# Dossier: QUARTUS ENGINEERING INCORPORATED

## SBIR Award Details

**Award Title:** N/A

**Amount:** $995,486.00

**Award Date:** 2024-04-03

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

Quartus Engineering Incorporated is a technology company providing advanced engineering solutions primarily for the aerospace and defense industries. Their core mission revolves around delivering high-fidelity finite element analysis (FEA) and computational fluid dynamics (CFD) simulations, coupled with custom-designed hardware and software solutions. They aim to solve complex structural, thermal, and fluid dynamics problems faced in the design and analysis of critical aerospace and defense systems. Their unique value proposition lies in their ability to integrate cutting-edge simulation capabilities with bespoke hardware and software development, offering a vertically integrated solution that optimizes performance, reliability, and safety while often reducing time-to-market for their clients.

**Technology Focus:**

* Advanced FEA/CFD Simulation: They offer expertise in structural, thermal, and fluid dynamics analysis using industry-leading software packages (e.g., ANSYS, ABAQUS) and in-house developed simulation tools. This includes non-linear analysis, fracture mechanics, and multi-physics simulations.
* Custom Hardware/Software Solutions: Quartus designs and develops custom electronic hardware and embedded software for control systems, data acquisition, and sensor integration within aerospace and defense platforms. This includes specialized test equipment, data loggers, and real-time control systems.

**Recent Developments & Traction:**

* In February 2023, Quartus announced it received a subcontract from L3Harris Technologies to support the U.S. Space Force’s Navigation Technology Satellite-3 (NTS-3) program. Quartus is providing design and analysis services to L3Harris for critical NTS-3 subsystems.
* In March 2022, the company announced a contract for the development of a test system for a classified hypersonics program.
* In 2021, Quartus released an updated version of their FEA automation software tool, Quartus FEA, improving workflow and analysis speed.

**Leadership & Team:**

* David A. Pellerin (President): Possesses extensive experience in engineering management and technical leadership within the aerospace and defense industries. No easily accessible detailed biographical information on prior roles could be quickly ascertained.
* Information regarding the CEO and CTO could not be reliably sourced.

**Competitive Landscape:**

* ANSYS: While ANSYS is primarily a software provider, their professional services arm directly competes with Quartus for FEA consulting projects.
* Sierra Nevada Corporation: Sierra Nevada offers a broad range of engineering services, including simulation and analysis, representing a competitive overlap in the aerospace and defense sectors.

Quartus differentiates itself through its integrated hardware and software development capabilities alongside simulation, providing a more comprehensive solution compared to firms that primarily focus on simulation services alone.

**Sources:**

* [https://quartus.com/](https://quartus.com/)
* [https://www.l3harris.com/newsroom/us-space-force-navigational-technology-satellite-3-begins-integration-and-testing](https://www.l3harris.com/newsroom/us-space-force-navigational-technology-satellite-3-begins-integration-and-testing) (L3Harris press release mentioning Quartus)
* [https://www.crunchbase.com/organization/quartus-engineering](https://www.crunchbase.com/organization/quartus-engineering) (Limited information, but provides context)