

Inverter Benchmark & Cost Study







2019 Audi e-tron



2019 Nissan Leaf



2020 Tesla Model Y Front



2020 Tesla Model Y Rear

Inverter Benchmark & Cost Report

Email: <u>Sales@leandesign.com</u> a quote!

Tesla Model 3, Nissan Leaf, Jaguar I-Pace, Audi e-tron, Tesla Model Y front and rear

Munro's Inverter Report provides a detailed analysis of Battery Electric Vehicles (BEV) inverters.

The Benchmark Report is highly advantageous for OEMs or suppliers looking to effectively expand and compete in new EV markets.

The report is a comprehensive analysis of each Inverter. This report contains descriptive and pictorial detail on every facet of the inverters' dimensional data, manufacturing processes, schematics, block diagrams and detailed cost analysis.

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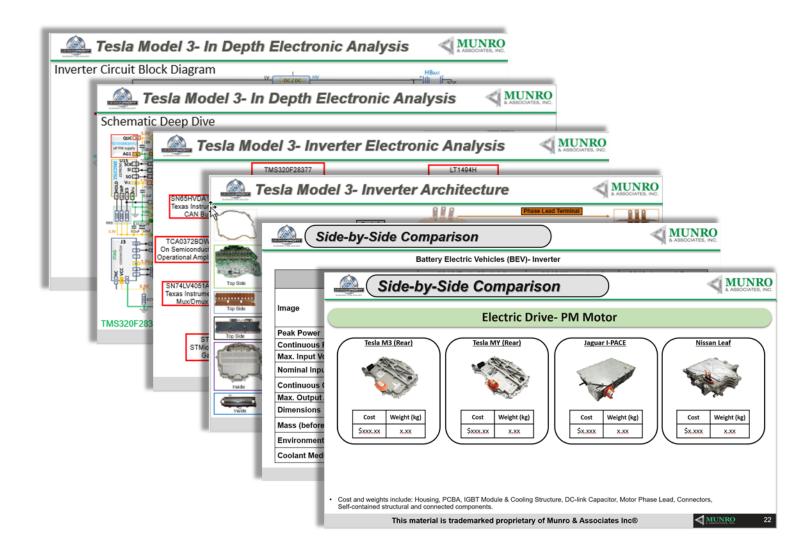




Inverter Benchmark Report Content

Those who purchase the report will receive a single report containing:

- a. Executive Summary
- b. Side by Side Summary
- c. Inverter views, dimensions, mounting approach, cooling strategy
- d. PCB circuit diagrams, schematics and block diagrams
- e. PCB bill of material
- f. Costed Bill of Material

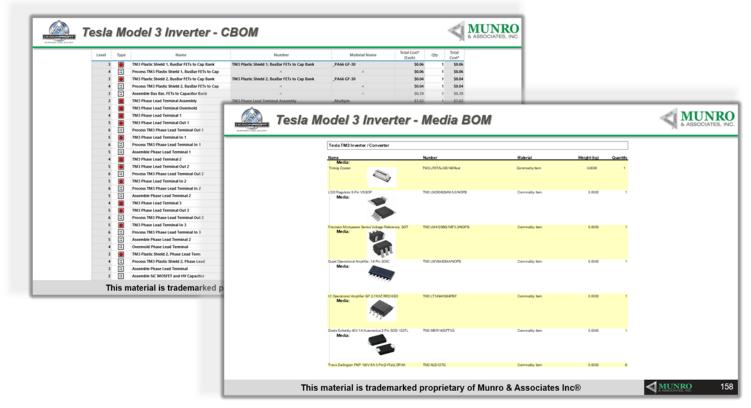






Inverter Costed Bill of Material

- The costed bill of materials (CBOM) are a consolidated view of the cost information presented in the reports. A CBOM report is included for each inverter analyzed in PDF format.
- The CBOM and media BOM are an indented format and include:
 - Part Name
 - Part Number
 - Material
 - Total Cost
 - Weight
 - Quantity
 - Total Weight



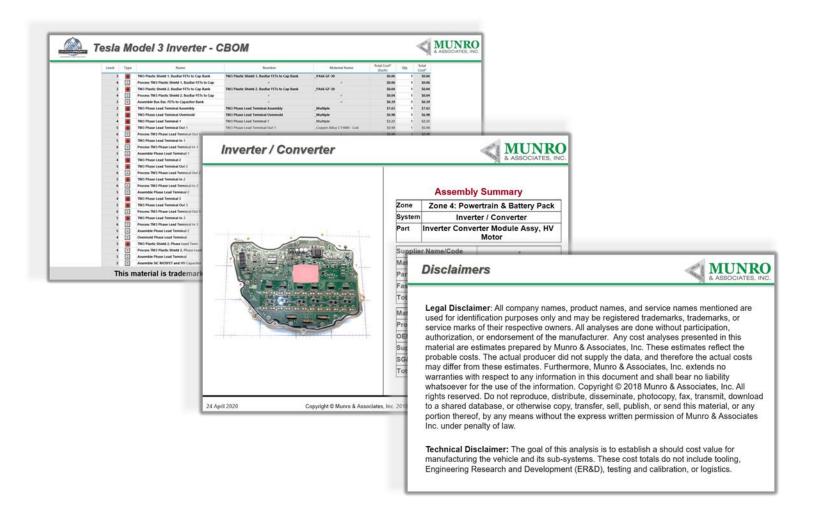
Please Note: The costed bill of material is provided in pictorial / PDF format and will not be available in Excel.





Cost Estimates

- The costs of the inverters include the housings and the internal electrical componentry. Munro used their proprietary software and methodologies to establish a should-cost to manufacture the various parts found in each inverter.
- Cost models are established by disassembling and analyzing the inverter assemblies. The components are documented in detail, capturing the assembly operations and weight. Costs are assigned to materials, purchased parts, and processes.
- All the inverters are costed with the USA as the country of origin.







FAQ (Frequently Asked Questions)

Was Tesla or any other OEM involved in the study?

No. Neither the OEMs' proprietary costs nor any supplier's quoted costs were used in this study.

Is there any OEM proprietary (stolen) IP in this report?

No. All data was developed through Munro's proven methodologies, analyzing Munro's purchased production Tesla vehicles and other OEMs' components

Are the components costed using USMCA costing centers?

Yes, Munro includes labor, factory floor cost, taxes and SG&A for OEM or Tier Suppliers.

Is this a Costing or Pricing report?
 This is a Costing Report. Pricing has too many variables.

Legal Disclaimers & Sales Condition

- How can I see the sample report before purchasing?
 Please contact your regional Munro salesperson. They can provide sample information in digital PDF format NOTE: critical data will be hidden in the sample.
- Is Purchaser allowed to Reproduce, Distribute, Disseminate, Photocopy, Fax, or Transmit report content internally within the Purchaser's organization?

Yes, ONLY INTERNAL Company correspondence is authorized.

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If questions arise, is a Munro expert able to visit and explain the report's details?
 It is not included in the price of report.

A Munro associate will visit if the customer pays for the travel and a daily fee.

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

Yes, please contact the local area salesperson and we will respond with our answers.