# Dossier: SIGNATURE RESEARCH, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,247,932.00

**Award Date:** 2024-02-10

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Signature Research, Inc. is a technology company specializing in advanced sensor technologies and electromagnetic spectrum solutions, primarily serving the defense, intelligence, and commercial sectors. Their core mission focuses on developing and deploying cutting-edge electronic warfare (EW), signals intelligence (SIGINT), and radar systems. They aim to solve the problems of increasing spectrum congestion, sophisticated and adaptive adversaries, and the need for robust and resilient sensor technologies in contested environments. Signature Research's unique value proposition lies in its ability to deliver customized, high-performance solutions with a focus on rapid prototyping and deployment, enabling clients to maintain a technological advantage in dynamic and evolving operational landscapes. Their expertise extends from algorithm development and software-defined radios to advanced signal processing techniques.

**Technology Focus:**

* Advanced Signal Processing & Algorithm Development:\*\* Developing sophisticated algorithms for real-time signal analysis, identification, and mitigation of interference in complex electromagnetic environments. This includes expertise in machine learning and artificial intelligence applications for spectrum management and EW.
* Software-Defined Radio (SDR) Systems:\*\* Designing and building customizable SDR platforms that enable flexible and adaptable sensor solutions across a wide range of frequencies and applications. These SDRs support various waveforms and protocols, enabling rapid deployment and reconfiguration in the field.

**Recent Developments & Traction:**

* SBIR/STTR Funding Awards:\*\* Regularly awarded Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) grants from the Department of Defense (DoD) for developing innovative technologies in areas such as electronic warfare, radar, and communications. Specific project details may be limited due to confidentiality.
* Partnerships with Defense Contractors:\*\* Collaboration with prime defense contractors (names often undisclosed due to proprietary agreements) to integrate their advanced sensor technologies into larger defense systems and platforms.
* Product Launch (Example - Though specific product names are often scarce):\*\* Reportedly launched a new, low-size, weight, and power (SWaP) SDR module designed for unmanned aerial vehicles (UAVs) and other resource-constrained platforms in late 2022/early 2023, emphasizing enhanced signal processing capabilities.

**Leadership & Team:**

* Key leaders are difficult to confirm without specific press releases.\*\* Based on information from professional networking sites, key individuals likely hold roles such as CEO, CTO, and Director of Engineering, with backgrounds in electrical engineering, signal processing, and defense systems. Prior experience includes work at major defense contractors and government research labs.

**Competitive Landscape:**

* Mercury Systems:\*\* A major competitor in the defense electronics and embedded computing market, offering a wide range of solutions for EW, radar, and signal intelligence.
* Keysight Technologies:\*\* While primarily a test and measurement equipment provider, Keysight also offers software-defined signal processing and analysis tools that compete with Signature Research's offerings in certain application areas. Signature Research differentiates itself through its focus on custom solutions, rapid prototyping, and specialized expertise in challenging electromagnetic environments, offering more tailored solutions compared to larger, more general-purpose competitors.

**Sources:**

* SAM.gov (For SBIR/STTR award information): sam.gov
* Professional Networking sites (LinkedIn, etc.): Searched for individuals and company information.
* Company Websites (though specific product details are often lacking). Searched for any available press releases and published technology descriptions.