

Hong Kong

Australia

NANODIMENSION
Electrifying Additive Manufacturing®

- ~545 employees across the globe
- ~46% in R&D & Tech/App Support
- ~35 Data scientists & Algorithm Engineers dedicated to AI development

Expanding the Product Portfolio to Reach the Target

DELIVER ADDITIVELY MANUFACTURED ELECTRONICS AND HIGH PRECISION AM
ENVIRONMENTALLY FRIENDLY & ECONOMICALLY EFFICIENT SOLUTIONS
TRANSFORMING DIGITAL DESIGNS INTO HIGH-PERFORMANCE INNOVATIVE
APPLICATIONS - ON DEMAND, ANYTIME, ANYWHERE

- **DragonFly IV:** Additively Manufactured Electronics

- **Fabrica Group**: High precision manufacturing in polymer and ceramic loaded utilizing DLP technology

- **Essemtec**: Adaptive, highly flexible and modular SMT equipment, P&P and micro-dispensers

- **Admatec:** ceramic and metal AM system utilizing a patented foil system and DLP technology

- **Global Inkjet Systems:** drive electronics, SW and ink delivery solutions for inkjet industries

Applying **DeepCube Group** Deep Learning based AI software to create a network of self improving and correcting systems, improving overall production capabilities
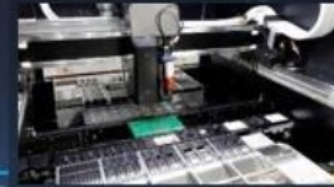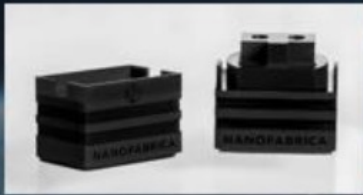
Innovation in Key Areas

Enabling Weight Reduction, Miniaturization, & Agile Innovation of Critical Components

PCBA
Dispensing, Pick & Place
Puma (SMT)

Chip Array Socket & Connectors
Fabrica 2.0 (Micro AM)

Optical components
Admaflex (AM)

RF Amplifier & System-in-Package
DragonFly (AME)

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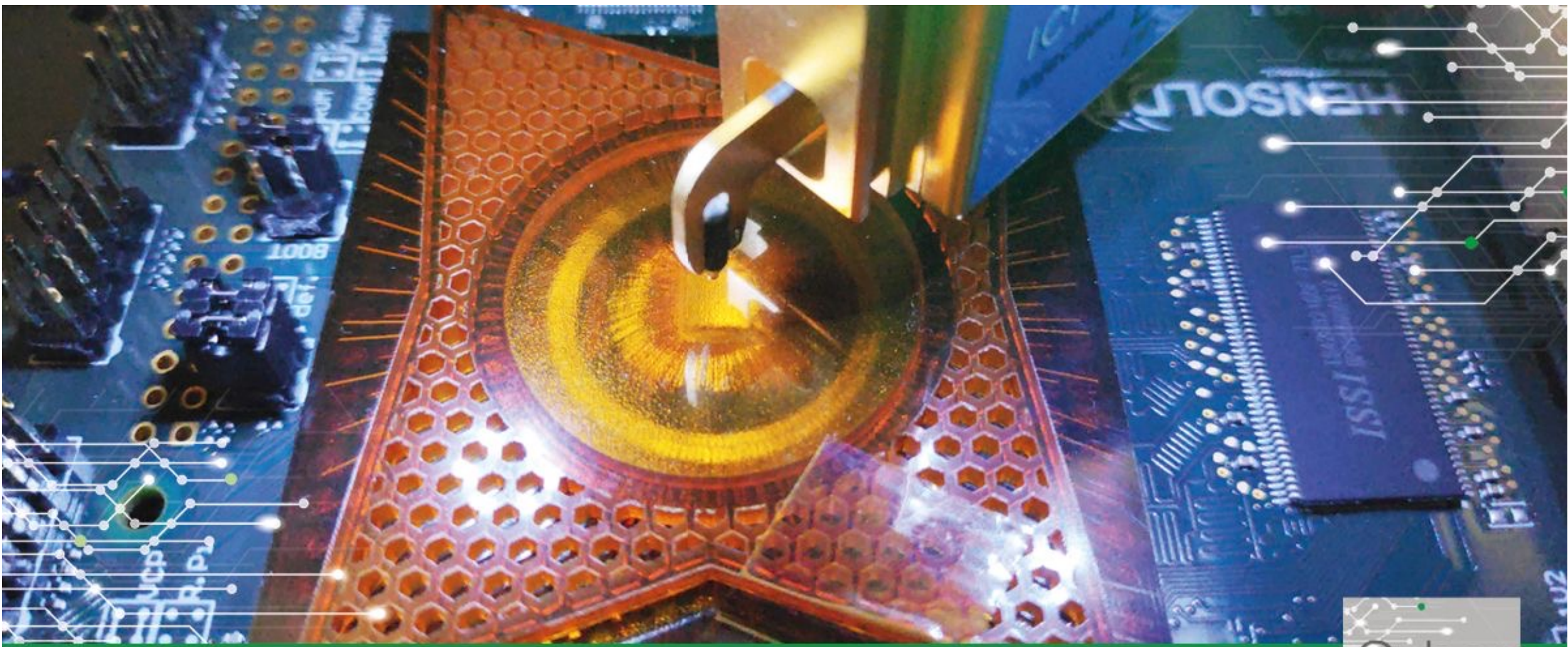
3D printed interposer with MiG-V SoC