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logiicdev (SME).

Deepak V. Katkoria

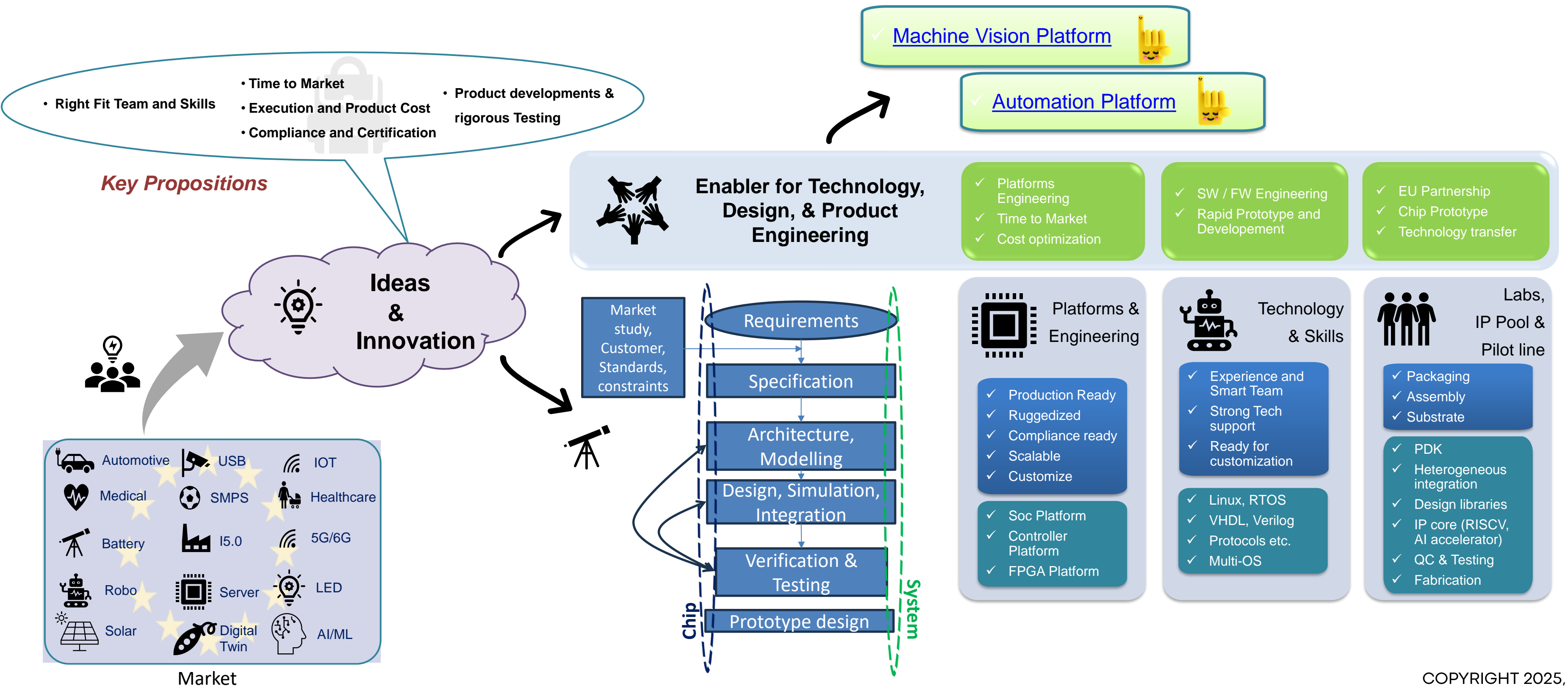Graz, 27.February 2025

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Logiicdev

Semiconductor & HW Prototype PLATFORM
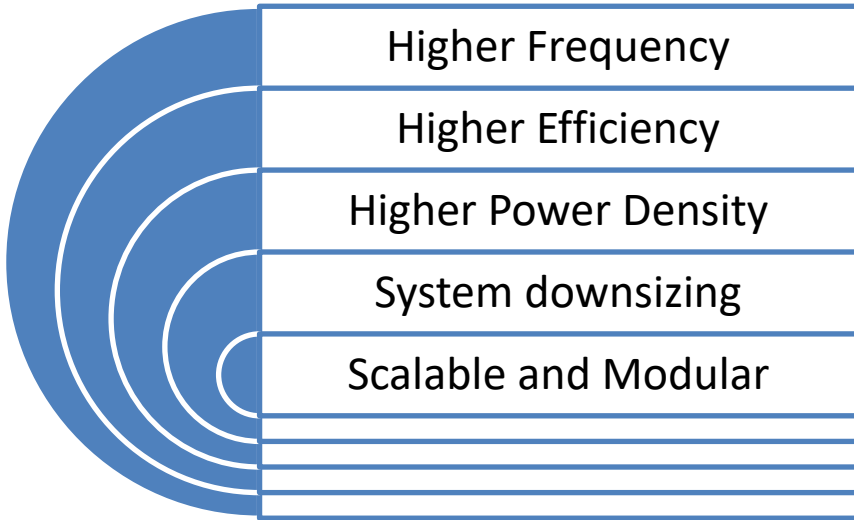
Key Propositions

- Right Fit Team and Skills
- Time to Market
- Execution and Product Cost
- Compliance and Certification
- Product developments & rigorous Testing

Ideas & Innovation

Market
- Automotive
- Medical
- Battery
- Robo
- Solar
- USB
- SMPS
- I5.0
- Server
- Digital Twin
- IOT
- Healthcare
- 5G/6G
- LED
- AI/ML

✓ **Machine Vision Platform** 👆

✓ **Automation Platform** 👆

Enabler for Technology, Design, & Product Engineering

- ✓ Platforms Engineering
- ✓ Time to Market
- ✓ Cost optimization

- ✓ SW / FW Engineering
- ✓ Rapid Prototype and Developement

- ✓ EU Partnership
- ✓ Chip Prototype
- ✓ Technology transfer

Development flow

Market study, Customer, Standards, constraints

- Requirements
- Specification
- Architecture, Modelling
- Design, Simulation, Integration
- Verification & Testing
- Prototype design

Chip — System

Platforms & Engineering

- ✓ Production Ready
- ✓ Ruggedized
- ✓ Compliance ready
- ✓ Scalable
- ✓ Customize

- ✓ Soc Platform
- ✓ Controller Platform
- ✓ FPGA Platform

Technology & Skills

- ✓ Experience and Smart Team
- ✓ Strong Tech support
- ✓ Ready for customization

- ✓ Linux, RTOS
- ✓ VHDL, Verilog
- ✓ Protocols etc.
- ✓ Multi-OS

Labs, IP Pool & Pilot line

- ✓ Packaging
- ✓ Assembly
- ✓ Substrate

- ✓ PDK
- ✓ Heterogeneous integration
- ✓ Design libraries
- ✓ IP core (RISCV, AI accelerator)
- ✓ QC & Testing
- ✓ Fabrication

ASSETS (A1)

