2021 NXP CUP EMEA

WE ARE DRIVING FORWARD

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EXTERNAL

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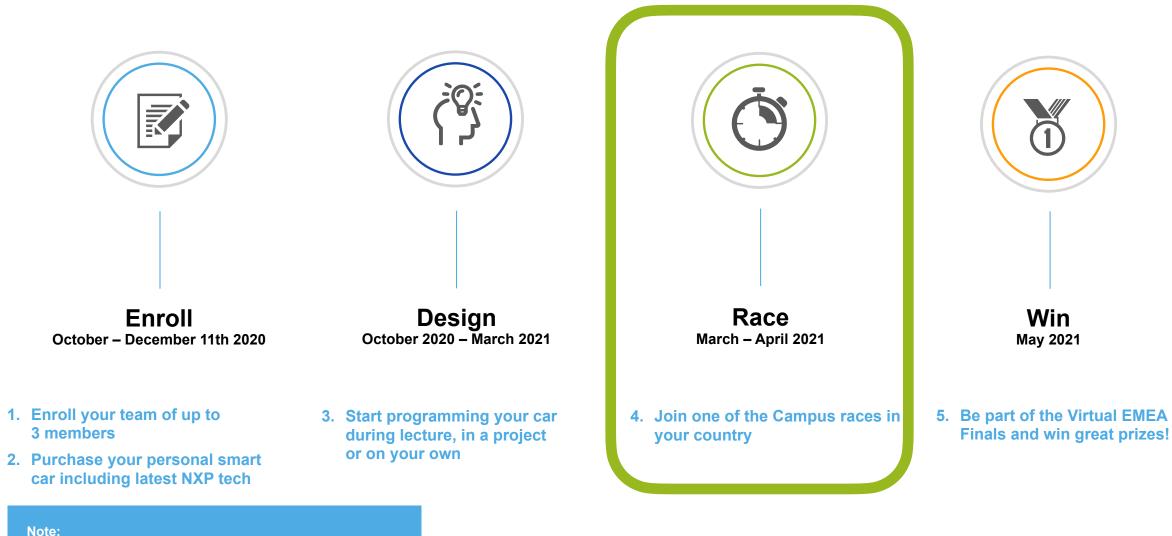


2020/2021 NXP CUP SEASON

- 1. The NXP Cup On-Campus events
- 2. Tips about the Virtual Prizes
- 3. The Virtual Finals Event: mark your calendar!!
- 4. Q/A



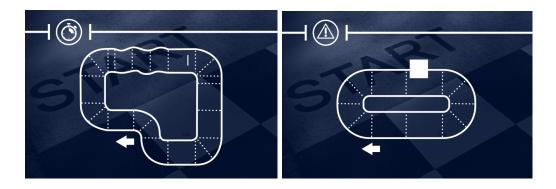
NXP CUP 2020/2021 CURRENT STATUS = 99 TEAMS ENROLLED



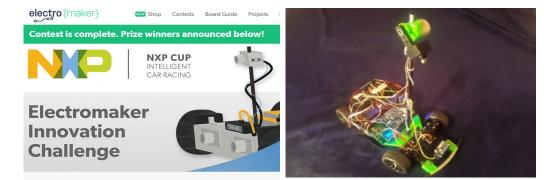
Participants from the 2019/2020 season are allowed to the contest regardless of student status.

2021 NXP CUP FOLLOWS A HYBRID APPROACH **BETWEEN PHYSICAL AND DIGITAL**

NXP CUP EMEA [PHYSICAL ON -CAMPUS EVENT]



OPEN TO ALL [VIRTUAL VIA ELECTROMAKER.IO]



SPEED RACE **FASTEST LAP TIME**

OBSTACLE **AVOID THE BARRIER** SPONSORED BY MOUSER

[6,540€ total cash prize]

ELECTROMAKER

[2.000€ total cash prize]

THE FUTURE OF **NXP CUP AWARD**

1.800€ total cash prize]

Every university will be given the same track configuration shortly prior race.

Fastest lap time wins this challenge.

After completing the first round, the jury will place an obstacle on one of the straight track segments.

The race car has to avoid this obstacle.

INNOVATION CHALLENGE

Functionality, project documentation, pictures and videos will get special attention during this contest.

Research, design and document how the NXP Cup should evolve to follow the anticipated trends in Autonomous vehicles.

Mandatory

Optional





1. Populate your project with all the data related to your NXP Cup Car 2. Focus on

- 1. Your achievements and learning
- 2. The car specifications
- 3. Special features of your NXP Cup car
- 4.Add videos to help illustrate your project

Project ends April 30th, 2021

The Future of the NXP Cup Award



The Future of the NXP Cup Award, sponsored by Mouser and Molex, is an opportunity for teams to design a new NXP Cup challenge.

