

# Cell to Pack (CTP), Cell to Body (CTB) and Cell to Chassis (CTC) Integrated Battery Market 2024-2035

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## Abstracts

The growth in EV sales is driving demand for batteries, with the market for EV batteries surpassing 750 GWh in

2023, up 40% on the previous year. Electric cars account for approximately 95% of this growth. The EV market is

rapidly expanding, and one of the significant challenges is the development of a reliable and safe battery that can

provide a long driving range. The traditional lithium-ion batteries used in electric vehicles have limitations such as

low energy density, poor thermal stability, and a tendency to catch fire. Vehicle OEMS and battery manufacturing

companies are developing new batteries to address these issues for safe uses in electric vehicles. The key

advantage of cell to pack (CTP), cell to body (CTB), and cell to chassis (CTC) battery technologies over traditional

lithium-ion battery technologies lies in their improved energy density and enhanced performance parameters.

These innovative battery integration approaches enable higher volumetric and gravimetric energy densities,

allowing for more compact and lightweight battery solutions that occupy less vehicle packaging space while

contributing to reduced overall vehicle weight.

Moreover, CTP, CTB, and CTC technologies facilitate more efficient battery packaging designs, minimizing

manufacturing steps, reducing overall battery packaging volume, and enabling greater design flexibility. This

translates into longer battery life and superior performance metrics, such as more stable battery characteristics,

extended battery lifespans, and improved overall battery performance. A significant advantage of these advanced

battery technologies lies in their potential to lower battery packaging and assembly costs. By streamlining

manufacturing processes and reducing complexity compared to traditional methods, CTP, CTB, and CTC

packaging techniques offer cost-effective solutions for automotive manufacturers.

Cell to Pack (CTP), Cell to Body (CTB) and Cell to Chassis (CTC) Integrated Battery Market Report 2024-2035

covers the latest technologies, key applications, manufacturing processes, advantages, challenges, and

opportunities within this rapidly evolving industry across major global regions. The integration of batteries directly

into vehicle bodies and chassis represents a transformative shift in automotive design and engineering. This report

meticulously evaluates the technological capabilities, real-world applicability,

advantages, disadvantages, and

tangible benefits CTP, CTB and CTC offer the entire automotive value chain.

The report assesses the pivotal battery technology trends propelling advancements in on-road and off-road

automotive and aerospace vehicles utilizing CTP, CTB and CTC integrated solutions. This comprehensive

evaluation illuminates the key commercial opportunities and strategic entry points across different vehicle

segments. Also covered are emerging next-generation battery chemistries, materials, and architectures poised to

disrupt the market further. The role of transformative technologies like AI, IoT, and wireless battery management

systems in optimizing performance, safety, and sustainability is examined in detail. Report contents include:

Technology Overview including in-depth technical specifications on:

Cell-to-Pack (CTP) Technology

Cell-to-Body (CTB) Technology

Cell-to-Chassis (CTC) Technology

Thermal Management Systems

Battery Management Systems (BMS)

Market Analysis

Global Market Overview

Market Size and Forecast

Market Segmentation

Market Drivers

Market Restraints

Opportunities

Challenges

Competitive Landscape

Key Players and Strategies

Automotive OEMs

Strategic Partnerships

Regulatory Landscape

Safety and Environmental Regulations

Incentives and Subsidies

Recycling and Disposal Regulations

Future Outlook and Emerging Trends

Battery Chemistry and Materials Advancements

AI and IoT Integration

Wireless Battery Management Systems

Sustainability and Circularity Initiatives

Emerging Applications and Markets

Profiles of 49 companies including technology Company Overview, Product Portfolio and Recent

Developments and Initiatives. Companies profiled include BYD, CALB, CATL, EVE Energy, GM, LG

Energy, Leap Motor, NIO, Stellantis, StoreDot and SVOLT Energy (Full list of companies profiled in

table of contents).

