

## **Paltech wins Avnet Silica robotics challenge with automated weed control solution**

*AMD Kria KR260 Robotics Starter Kit enables innovative herbicide-free design which is better for the environment*

**Brussels, Belgium, 23<sup>rd</sup> May 2023**– Avnet Silica, an Avnet company (NASDAQ: [AVT](#)), has announced that Paltech GmbH is the winner of its BayStartUP Robotics & Adaptive Computing Challenge, which has been run in collaboration with AMD.

The Avnet Silica Robotics & Adaptive Computing Challenge is a 12-week programme for early-stage startups in AI-enabled robotics, machine vision, industrial communication, and control. The challenge supports concept validation and product development, offers professional support, a free starter kit, and access to the AMD/Kria App Store. Managed by BayStartUP, it helps emerging companies to bring game-changing products to market. The challenge also advises them on developing suitable strategies for cooperating with established SMEs.

Bavaria-based startup Paltech GmbH has won the competition with its automated weed control solution, a novel smart agriculture concept for tending to grasslands without the use of herbicides. This solution uses several robots and a drone to map the field and calculate optimised paths for the robots. The robots are equipped with on-board sensors to determine their exact position and mechanically remove weeds when they reach a waypoint.

The startup has employed a Kria KR260 and developed a custom Shield for mobile robotics to enable this automated solution. The shield includes localisation with onboard GPS and IMU sensors, serial connectivity for co-processors with UART and I2C, high speed SPI interface with the KR260 board, CAN Bus transceiver for motor drivers, real time clock and data logging to a microSD card. This solution is more powerful and feature-rich than existing hobbyist solutions, and is highly optimised for mid- to large-sized mobile robots.

“Avnet Silica's support has been instrumental in the success of Paltech's automated weed control solution,” stated Felix Schiegg, CEO at Paltech GmbH. “As a startup, we greatly appreciate the resources and expertise that they provided us with, particularly the Kria KR260 powered by AMD. This powerful technology enabled us to develop a highly effective mobile robotics solution that can efficiently and accurately control weeds. Avnet Silica's commitment to supporting startups like ours is truly commendable.”

“Paltech’s victory in the BayStartUP competition is a cause for celebration” said Alexander Friebe, Business Development Manager at Avnet Silica. “The Kria KR260 was specifically created by AMD to foster creativity and innovation in robotics and industrial applications. It’s thrilling to witness Paltech’s ingenious use of this technology in their automated weed control solution.”

“We congratulate Paltech on identifying a real-world agricultural challenge and rapidly developing a novel solution using Kria KR260 Robotics Starter Kit and K26 Production SOMs” **said KV Thanjavur Bhaaskar, Strategy and Marketing Manager, Industrial Vision, Healthcare & Sciences, at AMD.** “We are proud to work alongside Avnet Silica to support this challenge, which demonstrates the power of making adaptive hardware accessible to the creativity and talent that exists within the growing robotics startup community.”

For more information about Paltech's innovative weed control solution, **visit <https://www.paltech-robotics.eu/>** To learn more about the Kria KR260, visit **[Kria KR260 Robotics Starter Kit \(xilinx.com\)](https://www.xilinx.com/products/development-boards/kria-kr260-robotics-starter-kit.html)**

### **About Avnet Silica**

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