



A new European trans-regional open innovation pathway: DigiFed Generic Experiment

DIH ecosystem building event
27 Oct 2021 Charbonnières les bains

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DigiFed Coordinator



Horizon 2020
Programme

European Initiative
Smart Anything Everywhere



Horizon 2020
Programme



IRT Nanoelec part of Auvergne-Rhône-Alpes Digital Ecosystem

One of the 8 French Technology Research Institutes

IRT are PPP to promote links between public laboratories and industry.

IRT Nanoelec is dedicated to micro and nano electronics

IRT Nanoelec Consortium

- 21 members : CEA - ST Microelectronics - Minalogic
- 8 public funders
- Annual budget: 54 M€
- Coordination by CEA
- 6 startups created
- 258 associated partners committed in R&D development

→ **Digital Trust** is one of the 3 main focus of IRT Nanoelec

→ **DigiFed** is supported by IRT Nanoelec and Easytech program



DigiFed 4 Generic Experiment Communities

Secure Platform 4IoT









Industrial Cybersecurity






IoT prototyping in agriculture








Energy- Efficient lighting

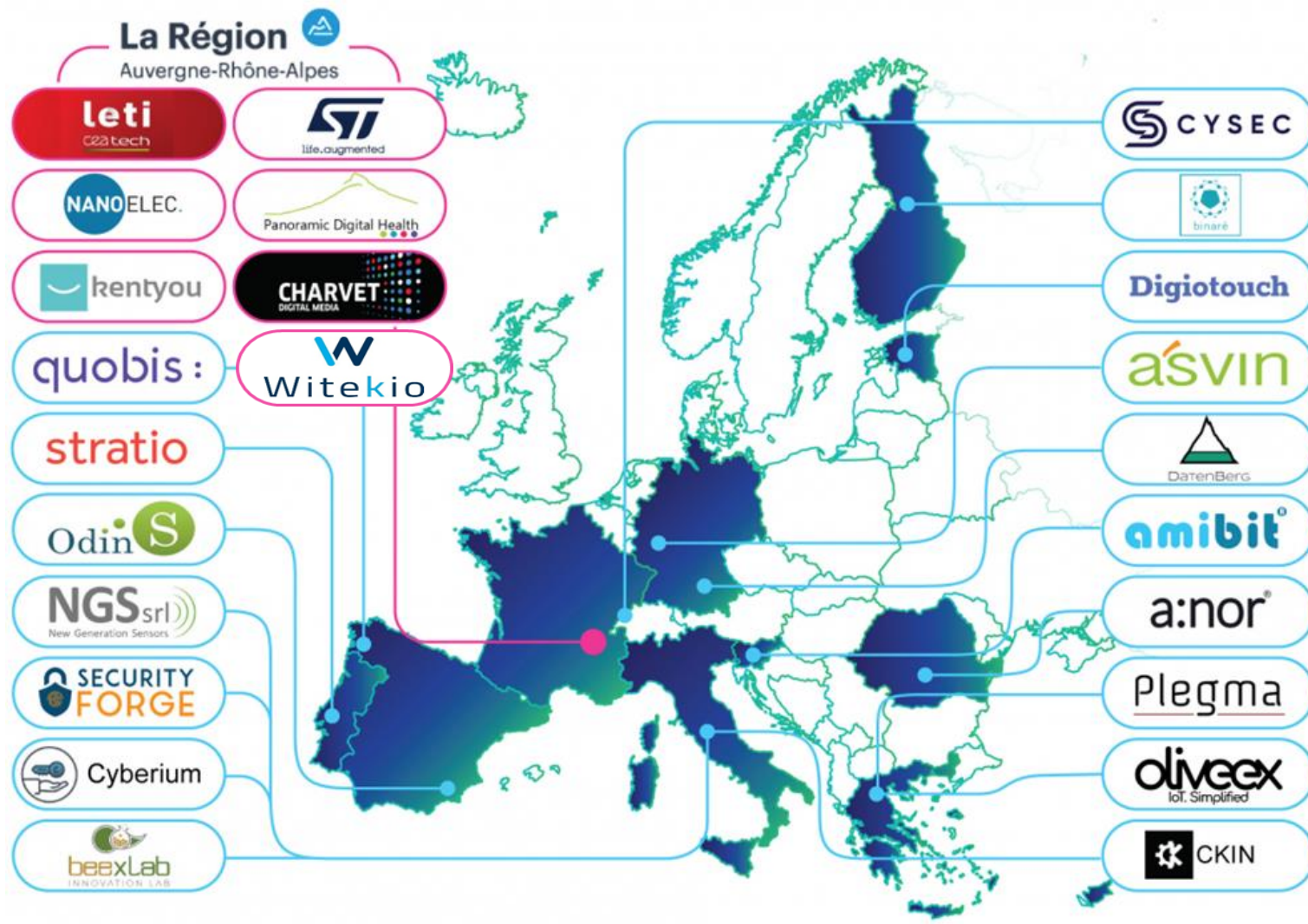





DigiFed GE Communities are focus on a technical topics to test new collaborations between RTOs and a group of SMEs & Mid-Caps



GE Secure Platform for IoT Members



Community :

21 members
4 from AURA France
10 countries

HW and SW, various
industrial sector

<https://digifed.org/open-calls/generic-experiment/generic-experiment-on-cybersecurity-secure-platform-for-iot/>

GE Secure Platform for IoT technical Program



Build a community

- CEA develop a generic prototype new Cyber attack Monitoring - TRL3-5
- SME Members will
 - Contribute to technical program orientation
 - Get direct acces to experts and technical results
 - Share use case / needs with SMEs from other domains
- 5 volunteer SMES can test the generic prototype



Exploitation

- **SME can** continue with CEA to develop a specific product prototype
