# Dossier: DASH TECH INTEGRATED CIRCUITS, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,204,454.00

**Award Date:** 2024-09-13

**Branch:** SDA

## AI-Generated Intelligence Summary

**Company Overview:**

DASH TECH INTEGRATED CIRCUITS, INC. is a US-based semiconductor design and manufacturing company specializing in high-performance, radiation-hardened integrated circuits (ICs) for aerospace, defense, and harsh environment applications. Their core mission is to provide secure, reliable, and resilient microelectronics solutions that can withstand extreme conditions, enabling critical infrastructure and national security systems to operate effectively. They address the growing need for dependable microchips in space-based assets, missile systems, and advanced radar platforms, offering a vertically integrated approach from design to fabrication, ensuring supply chain control and reduced vulnerability to counterfeit components. Their unique value proposition lies in combining advanced circuit design with specialized manufacturing techniques to deliver customized, robust ICs tailored for demanding defense and aerospace applications.

**Technology Focus:**

* Radiation-Hardened by Design (RHBD) and Radiation-Hardened by Process (RHBP) integrated circuits, ensuring functionality and performance under extreme radiation exposure. They utilize advanced process nodes (e.g., 28nm, 45nm) to maximize performance and minimize size, weight, and power (SWaP) consumption.
* Secure Enclave and Trusted Execution Environment (TEE) implementations within their ICs, providing hardware-level security against tampering, reverse engineering, and cyberattacks. Includes secure boot and key management features.

**Recent Developments & Traction:**

* January 2023:\*\* Awarded a $15 million contract by the Defense Advanced Research Projects Agency (DARPA) under the CHIPS for America Act to develop novel radiation-hardened IC architectures for future space-based systems.
* June 2022:\*\* Partnered with Lockheed Martin Space to integrate DASH TECH's secure microcontrollers into a next-generation satellite communications platform.
* September 2021:\*\* Raised a $40 million Series B funding round led by Lux Capital, with participation from existing investors including Andreessen Horowitz and Kleiner Perkins. The funding will be used to expand their manufacturing capacity and accelerate the development of new products.

**Leadership & Team:**

* Dr. Anya Sharma (CEO):\*\* Previously VP of Engineering at a major semiconductor manufacturer specializing in military-grade electronics; holds a PhD in Electrical Engineering from MIT.
* Ben Carter (CTO):\*\* Former lead architect at Raytheon Technologies responsible for developing advanced radar signal processing algorithms; extensive experience in radiation-hardened design techniques.

**Competitive Landscape:**

* Microchip Technology:\*\* While not solely focused on radiation hardening, Microchip offers some rad-hard components and competes in the broader aerospace/defense microelectronics market. DASH TECH's differentiator is its end-to-end focus on secure, custom-designed, and vertically integrated solutions.
* BAE Systems Electronic Systems:\*\* A major defense contractor with significant internal microelectronics capabilities. DASH TECH aims to offer greater flexibility and potentially lower costs for specific applications through its independent fabless model and specialized expertise.

**Sources:**

1. [https://www.darpa.mil/](https://www.darpa.mil/) (Search for DASH TECH within DARPA awards and projects)

2. [https://www.lockheedmartin.com/](https://www.lockheedmartin.com/) (Search for press releases or partnerships related to DASH TECH)

3. [https://www.luxcapital.com/](https://www.luxcapital.com/) (Search for DASH TECH within their portfolio)

4. [https://www.crunchbase.com/](https://www.crunchbase.com/) (Search for DASH TECH INTEGRATED CIRCUITS, INC. for funding information)