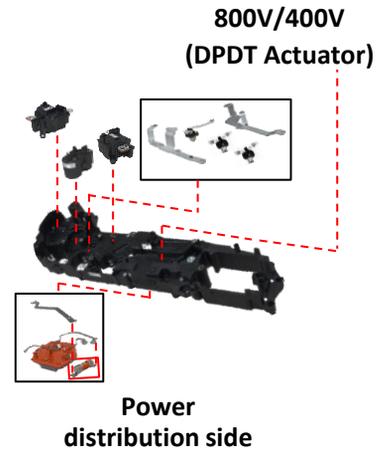
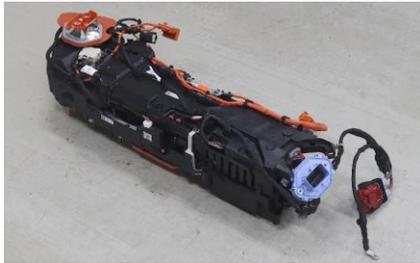


## DC Junction Box : TESLA CYBERTRUCK Teardown Report



DCJB control PCB

DC-DC Converter

Note

DPDT: Double Pole Double Throw  
DCJB: DC Junction Box

### Report Overview

The TESLA Cybertruck incorporates a wide range of new technologies as the company's latest model, including Tesla's first 800-V system.

This DC junction box is a unit that interfaces with the main battery stack, the NACS charging port, the inverter, and other components. It consists of two major sub-assemblies: a control unit equipped with a control PCB, and a power distribution unit equipped with a DPDT actuator. These two sub-assemblies are firmly fastened together using several E-Torx Plus screws.

Internally, in addition to the main relays (contactors) commonly found in EV junction boxes, it includes the following circuits:

- An 800-V / 400-V switching circuit for the main battery stack, depending on the charger specifications
- A communication interface with the cell monitors inside the main battery stack
- A 64-bit ARM-based processor and 512 MB of DRAM
- DC-DC converters that generate the internal power supply (likely a redundant dual-converter configuration)

### Unit outline

- Unit dimensions: (W) 840 mm × (L) 250 mm × (H) 220 mm / Weight: 11.5 kg
- Number of installed PCBs: 1
- (PCB size: 455 mm × 144 mm; number of mounted components: 2,172)
- Uses a laminated flexible busbar

### Report contents (51 pages)

- Teardown, Component size and wight
- Main key components
- Main path connection diagram

Delivered one week after order placement. Please contact us for report pricing.

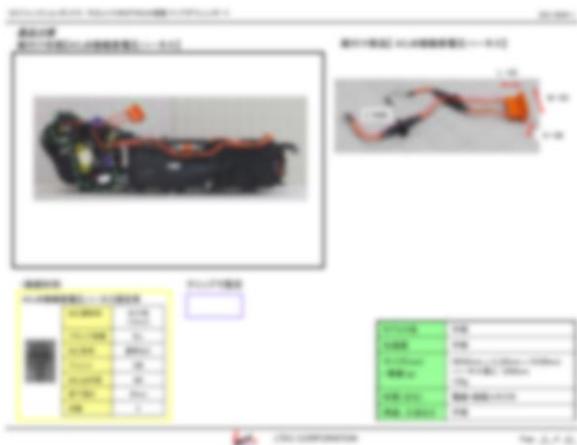
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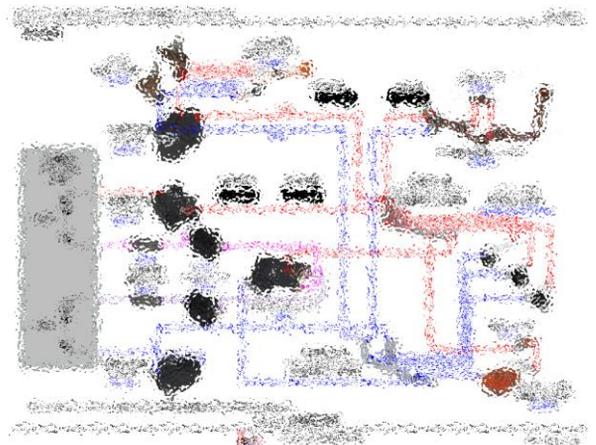
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## Excerpt from Analysis Report



Teardown



Main patch connection diagram