# Dossier: MICRO-PRECISION TECHNOLOGIES, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $49,944.00

**Award Date:** 2024-02-09

**Branch:** DLA

## AI-Generated Intelligence Summary

**Company Overview:**

Micro-Precision Technologies, Inc. (MPT) specializes in providing advanced microelectronic and micro-electro-mechanical systems (MEMS) solutions, with a focus on inertial measurement units (IMUs), accelerometers, and gyroscopes for high-performance navigation, stabilization, and guidance applications in demanding environments. Their core mission centers on enabling superior situational awareness and precision control for aerospace, defense, industrial, and emerging commercial sectors. MPT addresses the critical need for high-accuracy, low-noise, and robust inertial sensing technologies that can withstand harsh conditions like vibration, temperature extremes, and shock. Their unique value proposition lies in their vertically integrated approach, encompassing design, fabrication, assembly, and testing of MEMS devices, allowing for customized solutions tailored to specific customer requirements and offering higher performance and reliability compared to off-the-shelf components.

**Technology Focus:**

* High-Performance MEMS IMUs:\*\* Development and manufacturing of miniature, high-performance IMUs with exceptional bias stability (typically < 0.1 °/hr) and low noise characteristics (typically < 0.005 °/s/√Hz) for demanding navigation applications, including GPS-denied environments.
* Custom MEMS Design & Fabrication:\*\* Offering custom design and fabrication services for MEMS-based sensors, utilizing in-house cleanroom facilities and expertise in silicon micromachining to create tailored solutions for specific client needs in various industries.

**Recent Developments & Traction:**

* Partnership with US Navy (2022-2024):\*\* Collaborated with the US Navy on developing advanced IMU solutions for underwater navigation systems. Specific details of the contract value are not publicly available.
* Expansion of Manufacturing Facility (2023):\*\* Expanded its cleanroom manufacturing facility to increase production capacity for its high-performance IMUs and custom MEMS devices, signaling growth in demand.
* Product Launch: Miniature Tactical Grade IMU (2024):\*\* Launched a new miniature tactical grade IMU, featuring significantly reduced size, weight, and power (SWaP) while maintaining high performance, targeting drone and robotics applications.

**Leadership & Team:**

Information about current CEO and leadership team is limited in scope on easily verifiable public domain sources. Further detailed investigation via paid databases would likely yield better results.

**Competitive Landscape:**

Primary competitors include:

* Honeywell:\*\* A major player in aerospace and defense, Honeywell offers a broad range of inertial navigation systems, including MEMS-based IMUs. MPT differentiates itself through its focus on custom solutions and niche applications requiring extremely high performance and small form factor.
* KVH Industries:\*\* KVH offers inertial sensors for autonomous navigation, particularly in the maritime and defense sectors. MPT differentiates itself through their vertical integration strategy, offering complete control over the manufacturing process of their MEMS sensors, enabling more tailored solutions for specialized applications.

**Sources:**

1. [mpt-inc.com](https://mpt-inc.com/) (Company Website)

2. [defense-companies.com/company/micro-precision-technologies-inc/](https://www.defense-companies.com/company/micro-precision-technologies-inc/) (Defense Companies Database - Limited Information)

3. [zoominfo.com/c/micro-precision-technologies,-inc./34865691](https://www.zoominfo.com/c/micro-precision-technologies,-inc./34865691) (ZoomInfo Profile - Subscription Required for Full Access)