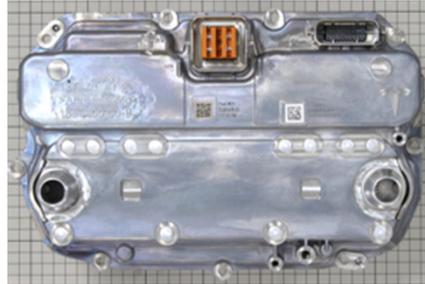


## Inverter : TESLA CYBERTRUCK Board Analysis



CYBERTRUCK



Inverter Overview

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

### Report overview

The Cybertruck inverter is a key component supporting Tesla's next-generation architecture. Compared with previous models, it has been made smaller and lighter, weighing approximately 4.6 kg, with a compact size and a water-cooled design. It supports 800V high voltage, improving charging speed and driving efficiency. In addition, major components such as capacitors, gate drivers, and transformers have been enhanced to achieve greater durability and efficiency.

This report presents a circuit analysis of the rear inverter installed in the RWD model.

### Product Features

Dimensions: (W) 324 mm × (L) 213 mm × (H) 135 mm, Weight: 4.6 kg, Water-cooled unit  
Compared with the inverter used in the Model Y, several modifications have been made in response to the increase in system voltage to 800 V, including a larger smoothing capacitor, changes to the gate-driver IC, and structural modifications to the step-up transformer.

### Report contents

- Product teardown and analysis of components mounted on the PCB.
- Layer-by-layer routing layout, Circuit connectivity information  
(Cross reference viewer) \*Connections between components can be traced.
- PCB circuit diagram and block diagram

(1) Full analysis report(Full circuit analysis) (110 pages)

(2) Partial analysis report(Analysis of the circuit with the two driver phases excluded)  
(96 pages)

(3) Partial analysis report(Analysis of a single driver phase only) (46 pages)

### Report price

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

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