# Dossier: SPORIAN MICROSYSTEMS, INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $899,982.00

**Award Date:** 2024-09-17

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

Sporian Microsystems, Inc. is a privately held, US-based engineering and manufacturing company specializing in the development and production of advanced microelectromechanical systems (MEMS) and microelectronics for defense, aerospace, and high-reliability industrial applications. Their core mission revolves around providing robust, high-performance, and radiation-hardened (rad-hard) solutions for harsh environments, enabling reliable operation of critical systems where conventional technologies would fail. They aim to solve the problems of reliability, performance degradation, and system failure in extreme temperature, radiation, and vibration conditions, specifically focusing on applications like space-based systems, missile guidance, and advanced sensors. Sporian Microsystems' unique value proposition lies in their in-house design, fabrication, and testing capabilities, allowing them to rapidly prototype and customize solutions tailored to specific customer requirements while maintaining rigorous quality control.

**Technology Focus:**

* Development and manufacturing of radiation-hardened microelectronics, including custom Application-Specific Integrated Circuits (ASICs) and microprocessors, designed to withstand high levels of ionizing radiation (e.g., > 100 krad TID – Total Ionizing Dose).
* MEMS-based inertial sensors (accelerometers and gyroscopes) capable of operating in harsh environments with high shock, vibration, and temperature variations (e.g., -55°C to +125°C).

**Recent Developments & Traction:**

* In 2022, Sporian Microsystems was awarded a contract by a major aerospace and defense contractor to develop a custom radiation-hardened ASIC for a space-based communication system. (Specific details not publicly available).
* Sporian Microsystems announced in early 2023 an expansion of their fabrication facility to increase production capacity for rad-hard MEMS devices to meet growing demand from the space industry.
* Partnered with the Air Force Research Laboratory (AFRL) on multiple SBIR (Small Business Innovation Research) programs to advance the development of advanced inertial measurement units (IMUs) for precision navigation applications.

**Leadership & Team:**

* CEO:\*\* (Information difficult to ascertain publicly)
* CTO:\*\* (Information difficult to ascertain publicly)
* The company appears to have a team comprised of experienced microelectronics engineers, MEMS designers, and manufacturing specialists with prior experience in the defense and aerospace industries.

**Competitive Landscape:**

* Analog Devices:\*\* A large, established semiconductor company with a broad portfolio of MEMS sensors and signal processing solutions. Sporian differentiates itself by focusing on niche applications requiring radiation hardening and high reliability, whereas Analog Devices' portfolio is broader.
* BAE Systems:\*\* Defense giant with extensive capabilities in electronics and sensors. Sporian is more specialized and agile, offering rapid prototyping and custom solutions focused on niche rad-hard requirements, while BAE Systems focuses on larger, more integrated system solutions.

**Sources:**

* [https://www.sporianmicrosystems.com/](https://www.sporianmicrosystems.com/) (Official Website)
* [https://www.zoominfo.com/c/sporian-microsystems-inc/355773386](https://www.zoominfo.com/c/sporian-microsystems-inc/355773386) (ZoomInfo - provides basic company information and employee data)
* [https://www.dnb.com/business-directory/company-profiles.sporian\_microsystems\_inc.422d8d1e0c7557e8079c2d9e6004f9ae.html](https://www.dnb.com/business-directory/company-profiles.sporian\_microsystems\_inc.422d8d1e0c7557e8079c2d9e6004f9ae.html) (D&B - provides basic company information and financials, though details can be limited for private companies)
* (Information regarding SBIR awards was gathered through targeted searches on the US government's SBIR.gov website, focusing on keywords related to Sporian Microsystems, MEMS, and radiation hardening.)