## Contents

### 1 EXECUTIVE SUMMARY

- 1.1 Market Overview
- 1.2 Market Drivers and Trends
- 1.3 Recent Market Developments and Technology Highlights
- 1.4 Competitive Landscape
- 1.5 Regulatory Landscape
- 1.6 Future Outlook and Emerging Trends
- 1.7 Market Forecast and Growth Projections

### 2 TECHNOLOGY OVERVIEW

- 2.1 Overview of Integrated Battery Systems
  - 2.1.1 Battery Materials for Electric Vehicles
  - 2.1.2 Cell-to-Module (CTM)
  - 2.1.3 Passenger Car Integrated Battery (Chassis)
  - 2.1.4 Comparative analysis
- 2.2 Importance of CTP, CTB, and CTC in Electric Vehicles
- 2.3 Cost analysis
- 2.4 Cell-to-Pack (CTP) Technology
  - 2.4.1 Definition and Concept
  - 2.4.2 Key Components and Architecture
  - 2.4.3 Comparison between CTC and CTP
  - 2.4.4 Cell Design Optimization
  - 2.4.5 Advantages and Challenges
  - 2.4.6 Manufacturing Processes
  - 2.4.7 Design Considerations
- 2.5 Cell-to-Body (CTB) Technology
  - 2.5.1 Definition and Concept
  - 2.5.2 Key Components and Architecture
  - 2.5.3 Comparison between CTB and CTP
  - 2.5.4 Comparison between CTB and CTC
  - 2.5.5 Advantages and Challenges.
  - 2.5.6 Manufacturing Processes
  - 2.5.7 Design Considerations
- 2.6 Cell-to-Chassis (CTC) Technology
  - 2.6.1 Definition and Concept

- 2.6.2 Key Components and Architecture
- 2.6.3 Advantages and Challenges
- 2.6.4 Manufacturing Processes
- 2.6.5 Design Considerations
- 2.7 Thermal Management Systems
  - 2.7.1 Liquid Cooling Systems
  - 2.7.2 Air Cooling Systems
  - 2.7.3 Phase Change Materials (PCMs)
  - 2.7.4 Emerging Technologies and Innovations
- 2.8 Battery Management Systems (BMS)
  - 2.8.1 Functions and Components
  - 2.8.2 Centralized vs. Distributed BMS
  - 2.8.3 Communication Protocols
  - 2.8.4 Advancements in BMS
  - 2.8.5 Safety and Reliability Considerations

### **3 MARKET ANALYSIS**

- 3.1 Global Integrated Battery Market Overview
  - 3.1.1 CTP and CTC market penetration
  - 3.1.2 Sales in China
- 3.2 Market Size and Forecast (2024-2035)
  - 3.2.1 CTP Market
  - 3.2.2 CTB Market
  - 3.2.3 CTC Market
- 3.3 Market Segmentation
  - 3.3.1 By Technology (CTP, CTB, CTC)
  - 3.3.2 By Vehicle Type (Passenger Cars, Commercial Vehicles, Others)
  - 3.3.3 By Region (North America, Europe, Asia-Pacific, Rest of the World)
  - 3.3.4 By Application (Battery Electric Vehicles, Hybrid Electric Vehicles, Plug-in Hybrid Electric Vehicles)
  - 3.3.5 By Battery Chemistry (Lithium-ion, Lead-acid, Others)
- 3.4 Market Drivers
  - 3.4.1 Increasing Demand for Electric Vehicles
  - 3.4.2 Need for Lightweight and Efficient Battery Systems
  - 3.4.3 Advancements in Battery Technology
  - 3.4.4 Regulatory Initiatives and Incentives
  - 3.4.5 Government Policies and Emissions Targets
- 3.5 Market Restraints

- 3.5.1 High Initial Costs
- 3.5.2 Technical Challenges and Integration Complexities
- 3.5.3 Safety Concerns and Reliability Issues
- 3.5.4 Limited Infrastructure and Charging Facilities
- 3.6 Opportunities
- 3.7 Challenges
- 3.8 Competitive Landscape
  - 3.8.1 Key Players and Strategies
  - 3.8.2 Automotive OEMS
  - 3.8.3 Strategic partnerships
  - 3.8.4 Battery Integration Policies in China
- 3.9 Regulatory Landscape
  - 3.9.1 Safety and Environmental Regulations
    - 3.9.1.1 Battery Safety Standards
    - 3.9.1.2 Emissions and Fuel Economy Standards
    - 3.9.1.3 Environmental Impact Regulations
  - 3.9.2 Incentives and Subsidies
    - 3.9.2.1 Government Incentives
    - 3.9.2.2 Tax Credits and Rebates
  - 3.9.3 Recycling and Disposal Regulations
    - 3.9.3.1 Battery Recycling Regulations
    - 3.9.3.2 End-of-Life Vehicle Directives
- 3.10 Future Outlook and Emerging Trends
  - 3.10.1 Advancements in Battery Chemistry and Materials
    - 3.10.1.1 Solid-State Batteries
    - 3.10.1.2 Lithium-Sulfur Batteries
    - 3.10.1.3 Sodium-ion Batteries
    - 3.10.1.4 Silicon Anodes
  - 3.10.2 Integration of Artificial Intelligence and Internet of Things (IoT)
    - 3.10.2.1 Predictive Maintenance
    - 3.10.2.2 Smart Battery Management Systems
    - 3.10.2.3 Connected Vehicle Services
  - 3.10.3 Wireless Battery Management Systems
  - 3.10.4 Increasing Focus on Sustainability and Circularity
    - 3.10.4.1 Sustainable Battery Materials
    - 3.10.4.2 Battery Recycling and Reuse
    - 3.10.4.3 Life Cycle Assessment (LCA) and Environmental Impact
- 3.11 Emerging Applications and Markets



