

# PRINTED CIRCUIT BOARD Bill of Material

Tesla Cybertruck (Q4 2023)

Hyundai IONIQ5 (2023)

**GMC Hummer EV EDM (2023)** 

Lucid Air EDM (2022)

**Rivian R1T** (2022)

Ford F-150 Lightning (2022)

Tesla Model S Plaid (2022)

Tesla Model Y (2020)

Ford Mach-E (2021)

MUNRO & ASSOCIATES

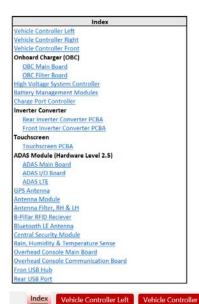
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#### PRINTED CIRCUIT BOARD BOM REPORT

This report includes a comprehensive list of the components on each main vehicle circuit board. Each component listed includes its associated part number, quantity per board, vendor, part description and other notable markings. Included are high resolution photographs of the top and bottom of each circuit board.

Component	Description	Qty	Notes & Marking Codes
Printed Circuit Board	270 x 164 mm, 6 layers Assumed, FR4	1	10.63 x 6.46 inches (54.91 sq. in.)
Label	Label, 25 x 7mm, B&W, (P) 1514604-00-D Rev01, (S) B7S20031000009	1	
Top PCBA Components			
Spade Terminal	6.35mm Spade Terminal, Compliant	6	
Spade Terminal	4.81mm Spade Terminal, Compliant	1	
Spade Terminal	1.50mm Spade Terminal, Compliant	83	
Spade Terminal	0.64mm Spade Terminal, Compliant	159	
SPC56EC74B3C9EEX, STMicro	SPC56EC74B3C9EEX, MCU 32-Bit Dual Core RISC 3MB Flash 3V/5V 256-LBGA	1	U1, SPC56EC74B3
SPC560C50L3C6E0Y, STMicro	SPC560C50L3C6E0Y, MCU 32-bit RISC 512KB Flash 3.3V/5V 100-Pin LQFP	1	U2, SPC560C50L3
NCV7707DQR2G, ON Semi	NCV7707DQR2G, Motor Driver 5.5V to 28V 36-Pin SSOP	1	U8, NCV7707
DRV8305NQPHPQ1, TI	DRV8305N QPHPQ1, 3-Phase Gate Driver 4.3V to 45V 48-Pin HTQFP	1	U626, DRV8305NQ
TMS320F28027PTQ, TI	TMS320F28027PTQ, MCU 32-bit C28x RISC 64KB Flash 3.3V 48-Pin LQFP	1	U628, F28027FPTQ
DRV8703DQRHBRQ1, TI	DRV8703DQRHBRQ1, Driver 0.5A Half Bridge Inv/Non-Inv 32-Pin VQFN	8	U18, 19, 24, 25, 26, 27, 613 & U636, DRV8703
DRV8702QRHBRQ1, TI	DRV8702QRHBRQ1, Driver 3.6V Half Bridge Inv/Non-Inv 32-Pin VQFN	1	U21, DRV8702
2901AVO T	2901AVQ, Comparator Quad R-R O/P ±16W 32V Automotive 14-Pin 750P	4	U20, 29, 621, 633 & U637, 2901AVO



Each PCB Excel workbook contains 20 to 25 tabs depending on vehicle content. Each tab details a printed circuit board.





# PCB BILL OF MATERIAL REPORT INDEX \*

### **♦** Controllers

Vehicle Controller Left Vehicle Controller Right Vehicle Controller Front

# ♦ Onboard Charger (OBC)

OBC Main Board
OBC Filter Board
High Voltage System Controller
Battery Management Modules
Charge Port Controller

#### ♦ Inverter Converter

Rear Inverter Converter PCBA Front Inverter Converter PCBA

#### **♦** Touchscreen

Touchscreen PCBA

#### **♦** ADAS Module

ADAS Main Board
ADAS I/O Board
ADAS LTE
GPS Antenna
Antenna Module
Antenna Filter, RH & LH

## ♦ B-Pillar RFID Receiver

Bluetooth LE Antenna Central Security Module Rain, Humidity, & Temperature Sense Overhead Console Main Board Overhead Console Communication Board

#### ◆ Front USB Hub

Rear USB port

Vehicle PCB content will vary.



#### **REPORT DELIVERY**

- ◆ All reports and accompanying deliverables will be made available for easy access through a secure File Transfer Protocol (FTP) site.
- ★ The Excel report features a linked index, allowing users to easily navigate the report contents and quickly locate specific data.

#### **REPORT FEE**

- ♦ Vehicle reports can be purchased separately for \$20,000. If multiple reports are requested, Munro can offer a bundle discount.
- ♠ Reports are delivered upon payment.

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♦ If there are limited specific questions in the content of the report, is it possible for a Munro representative to support a phone call or e-mail communication?

Yes, please contact <u>reports@leandesign.com</u> and we will respond with our answers.