Project1

Omnipower,
Special motherboard designed for power application

Number of components: 1400
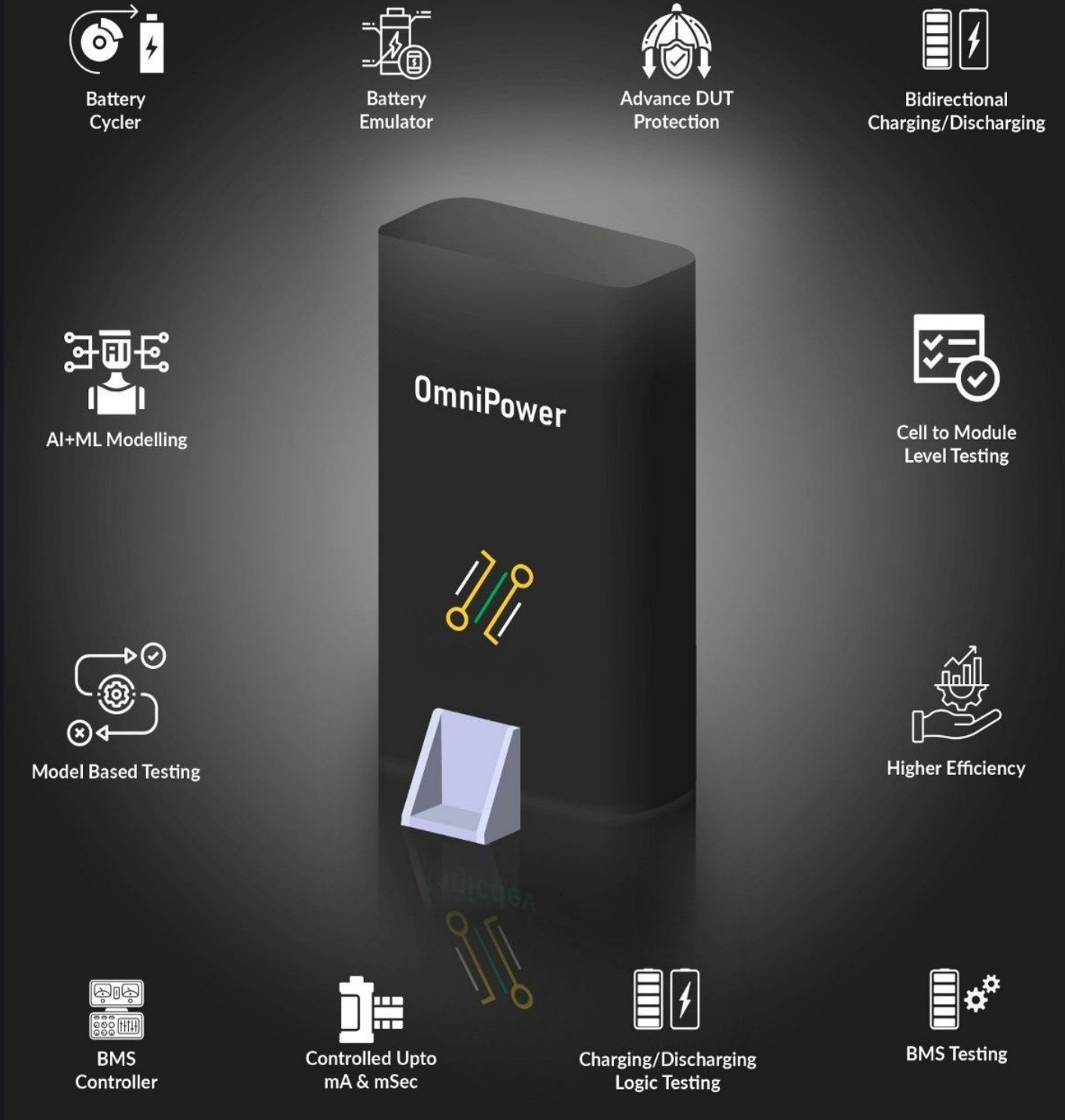Efficiency : 91%
Number of pluggable board: 4
Reached TRL 5-6

- Higher Frequency
- Higher Efficiency
- Higher Power Density
- System downsizing
- Scalable and Modular

OmniPower

- Battery Cycler
- Battery Emulator
- Advance DUT Protection
- Bidirectional Charging/Discharging
- AI+ML Modelling
- Cell to Module Level Testing
- Model Based Testing
- Higher Efficiency
- BMS Controller
- Controlled Upto mA & mSec
- Charging/Discharging Logic Testing
- BMS Testing

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(74) Agent: SCHWARZ & PARTNER PATENTANWÄLTE GMBH et al.; Wipplingerstrasse 30, 1010 Wien (AT).

