![SEQUANS]

Cellular IoT connectivity

Introduction
SNS JU Brokerage Event

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Sequans
Introduction

To connect things with cellular

Website: <u>www.sequans.com</u>
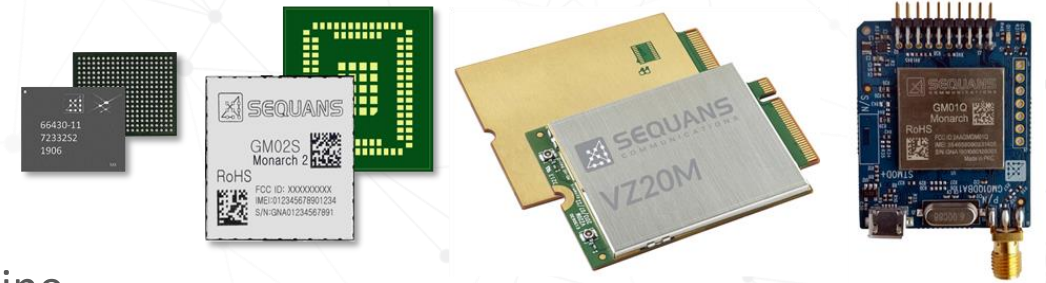
Corporate HQ: Paris, France

        Main R&D facilities in France, England, Israel & Ukraine

Employees: ~325 people in 14 countries (80% R&D & customer support)

Products: 4G/5G chipsets and modules for Massive IoT and Broadband
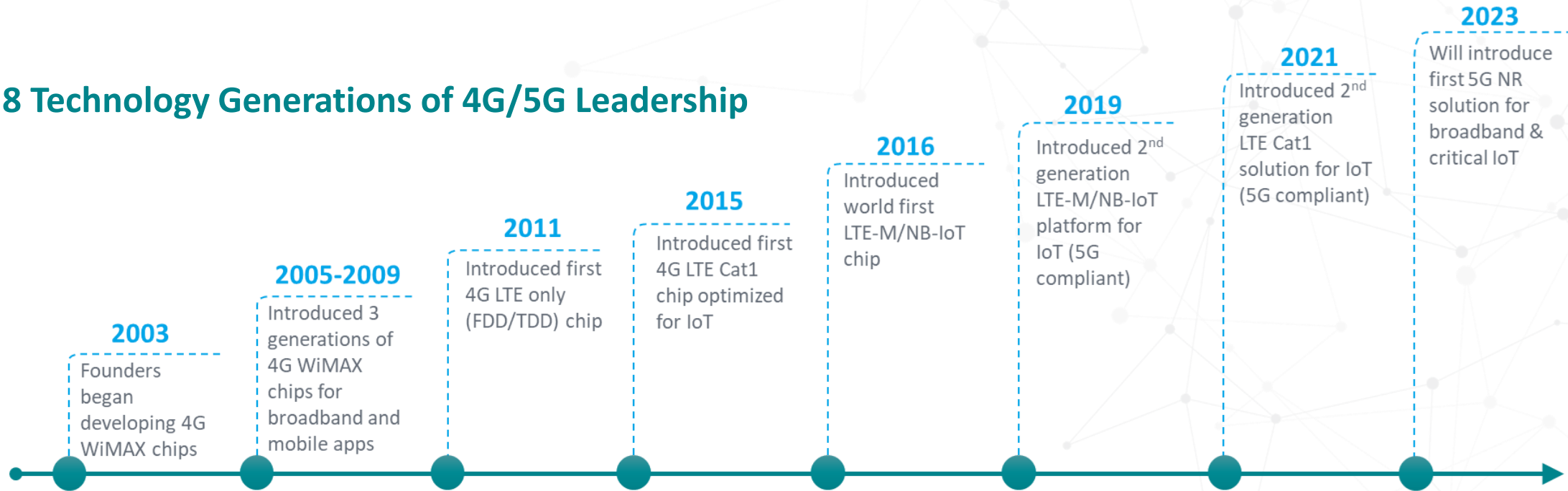   *to connect everything but smartphone*

Value Added:
- Sequans owns 100% of its Intellectual Property (chips, software, modules)
- Sequans designs its own semiconductor hardware (baseband & RFIC) and software protocol stacks
- Extensive experience with worldwide certifications and deep relationships with Global Carriers
- Capable of shipping 10M++ modules per year

Sequans
Technology Maturity

8 Technology Generations of 4G/5G Leadership

2003
Founders began developing 4G WiMAX chips

2005-2009
Introduced 3 generations of 4G WiMAX chips for broadband and mobile apps

2011
Introduced first 4G LTE only (FDD/TDD) chip

2015
Introduced first 4G LTE Cat1 chip optimized for IoT

2016
Introduced world first LTE-M/NB-IoT chip

2019
Introduced 2nd generation LTE-M/NB-IoT platform for IoT (5G compliant)

2021
Introduced 2nd generation LTE Cat1 solution for IoT (5G compliant)

2023
Will introduce first 5G NR solution for broadband & critical IoT

Sequans
Technology and Product Leadership

Sequans offers a **complete range** of **5G/4G chips** and **modules** fully **optimized** for **non-smartphone** applications

