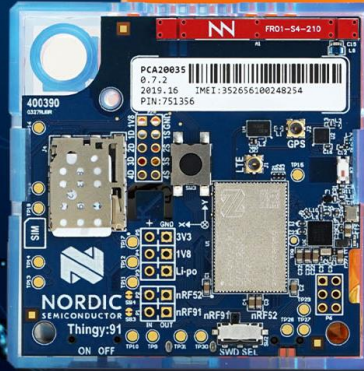


# Make it smart with Nordic Thingy:91



## Prizes

1st \$1,000

2nd \$750

3rd \$500

Runner-ups  
\$50 Amazon gift cards

# Make it smart with Nordic Thingy:91

Q&A live session for the Electromaker competition

*Martin Lesund*

*07.03.2022*

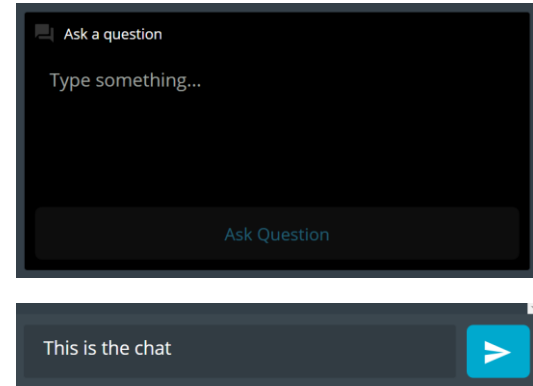
# Agenda

- About the contest
- Intro nRF9160 and Thingy:91
- How to configure applications, build & flash
- Resources
- Questions & Answers



# Practicalities

- Duration: 30 min presentation + Q&A
- Questions are encouraged!
  - Please type questions in the top of the right sidebar
  - All questions are anonymous
  - Try to keep them relevant to the topic
  - We will answer them towards the end
- The chat is not anonymous, and should not be used for questions
- Go to DevZone if you have questions after the webinar
- A recording of the webinar will be available together with the presentation at [webinars.nordicsemi.com](https://webinars.nordicsemi.com)



# About the contest

- Create a cellular IoT project for a Smart Home or Smart City application
- Use the nRF9160 SiP
  - Thingy:91, nRF9160 DK or Custom Hardware

Prize <b>\$3000</b> CASH 	 <b>\$1,000</b> 1st Prize	 <b>\$750</b> 2nd Prize	 <b>\$500</b> 3rd Prize
Runner-ups \$50 Amazon Gift Cards			