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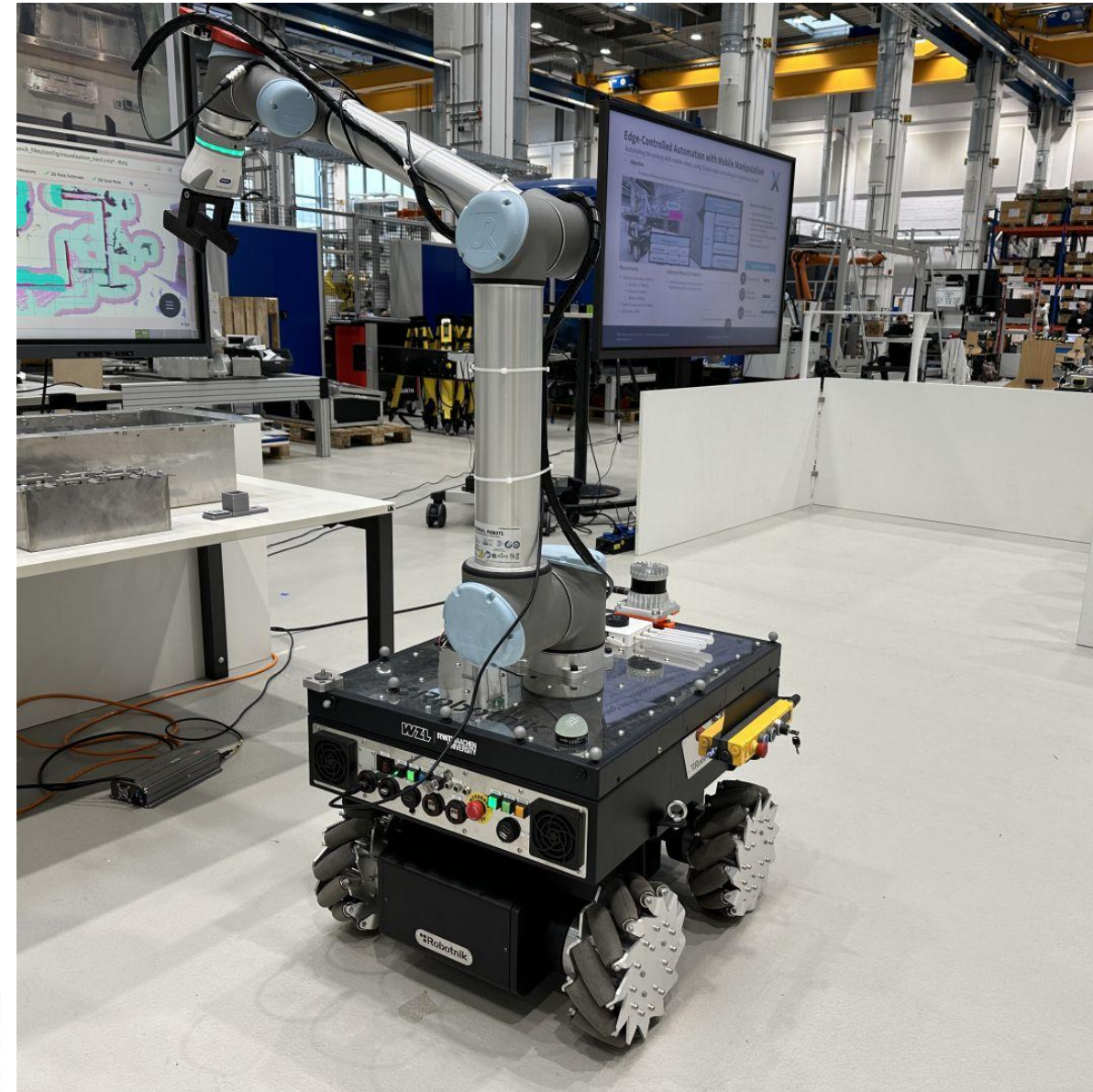
Eye twin for Robotic (A2)

