2021 NXP CUP EMEA

SEASON KICK-OFF

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EXTERNAL

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2020/2021 NXP CUP SEASON

1. 2021 DFRobot Car model
2. Your way into the Competition
3. Season #10: New opportunities
4. Timeline at a Glance
5. Q/A
2021 DFROBOT CAR MODEL
## NXP CUP KEY COMPONENTS

### CHASSIS
- **2021 DFRobot Car Chassis**
- **€87**

### MOTOR KITS
- **Brushless Motors**
- **€39**
- **Brush Motors**
- **€22**

### CAMERA
- **Pixy2 Camera**
- **€65**

### MCU BOARD
- **RDDRONE-FMUK66**
- **€220**
- **MIKRO-E**
- **€124**

### PRICES

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*Discounted Price and Limited availability! Only NXP Cup registered participants are eligible.

Special price valid only in combination with the purchase of a Chassis, Motor kit and Camera via Mouser.com.

Please contact us to receive a discount code.
REGISTRATION PROCEDURE
SIGN UP AT NXP AND ELECTROMAKER

1. **NXP**
   - Register via [NXP Tool](#)
   - This is for your official registration.

2. **ELECTROMAKER**
   - Register via [Electromaker](#)
   - This is for uploading your projects documentation and be eligible for all awards.

3. **ENROLLMENT**
   - After you have enrolled, you can decide which challenges you would like to consider. Not all contests are mandatory.
   - Your enrollment is only complete when registered on both platforms!
2021 NXP CUP FOLLOW A HYBRID APPROACH BETWEEN PHYSICAL AND DIGITAL

NXP CUP EMEA [PHYSICAL ON-CAMPUS EVENT]

Every university will be given the same track configuration shortly prior to the race. Fastest lap time wins this challenge.

SPEED RACE
FASTEST LAP TIME

[6.000€ total cash prize]

Mandatory

OBSTACLE
AVOID THE BARRIER

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.

Optional: Gain valuable extra points

OPEN TO ALL [VIRTUAL VIA ELECTROMAKER.IO]

Electromaker Innovation Challenge

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

ELECTROMAKER INNOVATION CHALLENGE

[2.000€ total cash prize]

Optional

Software and hardware, this is what counts in this contest. We will look at the components being used and code cleanness.

BEST DESIGN AWARD

[to be announced]

Optional

Note: All teams are eligible to win in the “Open to All” awards, even if not participating into one of the NXP Cup EMEA physical on-campus events.

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2021 NXP CUP CONCEPT
IN PERSON CAMPUS RACES FOLLOWED BY THE VIRTUAL FINALS

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<th>SIGN UP</th>
<th>DESIGN</th>
<th>CAMPUS RACES</th>
<th>FINALS</th>
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<td>OCT-DEC</td>
<td>OCT-MAR</td>
<td>MAR-APR</td>
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Races take place at 11 selected campus locations. They are In-Person events. Only residents allowed, no cross-border participation.
If you are not assigned to any of the 11 locations, a separate campus race can be arranged. Minimum requirement is 5 Teams per location.

All campus races will compete on the same track design
1. Coordinate time and date with NXP
2. Apply hygiene measures
3. Receive Final track configuration from NXP shortly before the event
4. Build racetrack according to specification
5. Run mandatory Speed Race. Record session!
6. Run optional Obstacle competition. Record session!
7. Select the TOP3 campus winners
8. Send all results as well as video recordings and teams code to NXP

Note: All results will be transferred into the final EMEA Scoring. There will be no Finals Races. Campus scorings will be used to select the NXP EMEA Champion!

Finals will be hosted on NXP’s all new Virtual Platform
During the 1-hour event, winners from all categories will be announced. Including Electromaker Innovation Prize, Best Design Award and the NXP CUP EMEA Champion.
The NXP CUP EMEA Champion will be selected by the results from the campus race as every team competes on the same track configuration. All results need to be hand in shortly after the campus event.
The event will include best-off campus races videos, tech demos by NXP and a keynote from NXP’s management. Also there will be a special online raffle prize for all live online viewers of the program.
EMEA CAMPUS LOCATIONS AND REQUIREMENTS TO HOST A RACE

EMEA KEY CAMPUS LOCATIONS*

FRANCE
Bordeaux
Grenoble

GERMANY
Deggendorf
Düsseldorf

GREAT BRITAIN
Edinburgh

LEBANON
Beirut

MOROCCO
Casablanca

THE NETHERLANDS
Amsterdam

ROMANIA
Bucharest

SLOVAKIA
Zilina

SWITZERLAND
HE-ARC

FURTHER OPTIONS TO PARTICIPATE

HOW TO HOST A CAMPUS RACE IF YOUR TEAM IS NOT AMONG THE KEY UNIVERSITIES

Besides the 11 key locations there can be separate events arranged. A minimum of 5 teams are required per location. NXP will provide universities with a track for rent. Hygiene measures apply. NXP will give regular updates on team count per university / country.

EVERY TEAM CAN JOIN THE EXTRA DISCIPLINES AND WIN GREAT PRIZES

If your campus is not on the list or your campus does not reach the minimum team count, your team can still join the extra disciplines (virtual) and win.

*Campus locations subject to change depending on availability
NXP CUP 2020/2021
REGISTER UNTIL DECEMBER 11

1. Enroll your team of up to 3 members
2. Purchase your personal smart car including latest NXP tech
3. Start programming your car during lecture, in a project or on your own
4. Join one of the Campus races in your country. Results count for becoming EMEA champion.
5. Be part of the Virtual EMEA Finals and win great prizes!

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

• NXP CUP Homepage
• Sign Up at NXP
• Sign Up at Electromaker

• GitBook
• Useful documentation
• NXP CUP Track
DON’T MISS THE NEXT CALLS

DON’T MISS OUR NEXT CALLS
NOVEMBER 12th

• With molex
• Introduction to TOF and Ultra Sonic Sensor
• Introduction to Gazebo Simulation tool

DECEMBER 3RD

To be announced

USEFUL LINKS

NXP Cup EMEA Website

Electromaker NXP Cup Challenge

Subscribe to the NXP Cup Newsletter
SECURE CONNECTIONS FOR A SMARTER WORLD