**Machine Learning  
/ A.I prize!  
Oculus Quest 2**



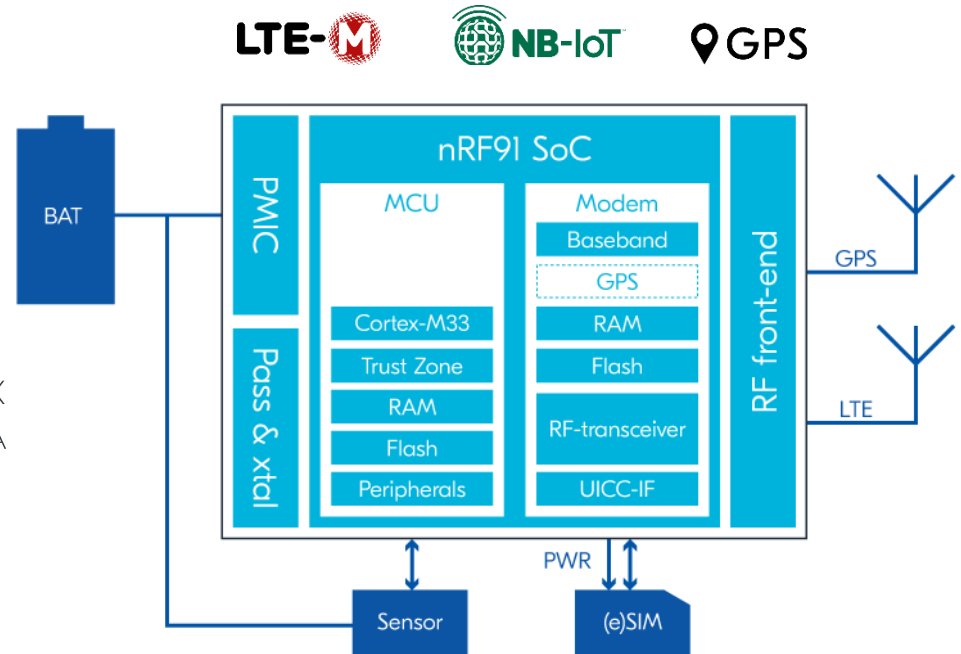
# Important dates

WHAT	WHEN
<del>Project ideas submission form opens</del>	<del>January 12th 2022</del>
<del>Project ideas submission deadline</del>	<del>February 9th 2022</del>
<del>Kits shipped</del>	<del>February 16th 2022</del>
Submissions deadline	April 13th 2022
Winners announced	April 27th 2022

- 37 days left until submissions deadline

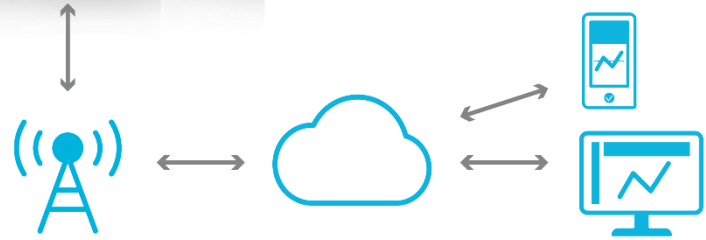
# nRF9160 – Voids Cellular Modules

- Based on Nordic Dual Core SoC:
  - Arm® Cortex® M33 MCU for the application
  - Multiband LTE-M/NB-IoT modem with GPS
- Small form factor - includes PMIC, RF FEM, passives and crystals
- Ultra Low Power – Avg. 18µA @ 81.92s eDRX
  - Power saving mode (PSM) floor current: 2.7 µA
- Multiband support for global coverage
- Pre-certified System-in-Package (SiP)

