WUPATEC x 6GSNS

HORIZON-JU-SNS-2026-FEM

Stream B-02

Who we are

AMCAD Engineering
Advanced Modeling for Computer-Aided Design

Spin-off

2016

wupatec

11 people

Markets:

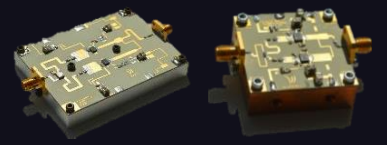
Telecoms: private/public 5G/6G

Defense: radar modules, radios, UAV

Space / New Space / NTN

EXPERTISE:

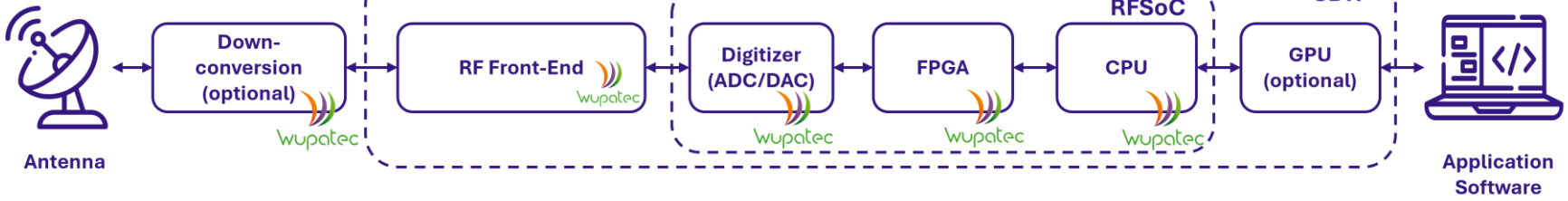
RF

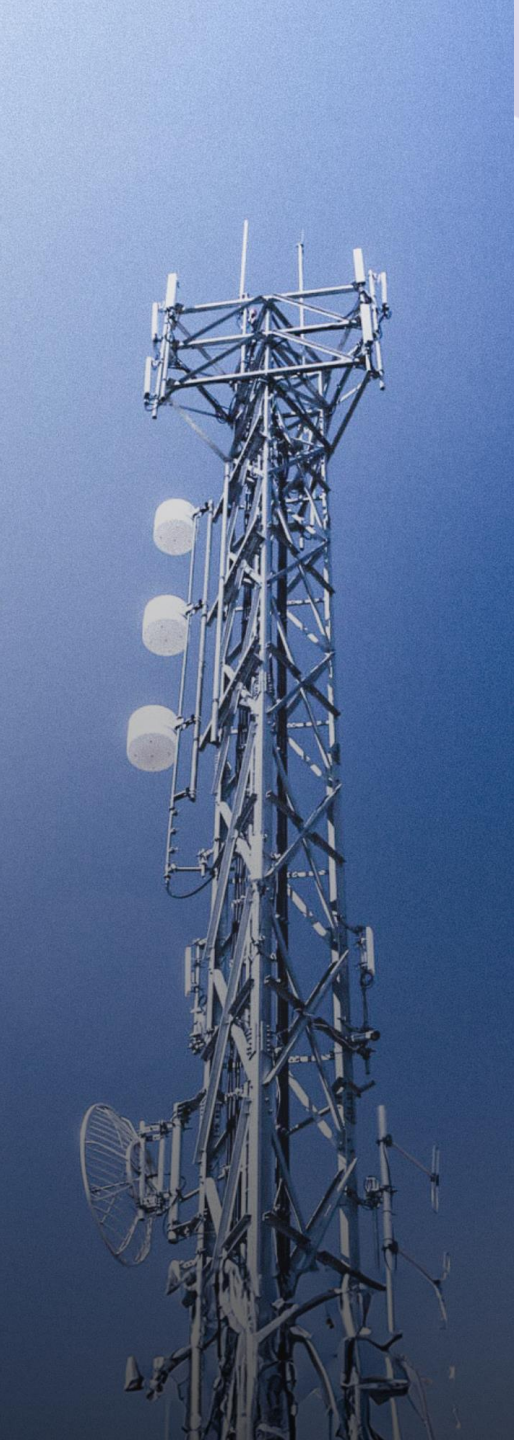


Doherty wideband PA design
MMIC/PAM
From sub 6GHz to mmWave

DIGITAL

FPGA / RFSoC – Zynq Ultrascale+
DPD /CFR IP development
5 patents in envelope tracking





A full FR3 front-end

The **WFC725A** is a **high-performance 6G FR3 RFFE** module**,** specifically engineered as a **frequency extension for Vector Signal Transceivers (VSTs).**

Coverage: from 10 MHz to 25.8 GHz

Instantaneous bandwidth: 1.2 GHz.

1st PRIZE INNOVATION
orange InfraNum
MWC 2026

This board enables seamless up- and down-conversion, making it an essential tool for wideband signal generation and analysis in next-generation wireless infrastructure.

https://wupatec.com/vector-signal-transceivers/fr3-extension-board/

RFSOC FR3 Test solution

The RFSOC FR3 Test solution is a complete test environment that allows to evaluate RF performance in the 7–24 GHz range.