- Feedback from SME included in **IRT Nanoelec technical roadmap**
- **Assess new service for eDIH**



CEA GE : animation



• Members presentation

- Technical questionnaire
 - Company skill
 - Market & use case
 - Cybersecurity needs

• Three WShop :

- 24/06/20 Kickoff
- 05/11/2021 Proto V1 demo
- June 2022 Final proto demo

Who are we ?



Specialist and expert in LED digital communication for nearly 40 years, Charvet Digital Media is a French independent manufacturer, ISO 9001 certified, who designs, manufactures, installs and maintains its performing displays and electronic LED, managed by innovative information systems.

Charvet is positioned exclusively on the Digital LED market with a large share in the outdoor market. It covers the entire chain in a 360° approach, and ensures the design, marketing, production, installation and long-term maintenance with 46 employees. Charvet benefits from a great market knowledge and the capacity to answer to all clients' needs. These last represent more than 10 700 references in the world. Leader on French market, it mainly works with the following clients:

- Communities
- Shops and advertising
- Major projects including transport, stadiums and sports



What do we do ?

Give us some examples of your products / services and the projects you worked on.

Our product offer lies in :

- Unicolor displays
- Full color Displays
- i-Girouette
- Perimeters and big screens for stadiums

This offer includes installation and maintenance. We sell licence for the use of the software.

Which markets do we serve ?

Keep only the icons that are related to your activity and feel free to add some icons

 Smart city
  Transport
  Infrastructure
  Mobility

 IT services

Why did we join the Secure platform community ?

Our displays are remotely controlled through 3G/4G wireless connections.

Security is key for us and our customers in order to guarantee the correct display of our panels.

How would we classify our cybersecurity experience ?

