# Dossier: Space Micro Inc.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,971.00

**Award Date:** 2023-02-02

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Space Micro Inc., a US-based company headquartered in San Diego, California, specializes in developing and manufacturing high-performance, radiation-hardened electronics for space applications. Their primary business revolves around providing reliable and robust solutions for mission-critical spacecraft components, including processing systems, communication systems, and data storage solutions. Space Micro's core mission is to enable advanced capabilities for space exploration, national security, and commercial satellite ventures by offering cost-effective, high-reliability electronics that can withstand the harsh radiation environment of space. They aim to solve the challenges of designing and deploying space-borne electronics by offering advanced technologies and rigorous testing protocols to ensure system longevity and performance. Their unique value proposition lies in their ability to deliver both custom and off-the-shelf solutions tailored to specific mission requirements, coupled with a strong emphasis on radiation hardening and high-reliability manufacturing.

**Technology Focus:**

* Radiation-Hardened Processors and Single Board Computers:\*\* Space Micro develops and manufactures radiation-hardened processors based on Power Architecture and ARM architectures, and single board computers using these processors for on-board data processing in space applications. They offer various performance levels, including processors rated for total ionizing dose (TID) levels exceeding 100 krad(Si).
* Space Communication Systems:\*\* They provide space-qualified communication systems, including high-bandwidth transceivers, modems, and software-defined radios (SDRs) for satellite-to-satellite and satellite-to-ground communications. These systems support various modulation schemes and data rates up to several Gbps, designed to meet the demanding requirements of modern space missions.
* Space Data Storage:\*\* Space Micro offers radiation-hardened memory solutions, including solid-state drives (SSDs) and volatile/non-volatile RAM, designed for high-capacity data storage in space environments. These storage devices are rigorously tested and qualified to ensure data integrity and performance in the presence of radiation.

**Recent Developments & Traction:**

* 2023:\*\* Space Micro was acquired by Voyager Space, a space technology company, which aims to integrate their product offerings into a broader ecosystem.
* January 2022:\*\* Space Micro announced the successful integration of their space-qualified Saturn 3U Space VPX Single Board Computer into the Skykraft Block 1 Satellite Constellation. This highlights their capability to deliver reliable and high-performance processing solutions for commercial constellations.
* September 2021:\*\* Space Micro announced the availability of its Proton400K™ radiation hardened SRAM module. The Proton400K is a 4 Mbit rad-hard SRAM designed for critical memory applications in space.

**Leadership & Team:**

* David Strobel (CEO):\*\* Prior to the acquisition, David Strobel served as CEO. Background information on his prior experience is limited to his tenure at Space Micro.
* Information on current senior leadership following Voyager Space acquisition is not readily available.

**Competitive Landscape:**

* BAE Systems:\*\* BAE Systems offers a broad portfolio of radiation-hardened electronics for space, including microprocessors, memory, and ASICs. Space Micro differentiates itself through its focus on providing cost-effective, off-the-shelf solutions tailored for specific mission needs, offering greater flexibility for smaller and mid-sized space missions.
* Renesas Electronics (Intersil):\*\* Renesas (formerly Intersil) produces radiation-hardened components, including voltage regulators and power management ICs. Space Micro offers more complete system-level solutions, including processors and communication systems, enabling a more integrated approach to space electronics design.

**Sources:**

1. [https://voyagerspace.com/voyager-space-acquires-space-micro/](https://voyagerspace.com/voyager-space-acquires-space-micro/)

2. [https://spacemicro.com/](https://spacemicro.com/)

3. [https://spacenews.com/skykraft-launches-first-five-satellites-for-air-traffic-management-constellation/](https://spacenews.com/skykraft-launches-first-five-satellites-for-air-traffic-management-constellation/)

4. [https://www.microwavejournal.com/articles/36877-space-micro-s-new-proton400ktm-rad-hardened-sram-module](https://www.microwavejournal.com/articles/36877-space-micro-s-new-proton400ktm-rad-hardened-sram-module)