

# Revolutionizing Connectivity with 5G and Edge Computing

## Empowering Every Wireless Device with Sensing and Compute Intelligence

"This partnership with Intel is a game-changer. It enables us to bring our innovative technology to market, transforming the way we understand and interact with our environment. We're creating a new paradigm where 5G networks do more than connect – they perceive and respond."

**Amitav Mukherjee, CEO of  
Tiami Networks**

Tiami Networks is at the forefront of integrating fifth-generation (5G) connectivity with advanced edge computing, revolutionizing how wireless devices interact and function. Our unique approach combines data and radar sensing, machine learning (ML), and 5G technology in a single, powerful solution, transforming numerous industries and sectors.

**Connect:** Our PolyEdge™ Multifunction Sensor is a versatile node in any 5G infrastructure, offering both high-speed data communication and radar functionality. Efficient in various settings, it complies with global industry standards.

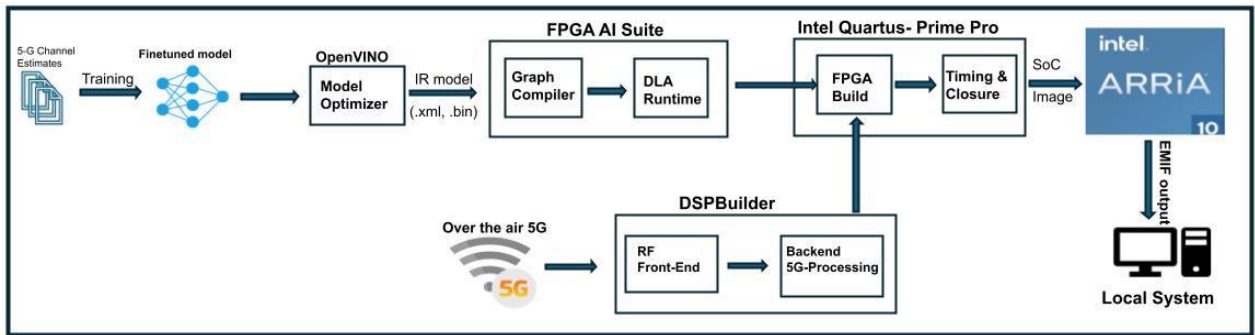
**Compute:** Central to our solution is embedded machine learning, powered by Intel® FPGA technology. This facilitates rapid data analysis and enhances decision-making. The fusion of Intel Agilex® SoC FPGAs with our technology heralds a new era in 5G and edge computing.

**Track:** We utilize 5G waveform as a radar signal allowing object and movement detection without direct 5G device interaction. This capability is effective for indoor human activity recognition, outdoor vehicle sensing, and UAV tracking.

## Technology Partnership

Tiami employs advanced 5G signal processing and proprietary ML algorithms, enhanced by Intel's AI framework. We leverage Intel's AI platform and FPGA AI Suite for hardware-ready machine learning models, optimized for real-time 5G-based sensing.





## Unlocking Potential: Diverse Applications of Tiami Networks PolyEdge™ Sensors

### Industrial and Manufacturing:

Enhancing safety and efficiency in manufacturing processes through precise tracking and monitoring of equipment and personnel movement.

### Asset Tracking and Surveillance:

Offering superior asset tracking and surveillance capabilities, especially in environments where traditional cameras are ineffective, or privacy concerns are paramount.

### Smart Home and Office Applications:

Enabling advanced smart home and office

automation through gesture recognition and movement tracking without the need for cameras.

### Vehicle Tracking and Navigation:

Facilitating advanced vehicle-to-vehicle and vehicle-to-infrastructure communication, crucial for the development of autonomous driving and smart city infrastructure.

**Public Safety and Security:** Improving public safety and security in urban and rural areas by enabling non-intrusive surveillance that respects privacy concerns.

## Join the revolution.

Embrace the future of connectivity with Tiami Networks. Discover how our groundbreaking 5G and edge computing solutions can revolutionize your operations. Take the first step towards unparalleled efficiency and innovation – request a demo today. Learn more about Tiami Networks at <https://tiaminetworks.com/>

Discover Intel FPGAs at [www.intel.com/fpga](http://www.intel.com/fpga).

Explore Intel's FPGA AI solutions at [www.intel.com/fpga-ai](http://www.intel.com/fpga-ai)

