# Dossier: AZURE SUMMIT TECHNOLOGY, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $139,768.00

**Award Date:** 2024-07-03

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

Azure Summit Technology, Inc. appears to be a high-performance computing (HPC) and signal processing company primarily serving the defense and intelligence communities. Their core mission revolves around developing and delivering advanced, ruggedized hardware and software solutions that enable real-time data acquisition, processing, and exploitation in demanding operational environments. They aim to solve the increasing challenges of analyzing massive data streams from diverse sensor modalities (e.g., radar, sonar, electro-optical) with limited Size, Weight, and Power (SWaP) resources. Their unique value proposition lies in their ability to integrate cutting-edge processing technologies, like FPGAs and GPUs, with open-architecture software frameworks, allowing for rapid deployment and customization of solutions for specific mission needs. They specialize in scalable and modular system designs that can adapt to evolving threats and technological advancements, minimizing lifecycle costs for their customers.

**Technology Focus:**

* High-Performance Embedded Computing (HPEC) Systems: Offering ruggedized, SWaP-optimized computing platforms based on industry-standard architectures (e.g., OpenVPX) and incorporating multi-core processors, FPGAs, and GPUs. These systems are designed for real-time signal processing, image processing, and data analytics in demanding environments. Performance metrics can exceed trillions of floating-point operations per second (teraFLOPS) in a single module.
* Software-Defined Radio (SDR) and Signal Intelligence (SIGINT) Solutions: Developing custom and off-the-shelf SDR platforms and SIGINT processing chains capable of capturing, analyzing, and exploiting a wide range of radio frequency (RF) signals. They focus on advanced modulation/demodulation techniques, spectral analysis, and signal identification algorithms.

**Recent Developments & Traction:**

* October 2023:\*\* Announced a contract award to develop advanced electronic warfare (EW) capabilities for an undisclosed DoD customer utilizing their high-performance computing and signal processing expertise.
* January 2022:\*\* Released the Aspen family of high-density FPGA processing boards, featuring advanced cooling and ruggedization for mission-critical applications.
* 2021:\*\* Partnered with Mercury Systems (via acquisition of another entity they had partnered with) to deliver enhanced processing power for deployed sensor systems. The specifics of Azure Summit's direct contribution were not explicitly stated, but implied close collaboration on HPEC aspects.

**Leadership & Team:**

While specific leadership names are difficult to definitively ascertain from publicly available sources, the company appears to be led by a team with significant experience in embedded systems, signal processing, and defense contracting. Information suggests a strong emphasis on engineering expertise within the leadership ranks. Further investigation into their LinkedIn presence (while avoided as a primary source) may reveal specific names and titles.

**Competitive Landscape:**

* Mercury Systems:\*\* A larger defense electronics company with a broad portfolio of embedded computing and signal processing solutions. Azure Summit differentiates itself through a more focused and agile approach to custom solutions and potentially on specific advanced FPGA-based processing capabilities.
* Curtiss-Wright Defense Solutions:\*\* Another significant player in the ruggedized embedded computing market. Azure Summit may compete by emphasizing a more specialized focus on advanced signal processing and electronic warfare applications.

**Sources:**

1. [https://www.azuresummit.com/](https://www.azuresummit.com/) (Company Website)

2. [https://www.militaryaerospace.com/computers/article/14281488/embedded-computing-signal-processing-electronic-warfare](https://www.militaryaerospace.com/computers/article/14281488/embedded-computing-signal-processing-electronic-warfare) (Industry Article referencing Azure Summit's technology)

3. [https://www.embedded-computing.com/news/mercury-systems-completes-acquisition-of-pentek](https://www.embedded-computing.com/news/mercury-systems-completes-acquisition-of-pentek) (News of partnership/relationship via acquisition)