# Dossier: DOVER MICROSYSTEMS INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,977.00

**Award Date:** 2022-11-07

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Dover Microsystems, Inc. focuses on providing provably secure microprocessor intellectual property (IP) that enables the development of secure systems for defense, aerospace, and critical infrastructure applications. The company aims to solve the problem of hardware-level vulnerabilities exploited by cyberattacks, offering protection against a wide range of threats including supply chain attacks, software vulnerabilities, and hardware backdoors. Their unique value proposition lies in their CoreGuard technology, which provides hardware-enforced security policies at the architectural level, preventing attackers from executing malicious code or manipulating data, even if software is compromised. This allows the development of intrinsically secure systems without relying solely on software patches or relying on trust in the software supply chain.

**Technology Focus:**

* CoreGuard:\*\* A security architecture that embeds fine-grained access control and memory safety directly into the hardware, preventing unauthorized code execution and data manipulation. It operates at the instruction level, enforcing security policies on every operation the processor performs.
* Dover Verification Platform:\*\* A software tool suite designed to enable verification and validation of CoreGuard implementations, allowing system designers to ensure the correct and secure behavior of their hardware. It includes tools for formal verification, simulation, and testing.

**Recent Developments & Traction:**

* AFWERX Phase II SBIR Award (2023):\*\* Dover Microsystems was awarded an AFWERX Phase II Small Business Innovation Research (SBIR) contract to further develop and demonstrate their secure processor technology for use in Air Force systems. This demonstrates continued interest and validation from the DoD.
* Expansion of CoreGuard Compatibility (Ongoing):\*\* Continues to increase compatibility with more processors and architectures, allowing broader adoption of their technology. Dover continues to improve the platform and integrate with industry-standard tools.
* Partnerships with Industry Leaders:\*\* Public statements highlight ongoing partnerships to integrate their CoreGuard technology into a variety of platforms, but specific details are limited.

**Leadership & Team:**

* Jothy Rosenberg (CEO):\*\* A seasoned entrepreneur with a background in computer security and experience leading venture-backed technology companies.
* The Dover Microsystems team includes experts in processor architecture, security, and formal verification, many with advanced degrees and experience in relevant fields. Further specifics on team members are not readily available publicly.

**Competitive Landscape:**

* Arm Holdings (TrustZone):\*\* While Arm TrustZone offers hardware-based security features, it provides a broader range of security functions, whereas Dover's CoreGuard is specifically focused on preventing memory safety violations and unauthorized code execution at a granular, hardware level. CoreGuard offers verifiable security properties.
* Intrinsic ID:\*\* Similar to Dover, Intrinsic ID uses SRAM based hardware to generate unique ID, which offers a level of security for embedded devices. However, CoreGuard offers a wider range of security properties, and is focused more on memory protection.

**Sources:**

* [https://www.dovermicrosystems.com/](https://www.dovermicrosystems.com/)
* [https://www.afwerx.com/](https://www.afwerx.com/)