

NB Engineering offers qualified and proficient expertise to your Engineering team with our 45+ years of electrical and mechanical engineering experience in electronics testing & mechanical packaging design for space, avionics, military, medical and commercial applications.

We will become part of your product team designing, building, and testing high quality, reliable products that meet your requirements. We will assist in writing proposals, developing presentations for design reviews, and will continue to support your product for the life of the program.

We achieve customer satisfaction through sound engineering methods, reliability, attention to detail, communication, solid business practices, process management, and a 100% commitment to quality products and relationships.



## Custom Test Equipment Design

We design and build Custom Test Equipment for production, qualification, performance, and design verification that provides turn-key automated test solutions starting with your test requirements and finishing with a custom test system ready to test your product.

### Functions

- USB, Ethernet, RS-422/485, IEEE-488
- CAN, MIL-STD-1553B, ARINC-429
- Resolvers, Gyros, Thermistors, Encoders
- Data Acquisition Systems
- Closed Loop Systems, Frequency Response
- Power Supplies, Motor Controllers

### Design Concepts

- Manual Test Fixtures to Fully Automated Systems (ATE)
- Cost Effective PC-Based Solutions
- Innovative and Rugged Packaging Techniques
- Modular Designs for Rapid System Development
- Graphical User Interfaces for Ease of Operation
- Reliable Commercial Off-The-Shelf (COTS) Hardware
- Easily Maintained

### Design, Build and Support

- Detailed Electrical and Mechanical Design
- Design Documentation, Drawings and Users Manuals
- Parts Procurement, PWB Fab, Wiring and Assembly
- Complete System Integration
- Customer Training
- Customer Support Throughout the Production Phase
- Test Software Development in LabVIEW by Certified Associate Developer.

### Electronics Test

- Designing For Testability
- Test Planning
- Test Procedures and Reports
- Test Coordination

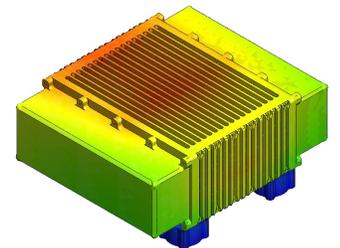
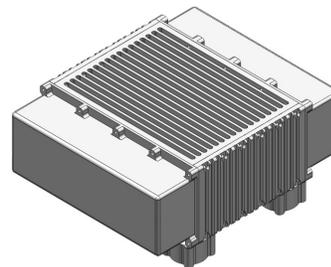


## Mechanical Packaging Design

We specialize in electronic packaging design for aerospace and military applications - designs that pass Environmental Stress Screening (ESS) including vibration and thermal cycling.

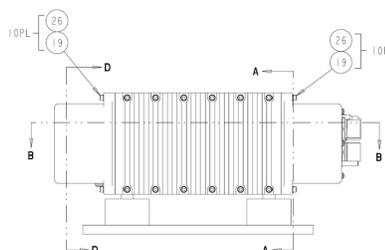
### Product Design

- Transform concepts into 3-D parametric solid models
- Convert your ideas into fully functional products
- Thermal & vibration analysis to ensure robust design
- CCA design per MIL-STD-275 and MIL-P-55110
- Update and validate designs prior to fabrication
- Greatly reduce product design cycle time
- Determine cost effective manufacturing methods
- Experienced in rapid prototyping methods



### 3-D CAD Modeling

- Complete virtual representation of the final product
- Verify form, fit, and function prior to fabrication
- Reduce/eliminate costly downstream design changes
- Product to market in a timely, cost-effective manner



### 2-D CAD Drawings

- Create 2-D engineering drawings from the 3-D model
- Generate mechanical drawings per ANSI Y14.5