It is created to meet future requirements in teaching along with newest industry standards.

Guiding question: How should the NXP Cup evolve to follow the trends in Autonomous cars?

The new challenge could follow along the lines with the existing NXP Cup (e.g. a new discipline on the race track).

Or it could follow a totally different approach (e.g. off-road challenge, follow a colour-code or signage rather than a track, Over-the-air updates, etc.)

Judging will be carried out by Mouser/Molex/NXP to decide on the Top 10 ideas.

- Winning ideas or their elements, may inspire or be used as a future official NXP Cup challenge!
- Each winning team will receive a payment of 180€

How to Submit your Ideas

molex

- Provide the following information when you submit:
 - Contact email / Team Name (same one used for registration)
 - Name of the challenge (think of something funny)
 - Sketches that support your idea (ppt., on papers, CAD...)
 - 500 word paper (pdf.) reflecting the central question. Don't forget to mention the hardware needed in case of something fundamentally new
 - 1 minute video about your idea
 - Note: Many robotics competitions copyright their game materials. Judges are not expected to know every robotics game that exists, but teams should be mindful to not submit a game that is too similar or identical to a copyrighted game. We want to see your creative solutions rather than copy paste!
 - Submission Deadline: 30th April
 - All results have to be uploaded to <u>Electromaker NXP CUP contest page</u>. Submission must include the 500 word pdf. Along with a 1 minute video (mp4
- Besides above mentioned submission criteria keep in mind:
 - Your idea is safe for everyone involved
 - Space is generally limited, even if executed outside
 - Time is limited, too. The execution of your contest idea should not exceed 2 minutes
 - Include as much NXP hardware as possible. Competitors solutions might be excluded.

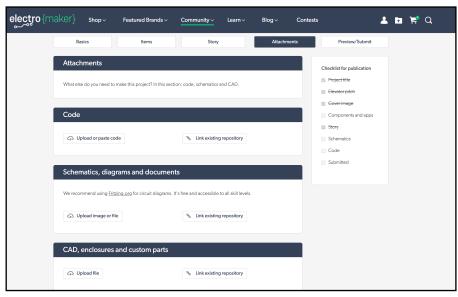
How to Submit your Ideas (2/2)



1. Name your PDF file "The Future of the NXP Cup - Molex Challenge - Team (your team name)

2. Go to you electromaker.io and log into your Team project

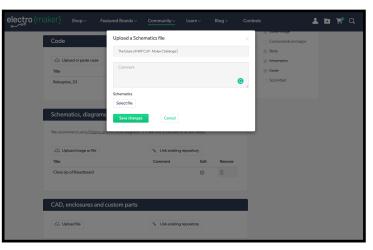
3. Select "Attachments"



4. Go under "Schematics, diagrams and documents"

Schematics, diagrams and documents		
We recommend using <u>Fritzing.org</u> for circuit diagrams. It's free and accessible to all skill levels.		
C₁3 Upload image or file	𝒫 Link existing repository	

5. Upload your file



Resources



We recommend this list of links and resources to help create your paper:

- <u>https://www.mouser.co.uk/empowering-innovation/driverless-cars</u>
- <u>https://www.mouser.co.uk/applications/automotive-autonomous-vehicles-the-way-forward/</u>
- <u>https://www.mouser.co.uk/applications/autonomous-vehicle-designs/</u>
- <u>https://www.mouser.co.uk/applications/autonomous-car-sensors-drive-performance/</u>
- <u>https://molex.mouser.com/home/advanced-micro-solutions-for-automotive-applications</u>
- What's Next In The Automotive Industry? | Experience Molex

All details in this presentation are now posted on the NXP Cup Community



Join Us... Invite your Friends

Virtual Finals Event



May 20th, 2021 Event starts at 5PM CEST



RECORDED CALLS (ACCESS VIA VIMEO PLATFORM)

Call Date	Access link
October 22nd, 2020	Watch the recording
November 12th, 2020	Watch the recording
December 3rd, 2020	Watch the recording
January 14th, 2021 @ 5PM CET	Watch the recording
February 4th, 2021 @ 5PM CET	Watch the recording
February 25th, 2021 @ 5PM CET	Watch the recording
March 18th, 2021 @ 5PM CET	Watch the recording
April 15th, 2021 @ 5PM CET	Join meeting
Virtual Finals Event May 2021	May 20th @ 5pm CEST

NXP Cup EMEA Showcase with all the call recordings https://vimeo.com/showcase/nxpcup



SECURE CONNECTIONS FOR A SMARTER WORLD