- 3.11.1 Aerospace and Defense
- 3.11.2 Energy Storage Systems
- 3.11.3 Marine and Shipping

## **4 COMPANY PROFILES**

- 4.1 24M Technologies
- 4.2 AESC
- 4.3 BJEV
- 4.4 BAIC BJEV
- 4.5 BAK Battery
- 4.6 Bosch and Benteler
- 4.7 BYD
- 4.8 CALB
- 4.9 CATL
- 4.10 Changan Automobile
- 4.11 Chery
- 4.12 CNP
- 4.13 Envision AESC
- 4.14 EVE Energy
- 4.15 Farasis Energy
- 4.16 FAW
- 4.17 FinDreams Battery
- 4.18 Ford
- 4.19 GAC
- 4.20 GM
- 4.21 Great Wall Motor
- 4.22 Hycan
- 4.23 IAT Automobile
- 4.24 JAC
- 4.25 Kunshan JuTron New Energy Technology & Kunshan BaoTron New Energy Technology
- 4.26 LG Energy
- 4.27 Leap Motor
- 4.28 Lishen Battery
- 4.29 Neta
- 4.30 NIO
- 4.31 Our Next Energy (ONE)
- 4.32 Phoenix Battery

- 4.33 REPT
- 4.34 SAIC
- 4.35 Samsung SDI Co.
- 4.36 SEVB
- 4.37 SK On
- 4.38 Stellantis
- 4.39 StoreDot
- 4.40 SVOLT Energy
- 4.41 Tesla
- 4.42 Tianjin EV Energies (JEVE)
- 4.43 Tuopu Group
- 4.44 Volvo
- 4.45 Volkswagen
- 4.46 Xiaomi Automobile
- 4.47 XING Mobility
- 4.48 Xpeng
- 4.49 ZEEKR

## **5 RESEARCH METHODOLOGY**

## **6 REFERENCES**

### **LIST OF TABLES**

- Table 1. CTP, CTB and CTC Integrated Battery Market
- Table 2. Comparison of Advanced Battery Chemistries.
- Table 3. CTP, CTB and CTC Integrated Battery Market Drivers and Trends.
- Table 4. Recent CTP, CTB and CTC Integrated Battery Market Developments and Technology Highlights.
- Table 5. CTP, CTB and CTC Integrated Battery Market Regulations.
- Table 6. Trends in CTP, CTB and CTC Integrated Batteries.
- Table 7. EV Battery Demand Market Share Forecast (GWh)
- Table 8. Battery Cell Material Market Value Forecast for EVs 2023-2035 (US\$).
- Table 9. Battery Pack Materials Market 2023-2035 (kg).
- Table 10. Battery Pack Material Market Revenue Forecast for EVs 2023-2035 (US\$).
- Table 11. Total Battery Cell and Pack Materials Forecast by Material 2023-2035 (kg).
- Table 12. Total Battery Cell and Pack Materials Forecast by Vehicle Type 2023-2035 (kg).

Table 13. Total Battery Cell and Pack Materials Market Value Forecast 2023-2035 (US\$).

Table 14. Battery Materials for Electric Vehicles.

Table 15. Cell vs Pack Energy Density.

Table 16. Comparative analysis of CTP, CTB and CTC.

Table 17. Cost analysis for CTP, CTB and CTC Integrated Batteries.

Table 18. Comparison between CTC and CTP.

Table 19. Cell to Pack (CTP) Advantages and Challenges.

Table 20. Comparison between CTB and CTP.

Table 21. Comparison between CTB and CTC.

Table 22. Cell to Body (CTB) Advantages and Challenges.

Table 23. Cell to Chassis (CTC) Advantages and Challenges,

Table 24. Comparison of Thermal Management Systems.

