

RENESAS MCU CAR RALLY 2019

JOIN THE EXCITING STUDENT CONTEST!



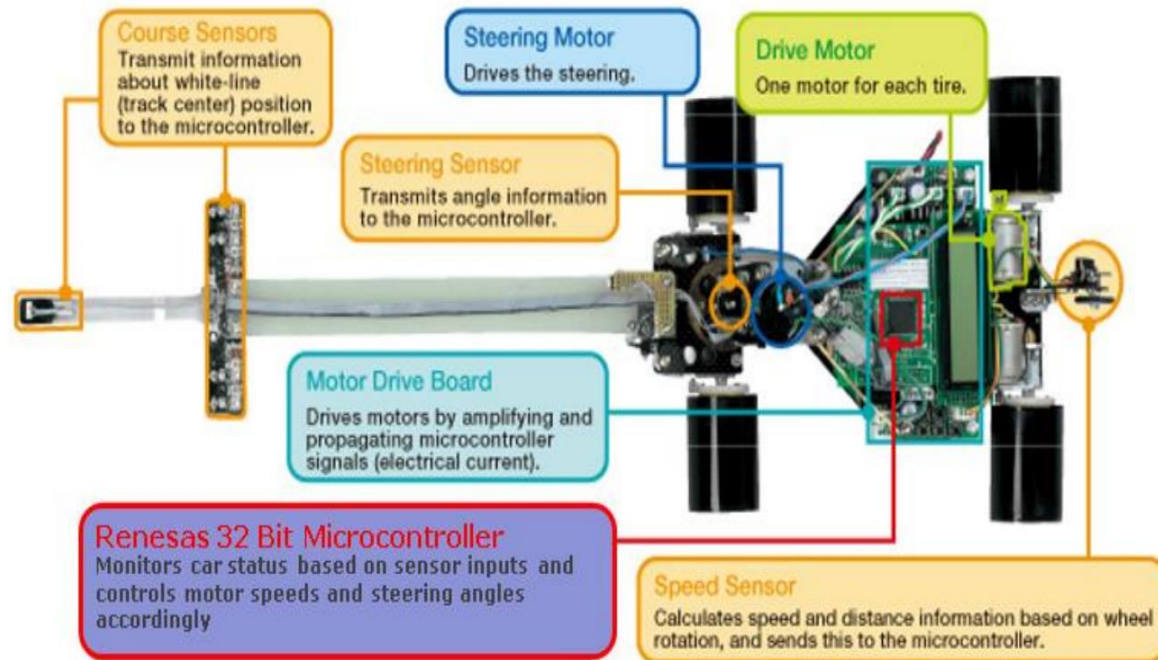
JOIN THE 5TH RENESAS MCU CAR RALLY @ EMBEDDED WORLD IN NUREMBERG BETWEEN 26TH AND 28TH FEBRUARY 2019

THE TASK	<ul style="list-style-type: none">• Build a self-guided model car.• Optimize the HW and SW algorithms that auto drive the car along the track.• Follow the given rule set.
THE CAR	<ul style="list-style-type: none">• A basic car kit with all components will be supplied by Renesas.• Sensors in front of the car are able to detect a white or grey line on the track.• Renesas 32-bit RX MCU controls the motor and guides the car.
THE WINNER	<ul style="list-style-type: none">• Is the team that builds the fastest and most stable car measured in 3 laps in the heats and 5 laps in the finals.
THE PRIZES	<ul style="list-style-type: none">• Attractive prizes will be awarded to the top 3 teams.

Watch the video from 2018:



CAR KIT AND CAR LAYOUT



As starting point every participating team will be provided with a free of charge MCU Car Kit including all components for a functioning car

Teams can add additional HW/SW in line with MCU Car Rally Rules and at own cost

Replacement parts and technical support will be provided by Renesas partner
AND Technology Research

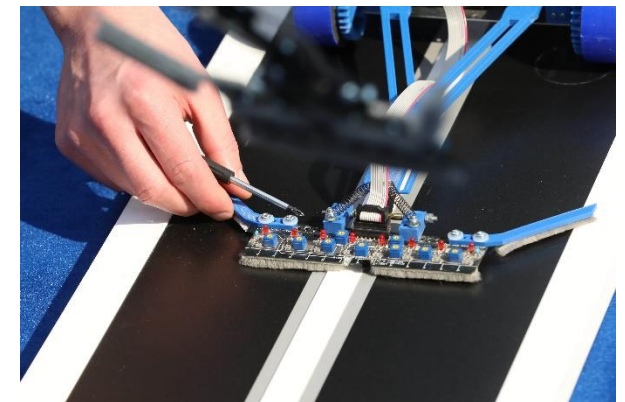
www.mcurally.com

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BENEFITS FOR STUDENTS

- Students will be able to gain in-depth knowledge and develop skills in
 - 32-Bit microcontroller hardware and software development
 - Electronic and mechanical hardware design optimization
 - Real time control theory & related software algorithms
 - Self guiding sensor systems (track monitoring, motor feedback...)
 - Motor control theory & systems
 - Project management and teamwork
- Can get credit points awarded by educators for their semester project work.

... and meet other students from all over Europe + have fun at an exciting event!



CONDITIONS FOR JOINING THE COMPETITION

- Up to two teams per university can participate.
- Each team may comprise a maximum number of 5 students.
- At least one professor or tutor per university is needed to support the team(s).
- The professor or tutor registers on behalf of the students, supports them along the way and is the main point of contact for Renesas.
- The total number of teams that can enter the contest is 35 – first come, first served.
- Applications must be submitted via the registration form by 31st July 2018.
- Renesas will provide one complete car kit per team.
- Renesas will cover the cost of accommodation in the A&O Hostel. The number of nights will be informed closer to the event.
- Renesas will provide meals during the event.
- All other costs – especially travel costs – have to be covered by the teams.



RENESAS MCU CAR RALLY IMPRESSIONS