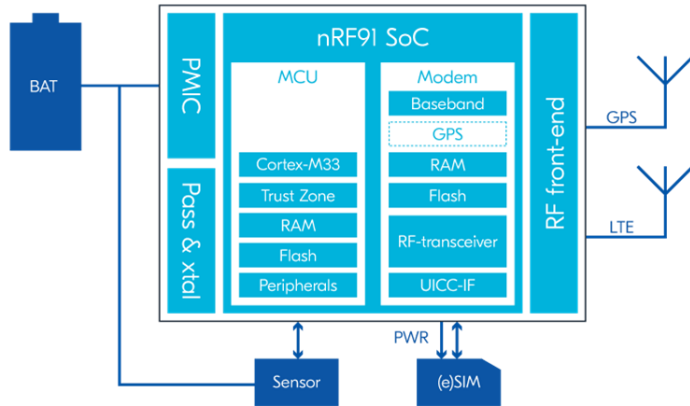


# Thingy:91 Prototype Platform

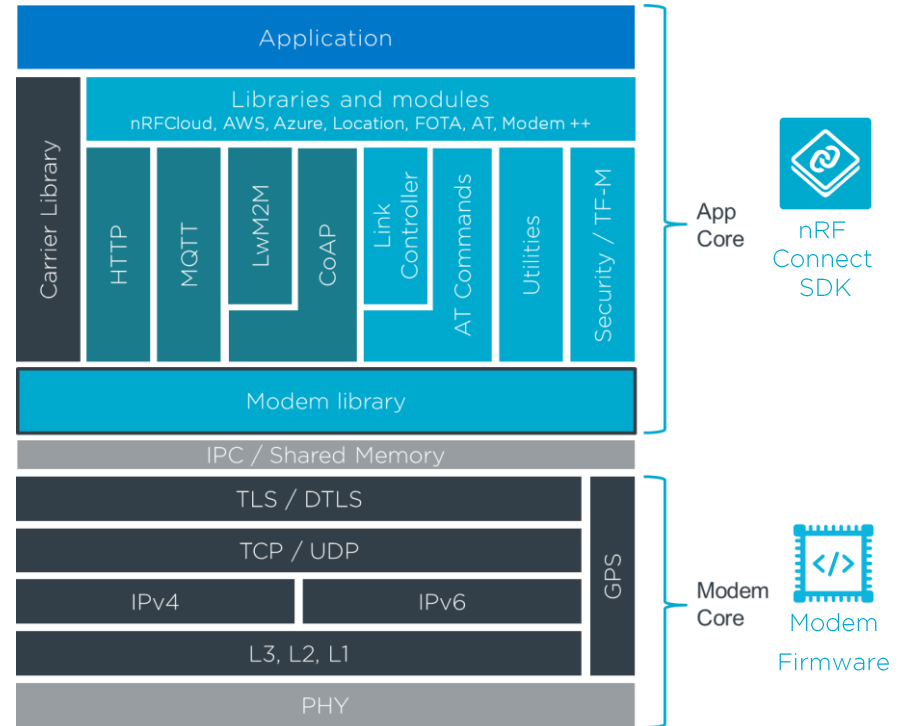
- Fully available hardware design and open-source software
- Excellent starting point for your own designs
- Includes a multitude of sensors
- Modem and application programming over USB
- Work with your antenna manufacturer on antenna design that fits your application



# nRF Connect SDK overview



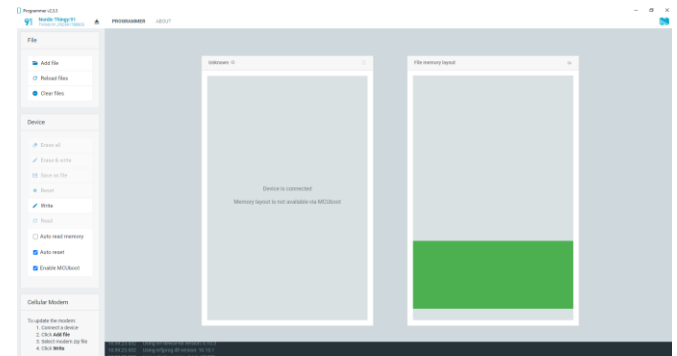
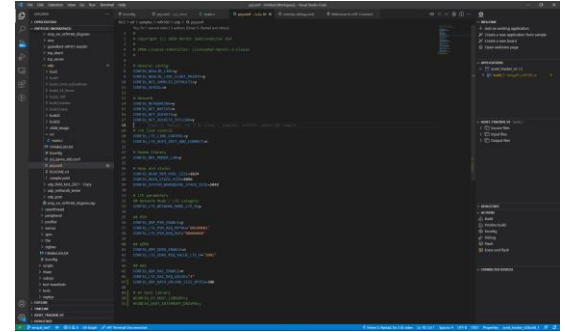
LTE-M NB-IoT GPS





# How to configure, build and flash

- Connectivity support
- Configure and build via VS Code or Segger IDE
- Flash via the “Programmer” app or command line tool “mcumgr”
  - (Thingy:91 needs to be set in MCUboot mode)



# Resources

- [Getting started with Thingy:91](#)
- [Developing with Thingy:91](#)
- [Hardware Specification](#)
- [Asset Tracker application v2](#)
- [Devzone \(Technical support\)](#)
- [Video tutorial series VS code](#)
- Discord server: ['Make it smart Thingy:91 contest'](#)

Q&A