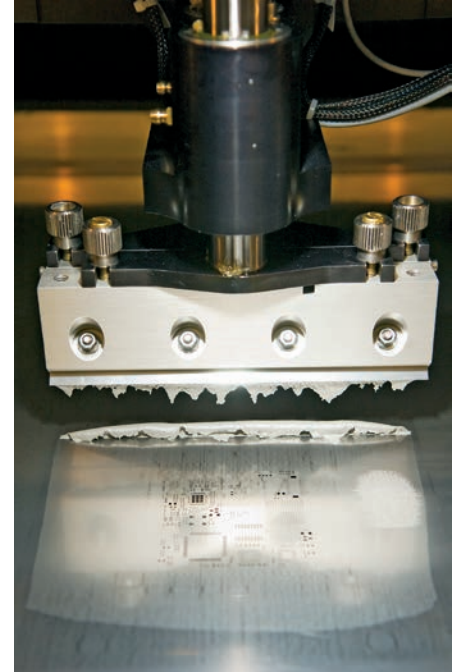


North Dakota Economic Development Center of Excellence for Advanced Electronics Design & Manufacturing

North Dakota State University (NDSU) and the Center for Nanoscale Science and Engineering (CNSE), Fargo, offer a proven track record of expertise in wireless electronic sensors, electronic miniaturization, chip scale packaging, surface mount technology, low volume electronic prototype manufacturing, as well as coatings and polymeric materials. Through the Center for Advanced Electronics Design & Manufacturing, NDSU researchers partner and collaborate with government and private industry to develop, test and deliver new market-driven electronics, wireless sensors, and innovative electronic packaging.



Center of Excellence for Advanced Electronics Design & Manufacturing (CAEDM)

- performs economically significant and market-driven research and development for private sector partners and collaborators
- designs, develops and tests wireless sensors and electronic systems that address commercially relevant industrial problems posed by companies

Statement of Purpose

NDSU's Economic Development Center of Excellence for Advanced Electronics Design & Manufacturing:

- assists industry partners and collaborators in meeting product and technology needs with research that results in new marketable technologies and products
- promotes development of new products and technologies in the advanced electronic and manufacturing industry cluster
- enables and fosters commercialization opportunities for new technologies and products
- promotes creation of high-value jobs and economic development opportunities
- enables NDSU to engage in market-driven private sector partnerships

Current CAEDM Partners

Aldevron, Fargo, ND
 Alien Technology, Morgan Hill, CA
 Appareo Systems, Fargo, ND
 Bobcat Company, Gwinner, ND
 Crane Wireless Monitoring Solutions, Plano, TX
 Deceleration Technologies, LLC, Reynolds, ND

Intelligent InSites, Inc., Fargo, ND
 Pacific Northwest National Lab, Richland, WA
 Pedigree Technologies, Fargo, ND
 PPG Industries, Inc., Pittsburgh, PA
 Starkey Hearing Technologies, Eden Prairie, MN
 Tessera Technologies, Inc., San Jose, CA

Capabilities of CAEDM at NDSU

- create, design and develop innovative electronic prototypes
- assemble low volume prototype components and systems
- conduct testing and performance characterization
- develop intellectual property available for licensing to private sector

Potential Industrial Market Applications

- advanced microelectronics packaging
- automated “smart” vending machines
- aviation and aerospace
- biomedical devices
- oil and gas sensor technologies
- precision agriculture electronics
- radio frequency identification technologies
- telecommunications



Technical Experience & Commitment to Excellence

- strong industrial backgrounds in electronics, packaging, systems engineering and business development
- experienced electrical, mechanical, and process engineers
- research scientist staff with chemistry and physics disciplines
- proven track record of technology and product development

NDSU Electronics Technology Laboratory

- 25,000+ sq. ft. of lab and workstation space
- equipment and prototyping tools valued at over \$10M
- extensive class 100 and 10,000 cleanroom facility for microelectronics packaging, SMT assembly, microfabrication, and thin/thick film deposition
- anechoic test chamber for radio frequency/antenna measurements
- comprehensive characterization capability for reliability and failure analysis

For more information, contact North Dakota State University, Fargo

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