Beginner

Expert

DigiFed GE-CEA Secure PF4IoT Kickoff Event 03/05/2021

- ... Imagine your product's future through digital technologies
- ... Benefit from expertise and competences from the main research centers
- ... Exploring the possibilities of technology
- ... Concretize your ideas in the form of demonstrators or models
- ... Exploring the possibilities of technology
- ... Make your business competitive with new technologies



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Marcello Coppola

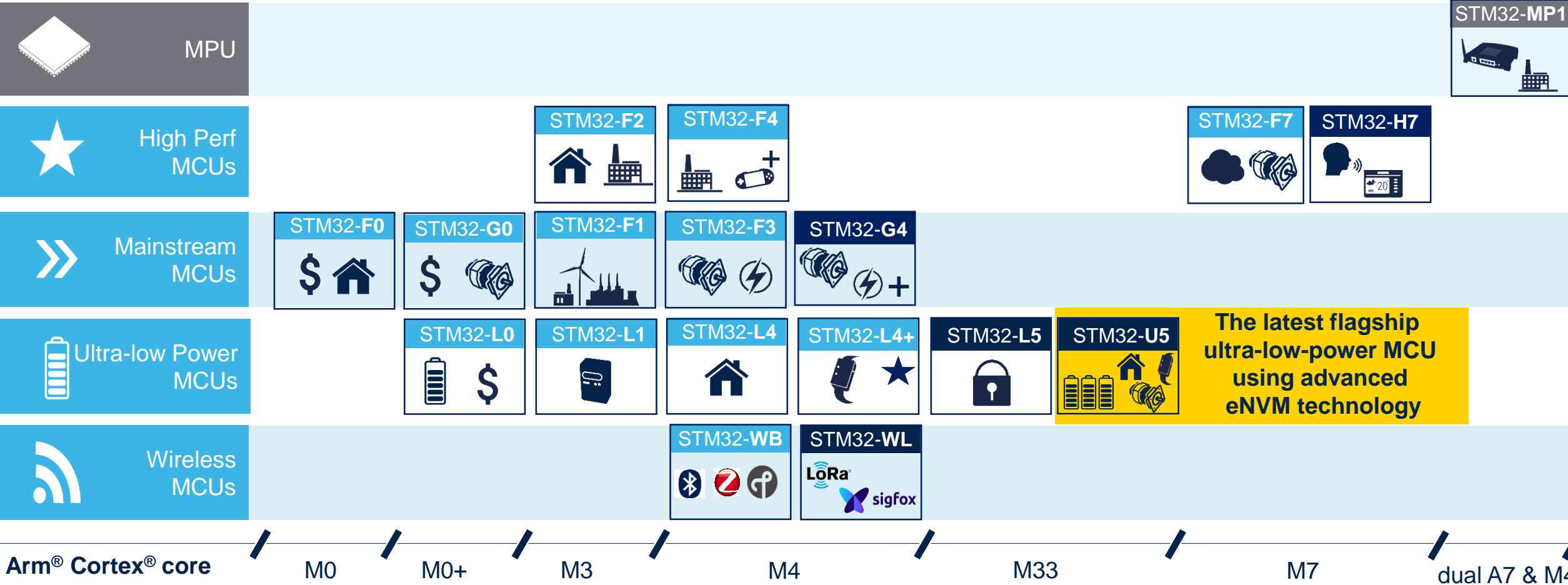
R&D Technical Director France

Technical support to DigiFed GE secure PF for IoT



Relentlessly growing portfolio Industrial & consumer markets focus

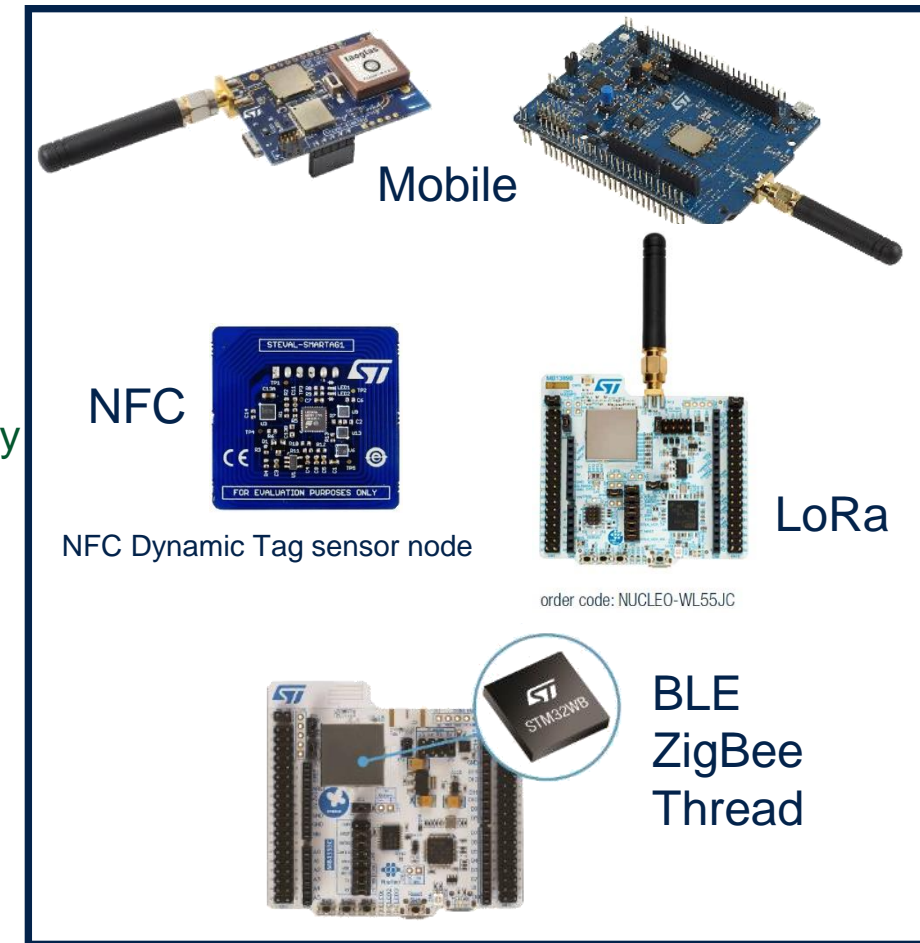
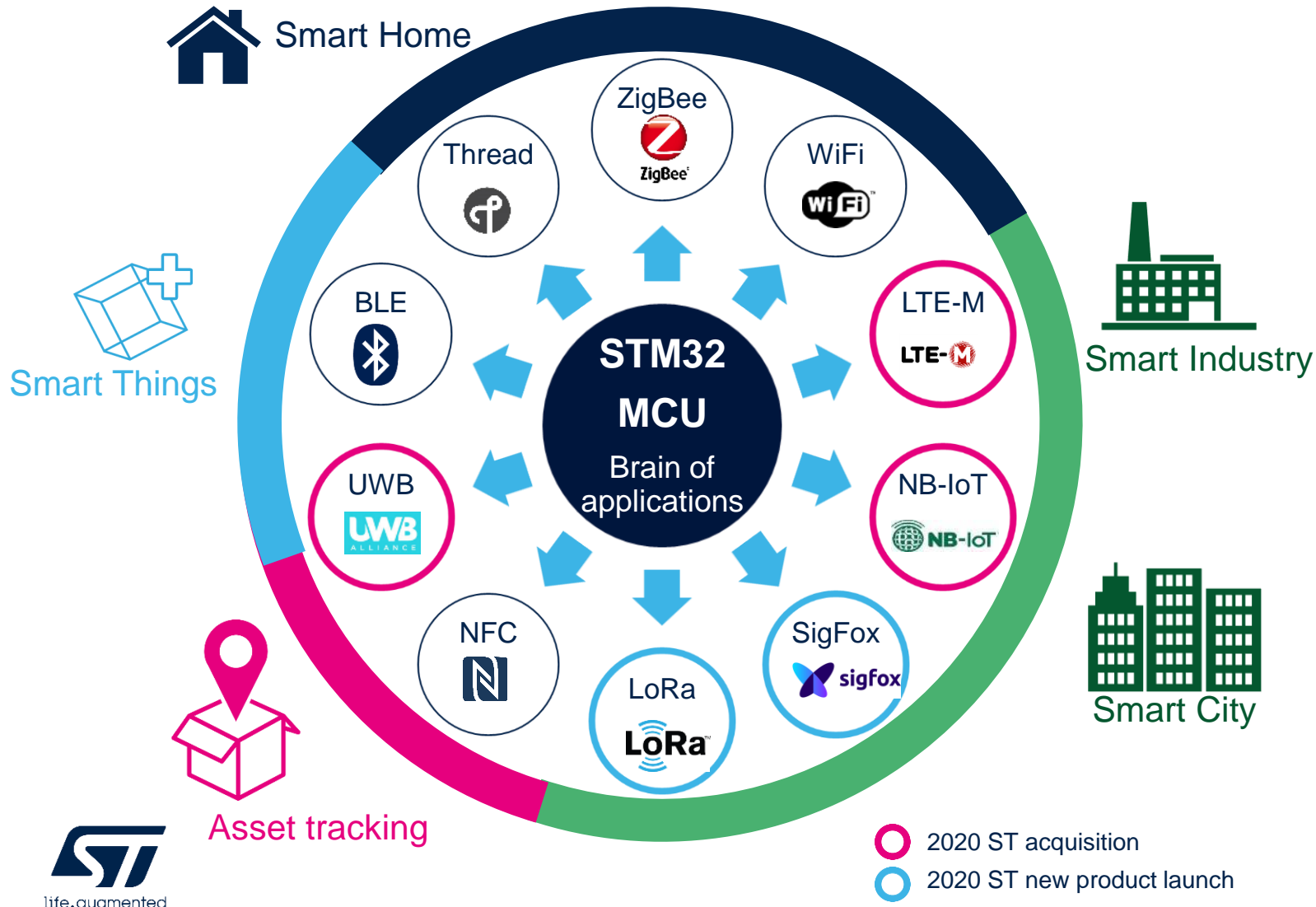
Leader in Arm® Cortex®-M 32-bit General Purpose MCU



