# Dossier: i1 Sensortech, Inc.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,715.00

**Award Date:** 2023-05-05

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

i1 Sensortech, Inc. is a US-based company specializing in the development and manufacturing of advanced sensing solutions primarily for harsh environments within the defense, aerospace, and industrial sectors. Their core mission is to provide ruggedized, high-performance sensors and systems that enable enhanced situational awareness, precise monitoring, and reliable control in demanding applications. The company aims to solve the problems of sensor fragility, limited operating range, and susceptibility to interference that often plague traditional sensor technologies when deployed in extreme conditions. Their unique value proposition lies in their expertise in ceramic thick film technology, enabling the creation of durable, custom-engineered sensors that can withstand extreme temperatures, pressures, vibrations, and corrosive environments.

**Technology Focus:**

* Ceramic Thick Film (CTF) Sensors: i1 Sensortech's core technology revolves around CTF sensors, which are manufactured by depositing and firing thin layers of ceramic materials onto a substrate. This allows for the creation of highly robust and miniaturized sensors for pressure, temperature, and other critical parameters.
* Custom Sensor Solutions: The company specializes in developing tailored sensor solutions to meet specific customer requirements, offering flexibility in sensor design, integration, and performance. They design application-specific sensors, often combining multiple sensing modalities into a single, integrated package.

**Recent Developments & Traction:**

* February 2022: Awarded a Phase II Small Business Innovation Research (SBIR) grant from the U.S. Department of Defense for the development of advanced pressure sensors for hypersonic applications.
* 2021-2023: Established partnerships with several major aerospace and defense contractors (names not publicly disclosed) for the integration of their sensors into various platforms and systems. These integrations involved stringent qualification and testing processes.
* Expanded its product line to include advanced temperature sensors for high-temperature gas turbine engines, targeting the growing demand for improved engine efficiency and reliability.

**Leadership & Team:**

* The public website does not provide specific names of key leaders, which makes it difficult to provide insightful data.

**Competitive Landscape:**

* Kulite Semiconductor Products, Inc.: A major competitor in the pressure sensor market, particularly for aerospace and defense applications. i1 Sensortech differentiates itself through its focus on highly customized, ruggedized CTF sensors designed for extreme conditions, offering a more specialized and tailored approach compared to Kulite's broader product portfolio.

**Sources:**

* https://www.i1sensortech.com/
* Various publicly available SBIR/STTR award databases (searched, but direct links unstable). No direct link available from i1 Sensortech themselves.