



EDAC

Custom Connectors



Custom Connectors Overview

Connect with Us . . . Experience Makes the Difference

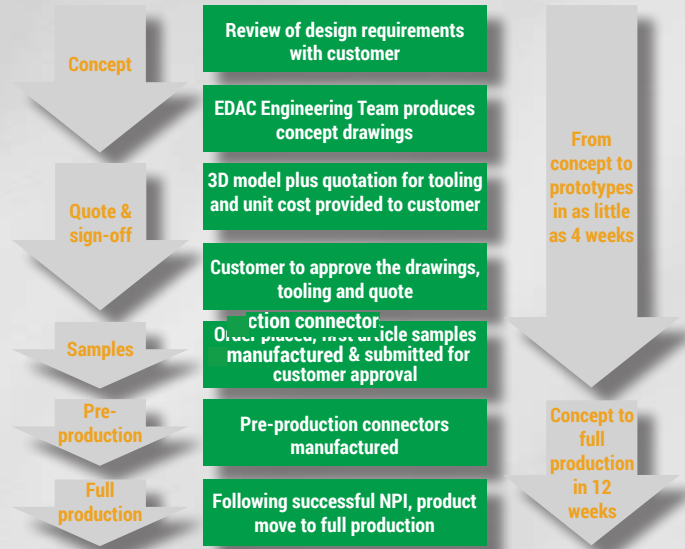
Custom Design

At EDAC we pride ourselves on our flexible approach to producing custom connectors and the modification of standard connectors to meet specific customer requirements. It's what makes us "Stand out from the Crowd"!

We can manufacture "made-to-spec" product when off-the-shelf product doesn't meet customer requirements. We are also able to move quickly – from concept to production in just 12 weeks, with prototypes in as little as 4 weeks.

We have experienced Engineering Teams ready to build to a specification and produce models and drawings. Quick turn samples available based on 3D printing rapid prototyping.

Made to Spec: Steps to Customization Process



Why are Custom Solutions required?

Some of the possible reasons are:

Special Technical Requirements

- Voltage requirements beyond standard ratings
- High temperature plastics to withstand non-standard temperatures
- Molded strain relief

Proprietary Design

- Proprietary Design where a customer wishes to use their own design
- Custom connector or cable assembly not readily available through standard channels

Special Sealing / Size Limitation

- Sealing for harsh environments
- Unusual or constrained spaces where standard products will not fit

Security

- Quick release system where there is a trip hazard
- Unique custom connector required to prevent non-approved cable insertion
- Polarized or 'keyed' system to prevent mis-mating
- Locking system for prevention of unauthorized removal

Custom Logo

- Customer specific logo molded into the connector housing
- Custom insulator colors are also possible

End of Life (EOL)

- EDAC has the ability to manufacture alternatives to obsolete connectors
- Not only end your search, but incorporate value-added features you require



Custom Enhanced Solution

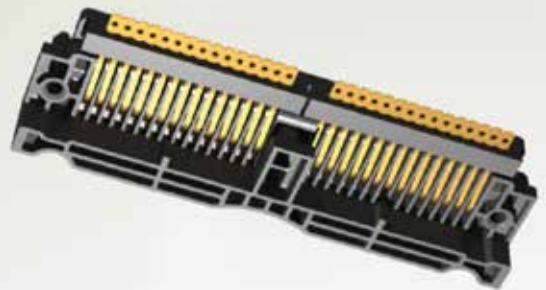
Modifications to existing design to improve performance and reliability while reducing costs.

Application

Payment Solutions for ATM, Gaming, Self-Check-out and Vending Applications.

Scope

Customer needed ruggedized connector to withstand harsh environments, while providing increased performance under application.



Challenge

Redesign the connector to conform to multi regulatory compliance requirements.

Solution

Superior insulator and contact design of which resulted in increased durability to vibration and shock resistance. The connector provides better dielectric withstanding voltage and temperature cycling at a reduced cost.



Full Custom Solution

Custom design where certain features and performance characteristics are needed or design requires major modifications to fit application and provide distinct features and benefits to the end product.

Application

Lithium Ion Battery Pack Housing.

Scope

Custom designed Battery Housing for Intelligent Power Management system.



Challenge

Design and produce a housing for 12 lithium batteries to account for environmental and operational conditions. In addition withstand high amperage peak loads without contact degradation.

Solution

Custom designed contacts for power and signal with specified spring forces and amperage loads. Gold plating on active contact areas for high continuity. Resin materials designed to mitigate excessive deflection forces on cover. Increased durability during full power load.



