Solving Your Design Challenges

Our experienced technical staff works hands-on with customers to provide application design assistance, drawing from a well-stocked tool box of interconnect technology. If a standard terminal or insulator fits the requirements, we’ll recommend it. If not, we’ll combine standard and modified components from our tool box to create a customized solution that precisely fits your application. Either way, the result is practical and cost-effective.

Our Tool Box Includes:

- More than 500 screw-machined terminal designs
- Extensive tooling capability for custom shapes
- CNC equipment for economical prototype volumes
- A variety of material and plating options

Working directly with an experienced product engineer made all the difference in solving an interconnect problem we’d been dealing with for years. Advanced’s unique approach combined 2 connectors into 1 which improved alignment while the rugged terminal/contact design eliminated ongoing reliability issues in our high vibration application. Advanced provided a solution that was better suited to our application, reduced space, and allowed a less costly PCB design.

Design Engineer
MIL/AERO Communications Systems

MARKETS
Military
Aerospace
Automotive
Medical
Security
Industrial
Telecom
General Electronics
Precision Technology Delivers Quality and Reliability

Since the heart of every connector is the contact system, we use Swiss-type screw machining technology to produce terminals of superior quality, with field-proven performance and durability. Redundant, multi-finger contacts provide an extra level of reliability in applications where there is high vibration or a harsh environment.

Precision machining technology allows us to manufacture terminal lengths and diameters to very tight tolerances, meeting demands for finer pitch while improving positional accuracy during assembly. Since our screw-machining tool-up time is less than required for stamping, we typically produce a new terminal in weeks, significantly reducing your time-to-market.

Our terminals begin as solid brass/copper alloy bar stock and are machined to precise application-specific tolerances.

High speed Swiss screw machines and CNC technology offer the flexibility to produce prototype to production volumes with repeatable precision.

From through-hole to surface mount, screw-machined terminals ensure the robustness required in high reliability applications.
Vertical Integration Puts Our Tool Box in Your Hands

In our fully integrated manufacturing operation, we exercise complete process control - from raw material to final inspection. We have all the tools and skills needed to produce high-quality, performance-driven, customized interconnect solutions while reducing lead times.

- Precision screw machine technology
- State-of-the-art tool making from mold design though cutting steel
- Injection molding equipment
- Precision drilling and routing capability
- Economical insulator piercing
- Surface mount assembly technology
- Device attachment
- Automated optical inspection
- Tape and reel packaging

Precision molded insulators ensure positional accuracy and long-term durability in high pin count connectors and micro-miniature designs.

Precision drilling and routing equipment allows fast turnaround on prototypes and endless customization capability.

Automated optical inspection improves accuracy and provides the stringent level of quality control required in high reliability applications.
Custom Is Our Standard

Advanced Interconnections specializes in customized interconnect solutions for development, test, validation, and volume production applications. We design to your requirements while adding value and reducing time-to-market from prototype through production.

Typical applications from our tool box:

- High reliability connectors for board stacking and blind mating
- BGA socket adapter systems and test sockets for device validation
- Peel-A-Way® removable terminal carriers to allow complete solder joint visibility
- Low profile connectors for cable-to-board and micro board-to-board applications such as high-end military communications systems and hand-held medical equipment
- Adapters and interposers for device package transition and obsolescence

Board-to-Board Connectors solve difficult design challenges from rugged, high-reliability board stacking to micro flex cable-to-board applications.

Device-to-Board Sockets and Adapters enable cost-effective device validation, IC package conversion, and easy field replacement from prototype through production.

Cross-functional Designs are customized from our extensive tool box using proven technology and a mix of tooled and new components.
A Dedication to Solving Design Challenges

Since 1982, Advanced Interconnections has been recognized throughout the world as a leading designer and manufacturer of innovative, technologically advanced interconnect solutions.

Our experience ranges from durable screw-machined terminals and patented design features, to vertical integration in component production, assembly, and testing. We are committed to being a design partner and interconnect supplier you can rely on.

ISO 9001 Certified
RoHS Compliant
REACH and PFOS Compliant