

New Release

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On-Board Charger (OBC) + DCDC Converter : TESLA CYBERTRUCK Teardown Report







CYBER TRUCK (from Web site)

Overview of OBC+DCDC

PCB (Top View)

https://hypebeast.com/jp/2022/7/cybertruck-delivery-mid-2023-date-news-info

Overview

TESLA announced CYBERTRUCK in November 2023.

The price of the vehicle is about \$70000 for the rear-wheel drive (RWD) model, and about \$0.1 million for the highest performance version, the CYBERBEAST. This automobile has attracted attention because of its unique exterior, but it is also the newest model in TESLA with a variety of new techniques. (The company's first 800V system. The auxiliary battery uses 48V system.) This is a teardown report of OBC+DCDC installed in RWD nodel.

Product features

- Size: 623mm (W) × 255mm (L) × 59mm (H)
- Weight: 7.0kgWater cooling
- Planar Transformer and Plane Inductor are adopted, making the product thinner.
 In previous models, transformers, PFC reactors, etc. were board-mounted components.
- In addition, large-capacity capacitors (film capacitors, electrolytic capacitors, etc.) for DC linkage are not used. This is thought to be a factor in the thinning.
- A number of ceramic capacitors are arranged around the transformer and MOSFET.

Report Contents (21 pages)

- Product teardown, parts measurement (size & weight)
- Identification of key ICs on the PCB (including datasheet, if we found).

Report price

Delivery one week after order placement Please contact us for report pricing

Note: For the circuit configuration, PCB circuit analysis report is being prepared. Please contact us, if you are interested in circuit analysis report.



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