# Dossier: ENGIN-IC INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,792.68

**Award Date:** 2024-07-24

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

ENGIN-IC Inc. is a US-based company specializing in the design, development, and manufacturing of high-performance integrated circuits (ICs) and systems, particularly radiation-hardened (rad-hard) and high-reliability solutions for demanding aerospace, defense, and space applications. Their core mission revolves around providing robust, secure, and advanced microelectronics that can withstand extreme environmental conditions and operate reliably in harsh radiation environments. They aim to solve the critical problem of electronics failure in space, high-altitude, and military environments, ensuring mission success and long-term system functionality. ENGIN-IC's unique value proposition lies in its ability to offer a combination of cutting-edge IC design expertise, in-house manufacturing capabilities, and rigorous testing protocols to deliver customized, highly reliable microelectronics solutions tailored to specific customer requirements, effectively addressing the SWaP-C (Size, Weight, Power, and Cost) constraints prevalent in the defense and aerospace industries.

**Technology Focus:**

* Rad-hard ASIC and FPGA development: Specializes in the design and manufacturing of Application-Specific Integrated Circuits (ASICs) and Field Programmable Gate Arrays (FPGAs) that are radiation-hardened to withstand the effects of radiation exposure in space and high-altitude environments.
* Mixed-signal and analog IC design: Offers advanced capabilities in designing mixed-signal and analog ICs for various applications, including data acquisition, power management, and signal processing, all designed to operate reliably under harsh conditions.

**Recent Developments & Traction:**

* Strategic Partnership with CAES (Cobham Advanced Electronic Solutions) (Likely ongoing):\*\* Acknowledged industry collaboration for the enhancement and utilization of rad-hard microelectronics, showcasing ENGIN-IC's potential for growth through partnership.
* Focus on AI Integration:\*\* Actively showcasing and developing AI capabilities within their microelectronics offerings, showing a proactive adaptation to technological advancements.

**Leadership & Team:**

* The available information on leadership is limited. Further investigation would be required to identify and profile specific key individuals.

**Competitive Landscape:**

* CAES (Cobham Advanced Electronic Solutions):\*\* CAES is a major player in rad-hard microelectronics and competes directly with ENGIN-IC. ENGIN-IC may differentiate itself through more customized solutions and potentially more agile development cycles.
* Microchip Technology (via Microsemi):\*\* Microchip, through its acquisition of Microsemi, also provides rad-hard solutions. ENGIN-IC could differentiate through specialized expertise in ASICs and customized designs compared to Microchip's broader product portfolio.

**Sources:**

* [https://www.engin-ic.com/](https://www.engin-ic.com/) (ENGIN-IC Official Website)
* [https://www.linkedin.com/company/engin-ic-inc/](https://www.linkedin.com/company/engin-ic-inc/) (ENGIN-IC LinkedIn Page)