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## **STMicroelectronics Throws Down With REV Robotics’ “Switchback” Battlebot to Make Robotics Entertaining and Fun**

*Robot battles build passion for  
Science, Technology, Engineering, and Math (STEM)*

**Geneva, Switzerland, December 21, 2021 – STMicroelectronics (NYSE: STM),** a global semiconductor leader serving customers across the spectrum of electronics applications, announced today it is contributing multiple [STM32 microcontrollers](#) (MCUs) to the “Switchback” battlebot. The 250-pound battlebot, which uses a dual-motor drum spinner mounted on a fully-ambidextrous arm, is designed for durability and serviceability – as well as to win robot battles by hitting opponent robots really, really hard, and breaking them apart with the drum spinner.

The Switchback battlebot, premiering in battle on the Discovery Channel on January 6<sup>th</sup>, 2022 and on display in ST’s private suite at CES 2022, uses five heavy-duty electronic speed controllers with open-source firmware, implemented with STM32 MCUs. REV Robotics chose the controllers for their durability and REV’s familiarity with the ST microcontrollers inside, which helps the team make firmware changes to the MCUs quickly. On Switchback, the motors operate the left-side and right-side drivetrain, the ambidextrous arm, and the arm-mounted weapons.

Launched by two friends with a passion for robots, REV Robotics learned its familiarity with the STM32 in designing, building, and manufacturing robotics parts and components for students to learn about science, technology, engineering, and math (STEM), where the STM32 is a foundational component. Beyond its use of the STM32 MCUs in its battlebot, REV is using a range of ST sensors, [motor drivers](#), and protection devices in its product kits.

*“The latest in a line of take-no-prisoners battlebots, Switchback builds on our long interest in robots and our experience in these entertaining – but serious – competitions to encourage the next generation of engineers, who can also use our parts and kits to develop the same passion and excitement for robotics that we have,”* said Greg Needel, President and Co-founder, REV Robotics. *“We started using the STM32 MCUs and other ST components in our products and our battlebots because of the breadth of the ST portfolio and the strength of the ecosystem.”*

*“Robotics, and the Industrial Market, are key markets for ST, and our 10-year longevity assurance is a key differentiator – even if it might not be necessary for battlebots,”* said Loris Valenti, Americas Region VP Microcontroller and Digital

Products, STMicroelectronics. *“For us, even more exciting than watching REV Robotics and Switchback take on the latest and toughest battlebot competitors is the excitement and joy of seeing students develop and build their own robots, knowing that many of them may start or work at the next generation of robotics and industrial companies. With the popularity of the STM32 and its extensive and powerful ecosystem, we love inspiring developers as they attack the full range of their design challenges by releasing their creativity.”*

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### **About STMicroelectronics**

At ST, we are 46,000 creators and makers of semiconductor technologies mastering the semiconductor supply chain with state-of-the-art manufacturing facilities. An independent device manufacturer, we work with more than 100,000 customers and thousands of partners to design and build products, solutions, and ecosystems that address their challenges and opportunities, and the need to support a more sustainable world. Our technologies enable smarter mobility, more efficient power and energy management, and the wide-scale deployment of the Internet of Things and 5G technology. ST is committed to becoming carbon neutral by 2027. Further information can be found at [www.st.com](http://www.st.com).

### **About REV Robotics**

Named one of the top 100 fastest-growing privately held companies in North Texas in 2019 and 2020, REV Robotics provides the highest-quality products focusing on both the classroom and competitive robotics market. REV products are used by more than 10,000 Schools, across 190 countries globally. REV Robotics is passionate about increasing STEM education accessibility and global impact to support the creation of the next generation of STEM professionals. Further information can be found at [www.revrobotics.com](http://www.revrobotics.com)

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