Semi-Custom Variations

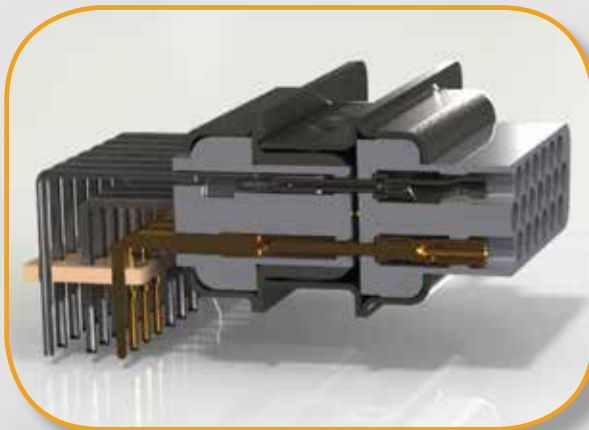
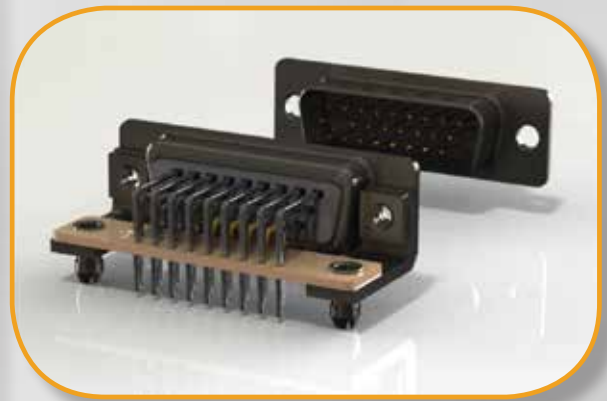
Variation of standard product by taking an existing connector and modifying areas to meet customer application requirements. Often achieved using existing tooling or nominal low cost tooling modifications.

Application

Aerospace In-flight Infotainment.

Scope

Provide standard high density 26 contact D-Sub connector with 4 contacts at 5A current and 22 contacts at 3A current contact rating.



Challenge

Stamped contacts did not meet power requirements. Machined contacts were cost prohibitive.

Solution

Designed hybrid high density D-sub connector with machined and stamped contacts. 4 power and 22 signal contacts for the required current ratings. 67% cost reduction achieved.



Value-Added Design Solution

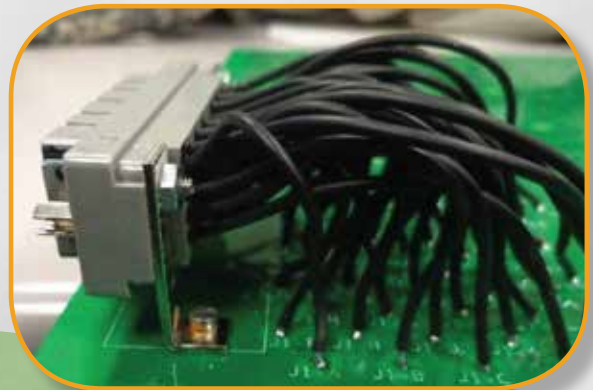
The enhancement of a customer's solution to improve functionality, reduce labor and reduce cost anywhere from product assembly level through to product implementation.

Application

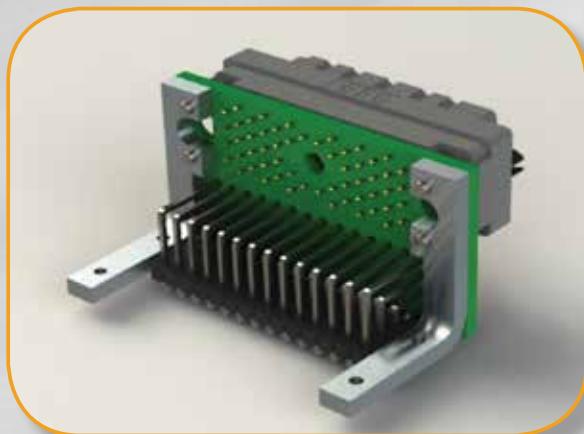
Transportation and Automotive Diagnostic Equipment.

Scope

To provide an alternative design that reduces the customers labor costs while improving the reliability of connections.



Before



After

Challenge

Produce a 90 degree connector that eliminates all of the manual soldering in customer application.

Solution

Replace wiring with right angle header, PCB and bracket to eliminate wires, offering a cost effective and more ruggedized solution for long term reliability.



Full Custom Solution

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Application

Enterprise PBX wireless device.

Scope

Design waterproof micro USB Plug for charging.



Challenge

Custom design a connector to fit customer's existing device.

Solution

Custom designed Micro USB over-molded splash proof connector integrating 4 pods for charging the battery while providing a seamless fit to the existing design of hand held device.



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Our Capabilities

EDAC has been designing and manufacturing interconnect products for over 53 years. Today EDAC supplies a wide variety of products to customers globally. We understand our markets and provide off-the-shelf and customized products manufactured to the highest quality standards.

Whether your requirement is fully custom, semi-custom, enhanced, or you need to replace an end of life part, we are dedicated to solving problems and supplying solutions to ensure you get the right product for your application. Our Experience Makes the Difference.

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