

Automated MEMS Packaging

Flexible Microsystems Packaging

The Bennington Microtechnology Center (BMC) is a pilot production facility offering:

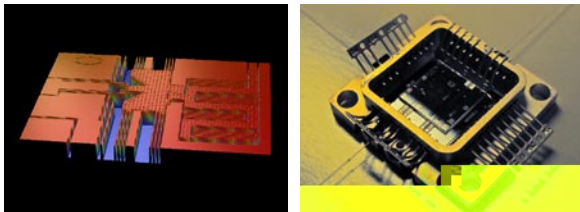
Process and prototyping development.

Small batch production.

Reliability and testing services.

From Concept to Production

Through a strategic partnership with **The Automation and Robotics Research Institute (ARRI)** at **The University of Texas at Arlington (UTA)**, BMC provides clients with a full spectrum of services from basic research to small batch production.



Packaging Expertise

Micropackaging capabilities are based on:

Design for manufacturing.

Reconfigurable precision automation.

Reliable bonding and sealing processes.

Ability to package microoptical and microfluidic devices.

State of the Art Facilities

BMC houses a state-of-the-art, 3,000 square-foot clean room, equipped with back-end microassembly and packaging tools.

Capabilities

Robotic Assembly & Manipulation

- Reconfigurable course and fine assembly.
- Motorized cameras.
- Advanced micropositioning systems.

Testing & Metrology

- Optical leak testing.
- Gross leak testing.
- 3D MEMS profiler and motion analyzer.
- Advanced image analysis systems.
- Pull testing.
- Wafer probing.

Bonding: Welding & Soldering

- Laser soldering.
- Hermetic sealing with both seam sealing and projection welding.
- Wire bonding.



Automated MEMS Packaging

BMC's Micromanufacturing Solutions

BMC removes barriers to microsystems commercialization by adopting a paradigm shift in the way microsystems products are designed and developed, based on innovative approaches developed at **The Automation and Robotics Research Institute (ARRI)** at **The University of Texas at Arlington (UTA)**.

Generic and Modular Packaging Tools & Platforms

BMC addresses current micromanufacturing problems through the development of generic and modular packaging tools and platforms, and their deployment into system prototyping and low-volume pilot production.

Integrated Microsystems

The cost-effective manufacturing of integrated microsystems is a major objective, and the design of modular system architectures is a key element of our technical approach.

Heterogeneity

Our approach also recognizes that heterogeneity (the assembly of microparts fabricated from different materials using different processes) can improve yields and reduce costs by reducing the complexity involved in fabricating complex monolithic systems on a single substrate.



For More Information, Contact:

Beth Wales
Executive Director

Bennington Microtechnology Center
P.O. Box 877, 441 Water Street
North Bennington, VT 05257
802.753.1902 (Phone)
802.753.1908 (Fax)

EMAIL: wales@benningtonmicro.org