Massive IoT – low throughput, low power, cost optimized
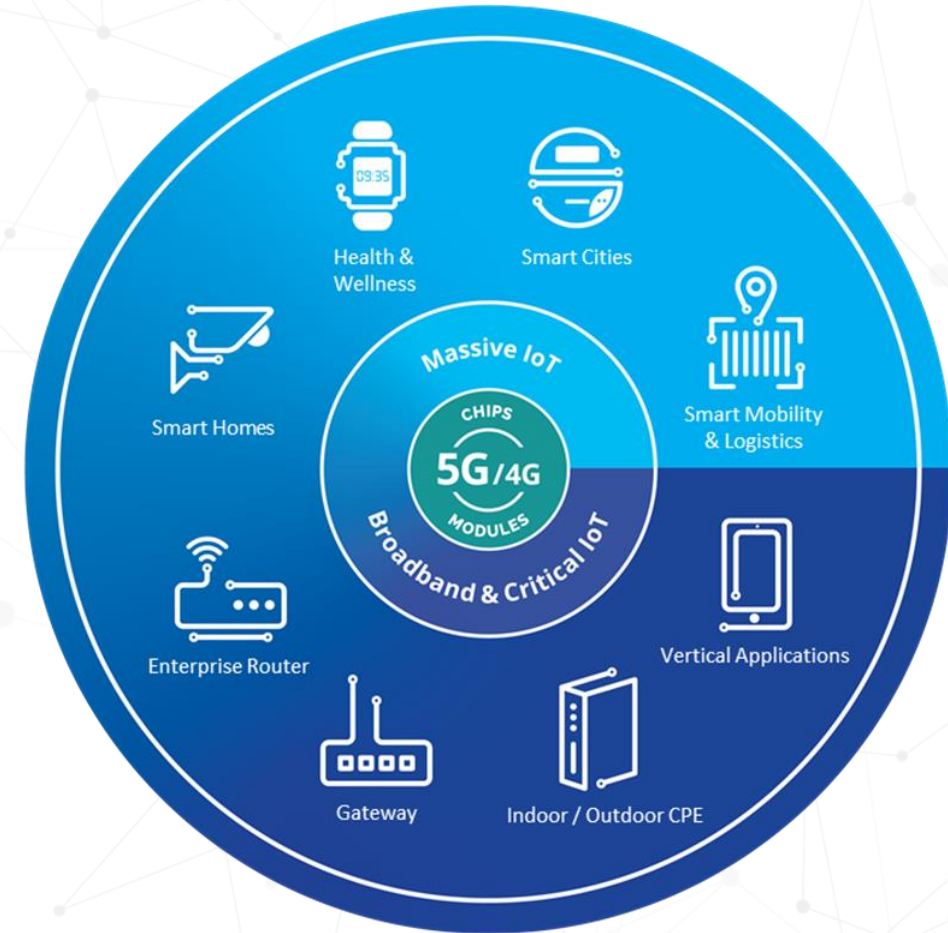NB-IoT, LTE-M, LTE Cat 1, 5G-NR eRedCap

Broadband & Critical IoT – high throughput, low latency
LTE Cat 4-6, LTE Cat 18-19, 5G-NR eMBB, 5G-NR RedCap

Mature, comprehensive portfolio for IoT
From low-power to high-throughput apps

Advanced 5G road map
5G-compatible products sampling now

Exposure to entire value chain: IP/chips/modules
Expertise and know-how in all areas

Cutting-edge technology collaboration
SiP is world's smallest/thinnest LTE solution

Sequans
EU collaboration projects – SNS Call 2024 – Motivation

Cross fertilize "vertical" industries and Telecom industry

Strengthen European position in key industries:

telecom / microelectronics / software

Philosophy: Make easy the connection of non-smartphone objects
- *user experience*
- *lower complexity & power consumption*
- *security & reliability*
- *flexibility & adaptiveness*

Performance & Value

Sequans
EU collaboration projects – Competency and expectations

Experience and general plans

- Used to contribute to collaborative projects, national or EU level
  - e.g., Hexa-X-II, CENTRIC, 5G-Tours, 5GCAR, Flex5Gware, Ingenious …

Hexa-X-II   **CENTRIC**   **CORENEXT**   **iNGENIOUS**

- Leverage our nimble research workforce
  - Few publications / white papers, or patents per year
  - Contributions to standardization (3GPP RAN groups)

3GPP

- Ideally in topics that could yield to standard contributions and support future Sequans internal development
  - **Device** advancements (power, cost, security)
  - **NTN** enhancements
  - **MIMO & AI**
  - **Evolution of IoT** technology (+ Ambient IoT)

+ available legacy 4G/5G IoT chipsets
- *baseline measurements*
- *analyse/prototype solutions*
- *use in PoC, demo …*

Thank You!

efstathios

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