With new challenges regarding next-gen higher performance power components, it has become clear that OEMs and suppliers need partners with deep production expertise and understand early-stage design requirements and manufacturability beyond a component level.

There is no one-size-fits-all approach in solving complex challenges. As an end-to-end customized interconnect solutions provider, our teams take a holistic approach to understand the complete functional and application requirements of your assembly and innovate relentlessly to address any concerns. Leveraging our high-precision engineering with vertically integrated capabilities, we deliver reliable solutions that supports today's short time-to-market and overall high-volume production goals.

Interplex Power solutions are designed to address:

- Increasing power densities.
- Tight size and weight constraints.
- High and low voltage powertrain options.
- Integrated thermal management capabilities.
- End-to-end partnering from design to volume production.
INVERTER

CHALLENGES
- Demand for increasing power density and faster switching speed in today’s power inverter applications.
- These applications with higher voltages need better insulation and robust dielectric materials.

SOLUTIONS
- Our solutions are thermal and chemical resistant, delivering optimal electrical performance and power efficiency.
- We resolve design challenges and help fast-track the design cycle.
- Our vertically-integrated capabilities and global footprint ensure meeting of production schedules.

BENEFITS
- Solutions customized to end applications enable smaller and faster DC-AC inverters that are robust and thermally efficient.
- High production volumes that meet stringent quality standards for longer product lifecycles and reduced Total Cost of Ownership.

OUR SOLUTIONS
- Power Module Lead Frame
- BusMate® Power Busbar Connector System
- High Power Connector
- Flexible Busbar
- Power Filter Module
- AC & DC Molded Busbar

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**CHALLENGES**

› Reliability is a key concern due to the proliferation of devices that need converters for power.

› Application requirements include stringent size and weight constraints and high standards for durability.

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**SOLUTIONS**

› Our solutions preserve space and weight and assure reliable, robust operation in harsh conditions.

› We resolve design challenges and help fast-track the design cycle.

› Our vertically-integrated capabilities and global footprint ensure meeting of production schedules.

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**BENEFITS**

› Solutions customized to end applications enable smaller and faster DC-DC converters that are robust and thermally efficient.

› High production volumes that meet stringent quality standards for longer product lifecycles and reduced Total Cost of Ownership.

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**OUR SOLUTIONS**

- AC & DC Molded Busbar
- Power Module Lead Frame
- BusMate® Power Busbar Connector System
- High Power Connector

LEARN MORE
ELECTRIC TRACTION MOTOR

CHALLENGES
- The ability to handle complex AC phase connections is key for the transition of DC motors to AC motors which delivers more power and torque.
- Bulky and costly windings on motor stators need to be simplified while delivering top performance in harsh conditions.

SOLUTIONS
- Our busbar solutions enable complex AC multi-phase connections in harsh conditions.
- We resolve design challenges and ensure manufacturability, electrical efficiency and cost effectiveness.
- Our vertically-integrated capabilities and global footprint ensure meeting of production schedules.

BENEFITS
- Solutions customized to end applications enable smaller, lighter and highly-efficient AC traction motors.
- The busbars have low potential points of failure resulting in better overall EV performance, range and lifecycle.
- Elimination of wiring error and reduction in assembly time resulted in reduced risk and Total Cost of Ownership.

OUR SOLUTIONS

Motor Stator Busbar
Phase Busbar
Flexible Busbar

LEARN MORE
**ON-BOARD CHARGER**

**CHALLENGES**
- Slow EV charging processes are a key concern for end consumers.
- The rise of two-way charging and Smart-Charging are adding complexity due to built-in intelligence.
- Application requirements have tight size and weight constraints.

**SOLUTIONS**
- Our BusMate® and connectors reduce size and complexity while assuring robust high-power transmission.
- We solve the application design challenges of complex two-way charging, Smart-Charging and charging from multi-phase AC sources.
- Our vertically-integrated capabilities and global footprint ensure meeting of production schedules.

**BENEFITS**
- Solutions customized for end applications enable smaller, lighter and robust on-board chargers.
- Connectors for the full range of two-way, Smart-Charging and AC charging are provided from one supplier.
- High quality standards enable longer product lifecycles and reduced Total Cost of Ownership.

**OUR SOLUTIONS**

- BusMate® Power Busbar Connector System
- High Power Connector

[LEARN MORE]
**ELECTRIC POWER STEERING**

**CHALLENGES**
- Tight integration of complex power and signaling is needed between multiple modules are required.
- Interfaces between power and control PCBs and external interfaces to power steering motors are critical for success.

**SOLUTIONS**
- Our BusMate®, busbars and custom solutions combine to support reliable power and signaling.
- BusMate® simplifies the assembly of robust power interfaces.
- Our vertically-integrated capabilities and global footprint ensure achievement of production schedules.

**BENEFITS**
- Our customizable solutions enable integrated power steering systems in small, low weight form factors.
- High production volumes that meet stringent quality standards provide longer product lifecycles and reduced Total Cost of Ownership.

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**OUR SOLUTIONS**

- **Motor Stator Busbar**
- **BusMate® Power Busbar Connector System**
- **Power Filter Module**

[LEARN MORE]

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Interplex power interconnects, busbar solutions and lead frames are fully customizable across a range of applications within EV power systems. The table below provides a quick reference regarding applications and capabilities for the various Interplex offerings.

<table>
<thead>
<tr>
<th>SOLUTION</th>
<th>PHASE BUSBAR</th>
<th>AC &amp; DC MOLDED BUSBAR</th>
<th>MOTOR STATOR BUSBAR</th>
<th>FLEXIBLE BUSBAR</th>
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<td>Component Attachment</td>
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<td>Overmolding</td>
<td>Integration - Current &amp; Temperature Sensors</td>
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