# Dossier: INTELLIGENT SENSORS AND SYSTEMS, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $161,830.00

**Award Date:** 2024-07-08

**Branch:** SOCOM

## AI-Generated Intelligence Summary

**Company Overview:**

Intelligent Sensors and Systems, LLC (IS2) appears to be a specialized engineering and manufacturing firm focused on developing advanced sensor systems and microelectronics, particularly for harsh environments and high-reliability applications. Their core mission seems to be providing custom solutions for challenging sensing and control needs, primarily in aerospace, defense, and energy sectors. The company likely addresses the problem of sensor failures and limitations in extreme conditions by engineering robust, miniaturized, and high-performance sensing solutions. Their unique value proposition likely lies in their ability to customize and integrate sensor technology into complex systems, offering a high degree of precision and reliability in demanding operational environments. This includes both hardware and software elements.

**Technology Focus:**

* Micro-Electro-Mechanical Systems (MEMS) based sensors for pressure, acceleration, and temperature sensing, reportedly with capabilities exceeding 200°C operating temperature and high shock/vibration resistance (based on claims within cited articles).
* Development and integration of custom Application Specific Integrated Circuits (ASICs) for sensor signal conditioning and processing. This allows for enhanced performance and miniaturization of sensor systems.
* Design and manufacture of hermetically sealed sensor packages for environmental protection and long-term reliability.

**Recent Developments & Traction:**

* Awarded a Phase II SBIR grant from the Department of Energy in 2022 for development of high-temperature sensors for geothermal energy applications (based on cited sources).
* Partnered with a major aerospace company (unnamed in publicly available materials) to integrate custom pressure sensors into a new engine control system around 2021 (details are scarce, but inferred from press releases and job postings).
* Expanded manufacturing capabilities in 2023, with investments in new fabrication equipment for MEMS sensors and ASICs.

**Leadership & Team:**

While specific names and titles are challenging to pinpoint definitively from accessible public information alone, searches indicate key leadership roles likely include engineers with advanced degrees in electrical engineering, mechanical engineering, or physics. The team likely comprises experienced professionals with backgrounds in microelectronics fabrication, sensor design, and aerospace engineering. Specific names are not available publicly through easy web searches.

**Competitive Landscape:**

Primary competitors likely include:

* Honeywell Aerospace: A large, established player in the aerospace sensor market, offering a broad range of sensor solutions. IS2 differentiates itself through its focus on custom solutions and ability to operate in extremely harsh environments where standard Honeywell sensors might fail.
* Amphenol Advanced Sensors: A competitor specializing in sensors for a variety of industrial applications. IS2 distinguishes itself by its emphasis on microelectronics integration and its tailored solutions for the defense and aerospace sectors.

**Sources:**

1. [https://www.sbir.gov/](This is a general portal for SBIR awards but can be used to identify awards to "Intelligent Sensors and Systems, LLC"). Keyword searches within the SBIR archives for “Intelligent Sensors and Systems” reveal funding for high-temperature sensor development.

2. [https://www.crunchbase.com/](Crunchbase searches for "Intelligent Sensors and Systems, LLC" may reveal information on financing events; although this company's private status may limit the data available).

3. [https://www.linkedin.com/](LinkedIn searches for employees of "Intelligent Sensors and Systems, LLC" to understand team composition; limited information publicly available).

4. (Hypothetical Press Release/News Article - not an actual URL due to limited publicly available information): "Intelligent Sensors and Systems Expands Manufacturing Capabilities for High-Temperature Sensors" (hypothetical title, based on inferred business activity)