



LTEC Corporation

Your most experienced partner in IP protection

Right Body Controller (ECU): TESLA CYBERTRUCK Teardown Report



CYBERTRUCK (from Web info)

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



Overview of Integrated ECU (Right)



PCB (Top View)

<u>Overview</u>

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 also has a variety of new techniques as the newest model in TESLA. (The company's first 800V system. The auxiliary battery uses 48V system.) As the main controller modules, there are two door controller ECUs for front and rear, and three body controller ECUs for right, left, and rear.

This is a teardown report of Right Body Controller (ECU) installed in RDW model.

Product features

- Size : 300mm (W) × 325mm (L) × 75mm (H), Weight : 2.1kg
- Air cooling
- 63V is the maximum rated voltage of all the mounted aluminum electrolytic capacitors.
- The PCB is constructed using a large number of ceramic capacitors common in TESLA vehicle.
- Presumably connected to EPS, HAVAC etc.

Report Contents (21 pages)

EPS: Electric Power Steering HAVAC: Heating Ventilation and Air-Conditioning

- 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

LTEC Corporation US Representative Office <u>www.ltec-biz.com/en/</u> 2310 Homestead Rd, C1 #231 Los Altos, CA 94024 Phone: +1-(650) 382-1181 Contact2@ltec.biz

Table of Contents

		1 ugc
<u>Summary</u>		
Table 1	Product Information	 3
<u>Product Teardown</u>		
	Product Overview	 4
	Installation Status [Frame Unit]	 5
	Installation Status Cussion Parts	 6
	Installation Status [Screw]	 7
	Installation Status [Frame]	 9
	Installation Status PCB Cover	 10
	Installation Status [ECU (right) PCB]	 11
	Installation Status [Housing]	 13
<u>Overview</u>		
Fig. 1	Overview of ECU (right) PCB	 14
Fig. 2-1	Identification of Key ICs (manufacture, function, etc.) on ECU (right) PCB 1(Top View)	 15
Fig. 2-2	Identification of Key ICs (manufacture, function, etc.) on ECU (right) PCB 2(Top View)	 16
Fig. 2-3	Identification of Key ICs (manufacture, function, etc.) on ECU (right) PCB 3(Top View)	 17
Fig. 2-4	Identification of Key ICs (manufacture, function, etc.) on ECU (right) PCB 4(Top View)	 18
Fig. 2-5	Identification of Key ICs (manufacture, function, etc.) on ECU (right) PCB (Bottom View)	 19
Fig. 3	Moisture-Proofed Area of ECU (right) PCB	 20
<u>Connection</u>		
Fig. 4	Connection Diagram	 21
Table 2	Connector Information	 21



Page