Today, the solution combines these complementary elements:

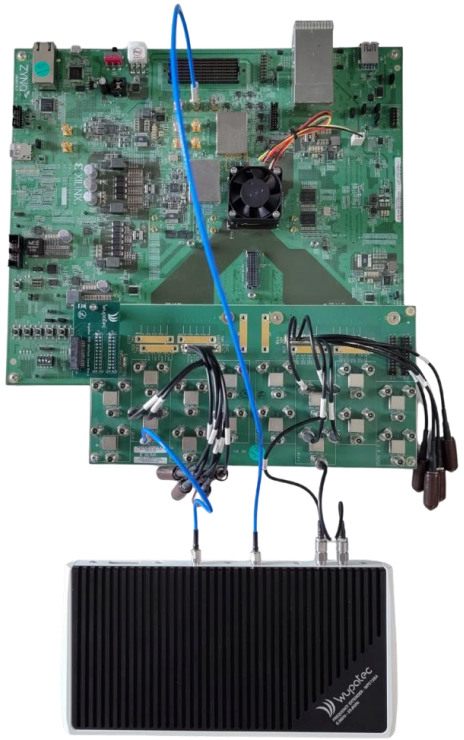
AMD RFSoC platform (ZCU670) + Wupatec firmware

- Real-time DPD (for amplifier charact.)
- Signal generation
- Sequencing
- Setup control

Wupatec FR3 Extension Board

Up-conversion/down-conversion and all RF interfaces of the RFSoC to reach the FR3 band.

PC interface



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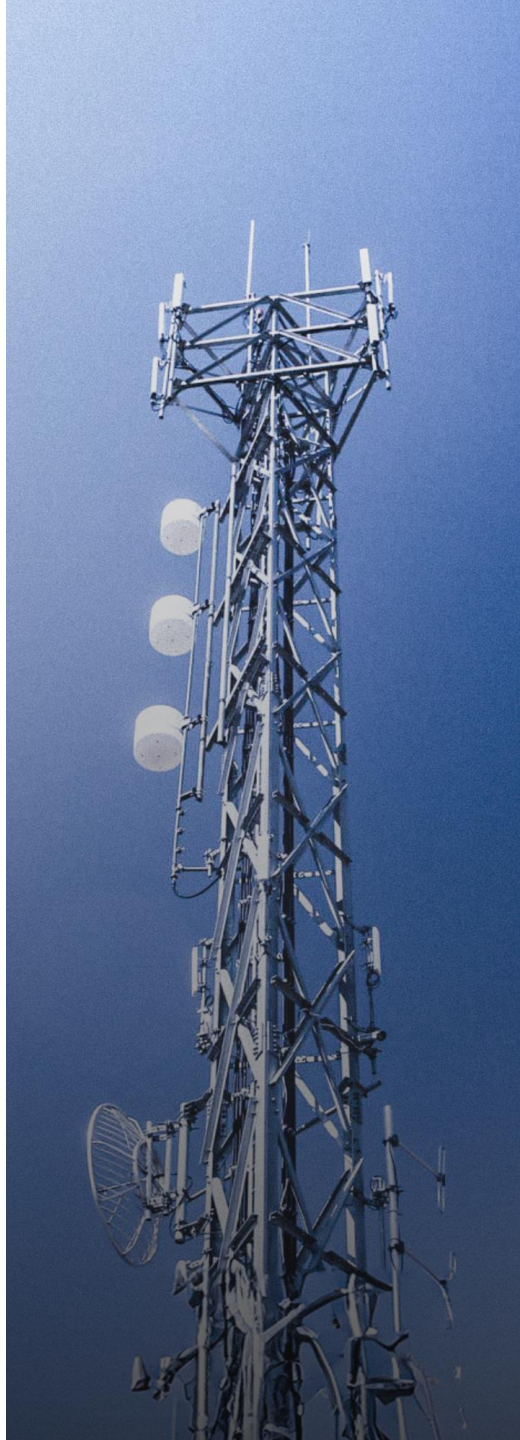
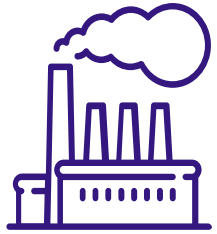
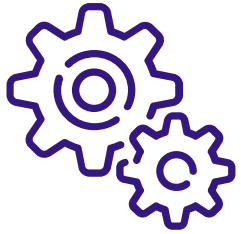


What we are looking for:



Foundry Partners

Combined with advanced packaging providers to combine the digital, analog, and RF dice into a single, compact module.



AI/ML Experts

DFE capable of managing 200–400 MHz channels, optimizing Channel State Information (CSI), and AI/ML for low-power management

Antenna Array & Beamforming Designers

For implementation of massive MIMO capable of compensating for the severe path loss.

Co-existence & Sensing (ICAS / JCAS)

Motivation: mandatory implementation of Sub-Band Full Duplex (SBFD) and ISAC
Need: Radar/Sensing Algorithms Experts

RTOs

E.g. : **research centers** to handle the low-TRL modeling, thermal analysis, and characterization

Industrial End-Users

To prove "5G cell site reuse" and validate the cellular/Fixed Wireless Access (FWA) scenarios proposed

FRANCE 6G

France 6G

The **France 6G Mission** aims to structure, drive and strengthen the national research, innovation and standardisation ecosystem around future sixth-generation telecommunications networks.

1

Wupatec's contribution

As a PME, Wupatec serves a **providers of critical technology building blocks** and driving innovation in areas such as RF and resilient communications. Wupatec, together with the PMEs involved, **serve as a bridge between research and industrial deployment**, while also contributing to technological sovereignty and European standardization efforts.

2

Funding

France 6G is supported by the €65M 'Réseaux du Futur' research program under France 2030, within a broader €3B national investment in future networks.

3

Wupatec's event participation with France 6G in 2026

1. **Conference**: Mobile World Congress, March 2026 Barcelona
2. **Plenary meeting March 2026, Paris**
   Objective: to launch 6 expert working groups tasked with developing the technical, environmental, and strategic roadmap for the future of 6G networks in France and Europe.
3. **Conference**: EuCNC 6G Summit, June 2026 Malaga