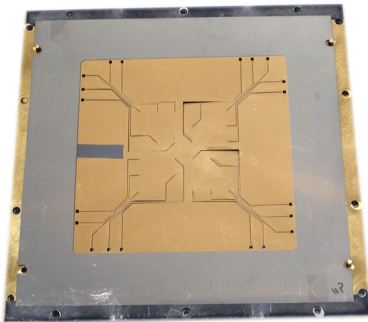


We provide a variety of vapor deposition processes and facilities which can be reconfigured for specific applications and/or dedicated to long-term projects.



Example Capabilities:

- Electron beam evaporation
- Sputter deposition
- Reactive deposition processes
- Atomic layer deposition
- Focused ion beam induced chemical vapor deposition

We provide a full range of material joining capabilities from consultation to fabrication. We frequently partner with small businesses and industry.

Example Capabilities:

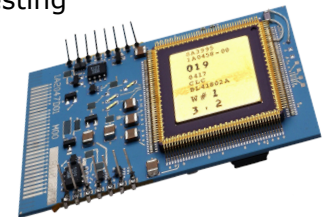
- Conventional, step, and active brazing
- Metal-to-metal and metal-to-nonmetal brazing
- Consult on parts designs, materials, and processes to ensure joining success
- Design and manufacturing of parts fixturing



We provide complete electronic packaging solutions for unique, high consequence, high reliability applications. Technologies include optical, microfluidic, MEMS, and integrated circuitry. We achieve full realization of product from design to testing with a rapid prototype capability.

Example Capabilities:

- Flexibility of LTCC design & fabrication
- Metallization and Photolithography
- Electronic assembly, bonding and sealing
- Laser machining and wafer dicing & sawing
- Product testing



We design, fabricate, assemble, and characterize vacuum systems, components, and processes. We trouble-shoot and upgrade existing vacuum systems. We also provide 3D solid modeling for virtual prototyping and subsequent fabrication of critical components.

Example Capabilities:

- Low temperature vacuum diffusion bonding
- Metal and ceramic brazing using controlled atmospheres
- Vacuum compatible welding of components, subassemblies, or assemblies
- Component realization from design through fabrication
- Helium leak detection



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