Over **8 Billion** STM32 shipped

Wireless connectivity pervasion

Leveraging the STM32 ecosystem footprint



Our technology starts with You



Find out more at www.st.com

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life.augmented



Charvet Digital Media

Expert in communication with LED displays



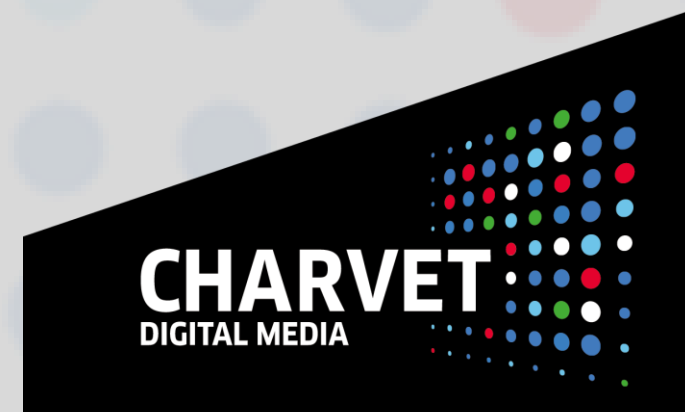
50 people



+ **40** years of know-how & experience



+ **11** millions euros turnover



THE VISUAL DYNAMICS

CITY REFERENCES



Lyon

SPECIFIC PROJECTS REFERENCES



UGC Cinema

RETAIL REFERENCES



Provencia

SPORTS REFERENCES



Reims Stadium



Florian Chenier CHARVET DIGITAL MEDIA
Innovation Manager & External Research Collaboration



“Florian why did you join the GE Secure PF for IoT”

Florian Chenier :

“The key words “Cybersecurity and Embedded systems” attracted us.

Charvet has recently launched a new range of product. It is a perfect time to integrate innovations : IoT and embedded system are part of our roadmap.

We know that Cybersecurity is critical in these domains and for our main markets. We expect to gain knowledge and cybersercuity State of the art.

We also invited our development partner Witekio to join the GE with us. It could help us define future prototype of secure embedded solutions.

It is difficult to give yet a concrete feedback about the GE before we have seen concrete prototype demonstration