- Hardware bridge platform Co-Robotic operation (CEA List)

- ROS2-based solution

- 5G SA connected (Fraunhofer)

- AI/ML-based algorithm for vision control x3 Camera

- RISCV-based FPGA Accelerator

- AI Hailo Accelerator
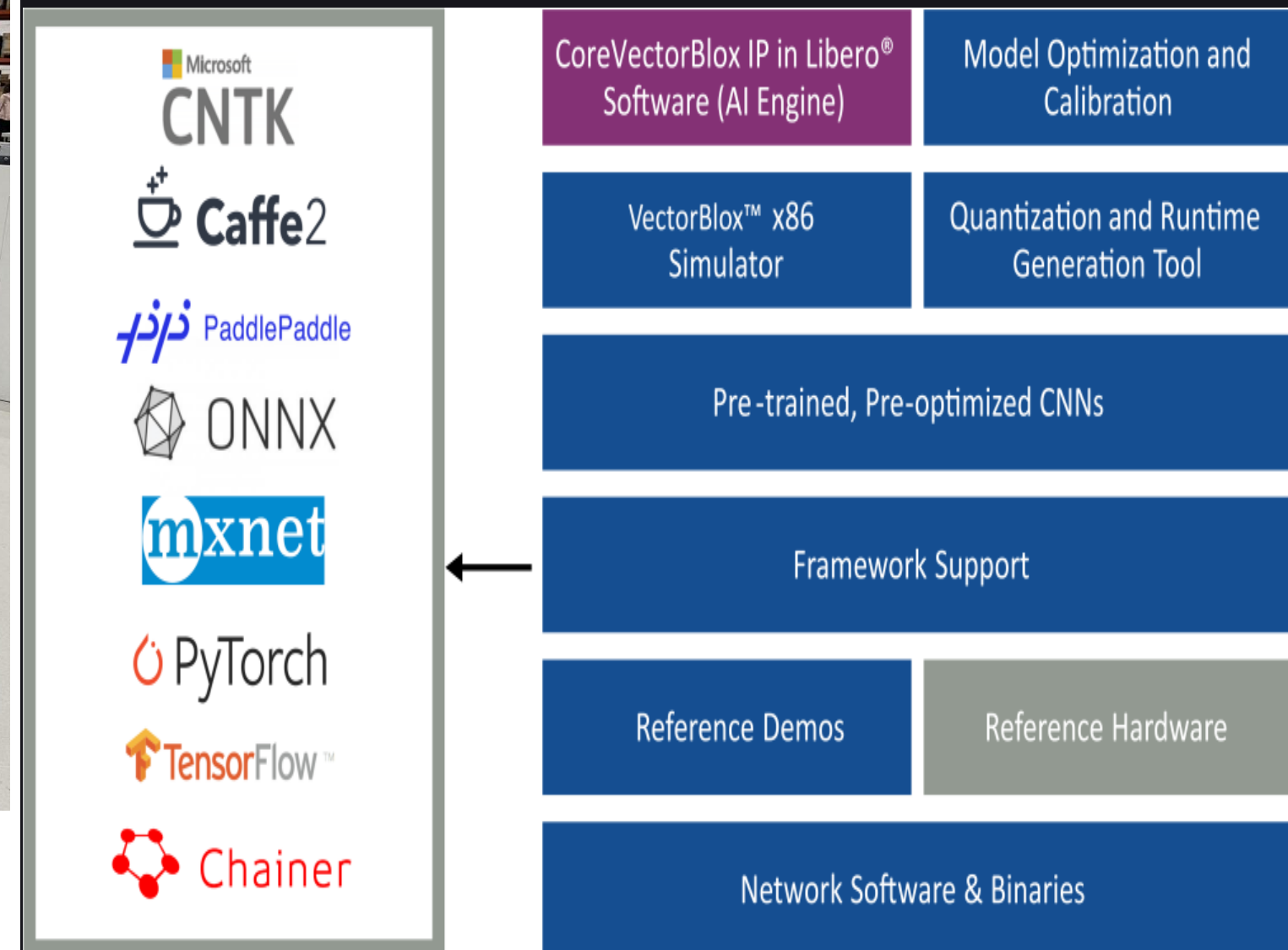

Programmable Hardware solution

Robotic & Co-bot application (**WZL der RWTH Aachen, DE**)

