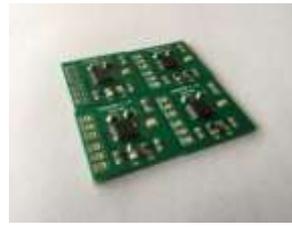


PRESS RELEASE

April 22, 2015



Kingston University's Formula Student Car*



One of Newbury Electronics' PCBs*

Motorsport engineers of the future select PCBs from Newbury Electronics for telemetry system in Formula Student Electric car.

Student engineers from Kingston University have turned to Newbury Electronics for both design advice and the manufacture of a series of bespoke PCBs for use in their latest Formula Student Electric car. Engineering departments from universities from across the country compete every year in a race where conventional combustion engines compete head-to-head with alternative fuelled vehicles.

Christopher Hockuba is the student team member at Kingston University responsible for Suspension & Telemetry in the 2015 vehicle, and he explains more about his work with Newbury Electronics; " Designing the telemetry system for the Formula Student car is part of my final year project. One of the measurements that we need to take from the vehicle is suspension travel and there are several ways to record this data. However the most efficient one, in terms of cost/performance, is to use a rotary hall effect sensor. The sensors needed to be I2C compatible because this standard gives a very good performance and only uses two wires for communication." He continues; Measuring suspension travel is important in a Formula Student Car as you want to have exactly the right amount of mechanical grip and this can be achieved by fine tuning dampers, anti-roll bar and the suspension geometry." In addition the boards, of which the Newbury Electronics' PCBs are an integral part, will also be used to monitor the throttle position sensors.

In previous years the students have used simple strip proto boards but this has not proved very successful. By placing all the necessary components on as few boards as possible the space used is kept to a minimum. Christopher already has some ideas about how the PCBs can be further enhanced for use in future vehicles.

"We are delighted to be able to support the team from Kingston University and share with them our knowledge and expertise. British engineering is some of the best in the world and by supporting the next generation of engineers we are helping to ensure that this key sector continues to grow and flourish; " said Philip King, managing director at Newbury Electronics.

Kingston University's e-Racing team has held the title as the highest ranking UK electric team for two consecutive year and is hoping to make it a hat trick in the 2015 season. This year they are looking to raise the benchmark for UK electric teams by using an independent drive with an electronic differential. The team is hoping to compete in not only the UK Silverstone Event, held on 9-12th July, but also the European Formula Student events later in the summer.

About Formula Student

Formula Student (FS) is Europe's most established educational motorsport competition, run by the Institution of Mechanical Engineers. Backed by industry and high profile engineers such as our Patron Ross Brawn OBE, the competition aims to inspire and develop enterprising and innovative young engineers. Universities from across the globe are challenged to design and build a single-seat racing car in order to compete in static and dynamic events, which demonstrate their understanding and test the performance of the vehicle. [Find out what is involved in the challenge](#)

Background

Newbury Electronics Ltd started trading in 1956. A management buyout took place in 1987 and Philip King took on his role of Managing Director in 2011. The company offers a full electronic design, [PCB design and layout](#) service alongside PCB manufacture and assembly in Newbury, West Berkshire. It employs 73 staff and is dedicated to small and medium batch PCB assembly, specialising in [electronic design and manufacture](#) incorporating SMD, SMT, surface mount, BGA, through hole, box build, soldering, test, & rework. Customers can select from electronics design and CAD layout through to printed circuit board design and fabrication, assembly and test, and the company is happy to undertake single, bespoke projects through to the design and supply of manufacture lots of up to 10,000 pcs on its automated SMD assembly lines.

As a contract electronic manufacturer (CEM), each year, the company produces in excess of over 15,000 different PCB designs for its clients, who benefit from the economies of scale built from the volume of orders processed. For more information visit www.newburyelectronics.co.uk

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*** High res jpegs available on request**

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