

SHIELDPACK® HV DCT™ CONNECTORS



• APTIV •



The Challenge

Need for increasing power within EV vehicles

Need for high-performing components with optimized space and weight

Need for HV interconnects with capacity for carrying high currents

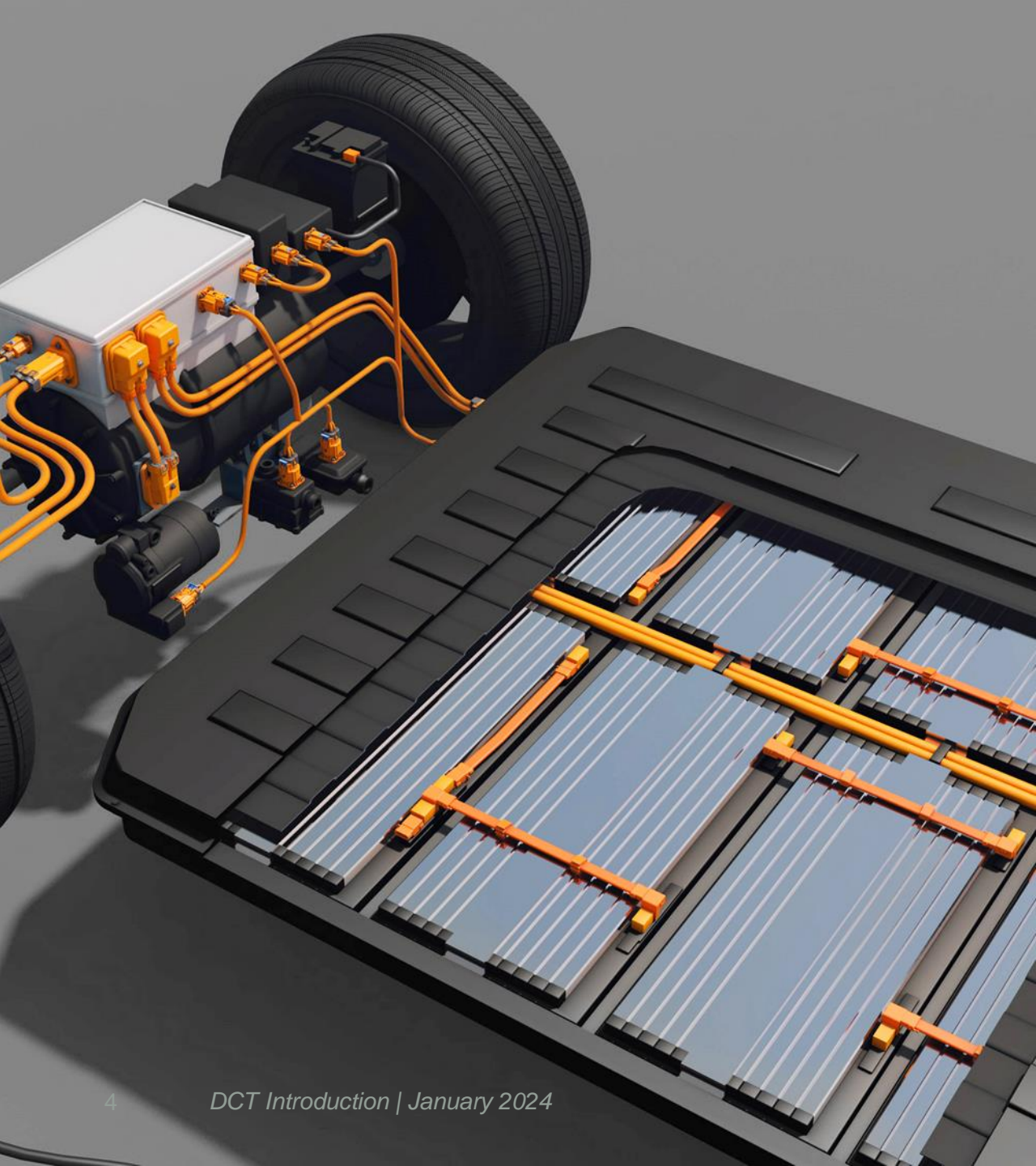
The DCT™ Solution

Aptiv brings a new concept to the market based on direct contact technology.

- A robust, compact solution capable to handle high current transfers to a device
- Predominantly used in power conversion applications like inverters and HV batteries

DCT™ creates direct contact between the highly conductive copper of the male and female terminals.





Direct Contact Technology Advantage

DCT™ creates direct contact between the highly conductive copper of the male and female terminals.

The mechanical connection is achieved through a robust steel spring.

This design is estimated to have an **operational lifespan more than 100 times** that of conventional terminal systems.

DCT™ uses an innovative, simplified design for improved robustness and reliability

SCALABLE

- DCT families optimized to 50 mm², 70 mm², 95 mm²
- Cable range: 25 mm² to 120 mm²

MODULAR

- Right angle and axial mate to the same header
- Many shared components within family

FLEXIBLE

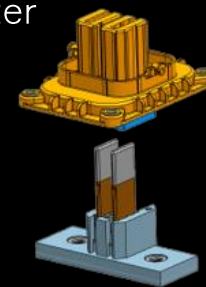
- Conventional header
- Direct Mate simple low-cost header with sealing, shielding, and fastening features integrated in the device casting
- Lever and bolt mating device available



ADAPTABLE

- Unlimited configurations available internal to the inverter or battery
- Pass-through busbar, bolted, welded, or busbar adapter
- Compatible with Copper and Aluminum cables

Unlimited busbar adapters



SIMPLIFIED ASSEMBLY

- Fully assembled connectors, ready to plug prepped
- Design allows for single lead processing



DCT bolted version



DCT lever version

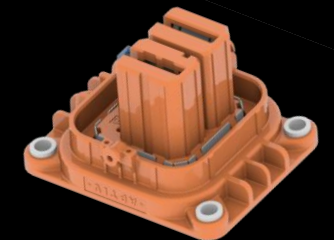
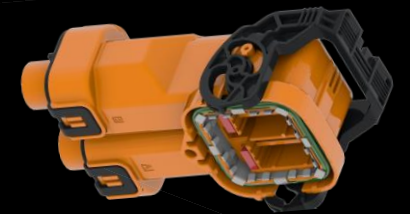
Class-Leading Package Size



Industry-leading package size in x, y, z dimensions

ShieldPack[®] HV DCT[™] Advantage

- Simplified terminal system
- Robust terminal design with 100x life compared to conventional copper alloy terminals
- Industry-leading power density and package size
- Direct mate to cast case, sheet metal capability, or traditional header
- Connection design for harness processing and manufacturing simplicity
- Maximum flexibility for device electrical connection



Thank you.