

PROJECT BRIEF



Project Name: Bringing Semiconductor Foundry Production Capabilities to Kansas

Grant Program: BASE 1.0

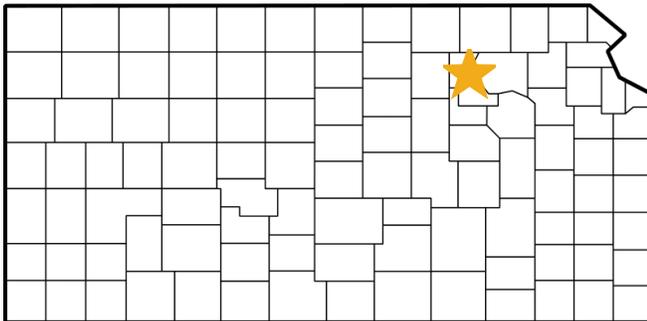
Project Date: October 2022 - September 2024

Project Summary

Radiation Detection Technologies is a small, Kansas-based business that manufactures semiconductor devices, semiconductor materials, radiation detectors, and electronic circuit technologies. BASE funding was used to expand Radiation Detection Technologies' semiconductor processing facility with new, state-of-the-art and high-throughput manufacturing capability to support increased product demand as recovery from supply chain pressures and other pandemic-related economic hardships continues.

Location

Manhattan, Kansas



Grantee Information

Founded in 2011, Radiation Detection Technologies focuses on manufacturing high quality semiconductor devices and sensor readout-electronic technologies for use in multiple industries including healthcare, defense, energy, and agriculture.

Goals and Objectives

Goal: Support Radiation Detection Technologies' exponential growth in semiconductor device sales, which requires better production capabilities, more square footage, more employees, and additional equipment.

Goal: Expand facilities and acquire semiconductor equipment to grow and develop semiconductor infrastructure and capability in Kansas.

Objective: Build out commercial space to expand cleanroom for high volume production of semiconductor devices.

Objective: Acquire new, state-of-the-art, 200-mm wafer production semiconductor equipment.

Budget Overview

- Award amount: \$2,905,200.00
- Match amount: \$975,076.95
- Total project budget: \$3,880,276.95

Expense categories:

- Facility Work: \$59,253.79
- Utilities & Permitting: \$2,455.00
- Clean Room: \$1,304,090.51
- Construction: \$399,080.57
- Consulting: \$5,350.00
- Equipment: \$2,110,047.08

Target Population

Kansas' high-tech manufacturing sector and workforce development pipelines that fill semiconductor manufacturing jobs and innovation needs.

Sustainability

The new facility will allow RDT to scale production, meet demand, and commercialize federally funded R&D projects, which is projected to generate \$40 million in additional revenue over five years. The expanded production capability at the new facility and the equipment also improves RDT's financial position, increasing the likelihood of venture capital and federal funding.

Outcomes

- Potential to create 50 high-paying jobs and bring in \$40MM in additional revenue in the next five years.
- Expand the state's base of high-tech businesses and residents by growing local production capability of semiconductor devices manufacturing.
- Train a semiconductor manufacturing workforce through workplace hiring and internship programs with KS Universities.

Activities and Timeline

2023 Q1: develop cleanroom specs, equipment specs, and building renovation scope

2023 Q2 - Q3: design and architectural engineering, procurement activities for lab equipment

2023 Q4: equipment installation, cleanroom construction, procurement activities ongoing

2024 Q1- Q3: cleanroom build out, testing and calibration of new equipment, hiring initiated for new technicians and engineers

Contact Information

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