Other application

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Project2

SDK & Framework

Team

Founders

CEO & Founder
Deepak V Katkoria, M.Sc

- 20+ Years of Experience in the Industry
- Worked at Leading Positions
  (Intel, Freescale, BAE, NXP, Dialog and Infineon)
- R&D Management

Chief Advisor
Theo Hatzis, M.Sc

- 35+ Years of Experience in the Industry
- Self – Employed (Nürnberg, DE)
- Innovation Management
- Technical Consultant

Investor
Ian Macnamara

- 35+ Years of Experience in the Industry
- Investor
- Business Management

Team

Elena Mokina, B.Sc
Business Developer

Sravani Thota, MTech
Power Electronics Engineer

Fedja Mulagebovic
AI - Hardware Engineer

Anjaly K
AI - Hardware Engineer

Board of Advisors

Jakob Udier
Sales Consultant

Darshna V Katkoria
Project Manager

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Facts & Figures

Graz, Austria
Area: 72sqm
Sitting place: 10 people

4 Engineer (HDL,HW, FW, GUI)
2 Management , 4 Students
Year of Establishment: 2020

Number of Project
'20 #1
'21 #2
'22 #2
'23 #3

80% invested in R&I

Graz

Product & Market:
1. FPGA based verification/prototype/evaluation.
2. Patented High speed Analog design for Digital twin.
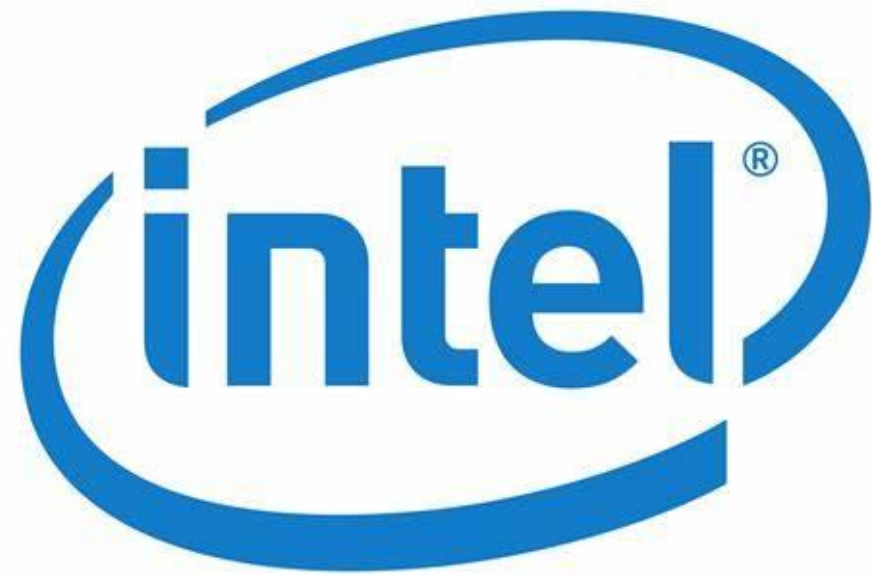3. Verification & Simulation –Macro-Die, Package, Chip & PCB.
4. AI based solution.

Infrastructure:
• AI/Simulation server(256GB RAM)

• Component storage worth 18000€ (in stock)

• Testing Equipment: 25000€

• PC/Computer: 28000€

Company book value 75000€

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