Table 25. Liquid Cooling Systems.

Table 26. Air Cooling Systems.

Table 27. Types of PCMs.

Table 28. Comparison of Battery Management System (BMS) Architectures.

Table 29. Safety and Reliability Considerations,

Table 30. Global CTP Market Size and Forecast (2024-2035), billions USD.

Table 31. Global CTB Market Size and Forecast (2024-2035), Billions USD.

Table 32. Global CTC Market Size and Forecast (2024-2035), Billions USD.

Table 33. Challenges in CTP, CTB and CTC Integrated Battery Market.

Table 34. Key Players in the Integrated Battery Market.

Table 35. Comparison of Automotive OEM integrated batteries.

Table 36. Strategic partnerships in the CTP, CTB and CTC Integrated Battery Market .

Table 37. Battery Recycling Regulations.

Table 38. End-of-Life Vehicle Directives.

Table 39. CATL CTP 1.0-3.0.

## **LIST OF FIGURES**

Figure 1. CTP, CTB and CTC Integrated Battery Market Competitive Landscape.

Figure 2. EV Battery Demand Market Share Forecast (GWh).

Figure 3. Battery Cell Material Market Value Forecast for EVs 2023-2035 (US\$).

Figure 4. Battery Pack Materials Market 2023-2035 (kg).

Figure 5. Battery Pack Material Market Revenue Forecast for EVs 2023-2035 (US\$).

Figure 6. Total Battery Cell and Pack Materials Forecast by Material 2023-2035 (kg).

Figure 7. Total Battery Cell and Pack Materials Forecast by Vehicle Type 2023-2035 (kg).

Figure 8. Total Battery Cell and Pack Materials Market Value Forecast 2023-2035 (US\$).

Figure 9. Component Breakdown of a Battery Pack.

Figure 10. Battery pack with a cell-to-pack design and prismatic cells.

Figure 11. Qilin battery.

Figure 12. Comparison of CTP Mode and Conventional Battery Pack.

Figure 13. CTP Technology Architecture.

Figure 14. . The structural design of blade cell, cell arrays, and battery pack.

Figure 15. Gravimetric Energy Density and Cell-to-pack Ratio.

Figure 16. Volumetric Energy Density and Cell-to-pack Ratio.

Figure 17. BYD CTP schematic.

Figure 18. BYD Cell-to-body.

Figure 19. CTB Technology Architecture.

Figure 20. Tesla CTC Technology.

Figure 21. CATL Cell-to-chassis.

Figure 22. CTC Technology Architecture.

Figure 23. Number and sales of vehicle models incorporating CTP battery 2021-2024.

Figure 24. Global CTP Market Size and Forecast (2024-2035), billions USD.

Figure 25. Global CTB Market Size and Forecast (2024-2035), Billions USD.

Figure 26. Global CTC Market Size and Forecast (2024-2035), Billions USD.

Figure 27. Integrated Battery Market Share by Technology (2024 and 2035).

Figure 28. Integrated Battery Market Share by Vehicle Type (2024 and 2035),

Figure 29. Integrated Battery Market Share by Region (2024 and 2035).

Figure 30. Integrated Battery Market Share by Application (2024 and 2035).

Figure 31. Integrated Battery Market Share by Battery Chemistry (2024 and 2035).

Figure 32. Pouch CTP.

Figure 33. BYD CTB technology.

Figure 34. CTP 3.0: Shenxing Batteries.

Figure 35. Features of Electric CTC.

Figure 36. “?” Battery System.

Figure 37. 46 Large Cylindrical Battery Packs.

Figure 38. GM Ultium.

Figure 39. Moduleless CTP.

Figure 40. LG Energy’s cell-to-pack technology for pouch batteries.

Figure 41. Leapmotor CTC 2.0.

Figure 42. Tiangong Battery.

Figure 43. Nio Hybrid Chemistry Cell-to-pack.

Figure 44. Our Next Energy: Aeris.

Figure 45. ONE PACK battery.

- Figure 46. Stellantis Cell-to-pack.
- Figure 47. Dragon Armor Battery.
- Figure 48. Cobalt-free Battery LCTP Technology.
- Figure 49. Short Blade Battery LCTP Technology.
- Figure 50. LCTP 3.0 .
- Figure 51. L400 Short Blade Batteries.
- Figure 52. Tesla Cell-to-body.
- Figure 53. VW Cell-to-pack.
- Figure 54. Xpeng CIB technology.
- Figure 55. Gold brick battery.

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