
Market Synopsis of Global Super Capacitor Energy Storage System Market

Market Scenario:
The demand of global supercapacitor energy storage system is rapidly increasing due to the increase demand for hybrid vehicles. The other factors boosting the supercapacitor energy storage system due to utilization in a number of applications like renewable energy power generation, power systems, and others.

Super capacitors energy storage systems are rapidly being adopted in the market in the recent years mostly in the automotive sector. The start-stop super capacity technology used in the US by the General Motors and Mercedes is becoming dominant and is boosting the growth of super capacitors energy storage market. Moreover, the increase in the demand for wind renewable energy is expected to boost the super capacitor energy storage system.

The super capacitor energy storage system is used in various applications like consumer electronics, computer, and communication applications. Super capacitors help increase the battery cell life by maintaining slow and shallow charge and discharge. The advancement in the material technology, the use of graphene and other compounds will gain traction in the coming years and will add fuel in the growth of super capacity energy storage system market. Moreover, the increasing demand for smartphones and energy harvesting are some of the drivers of the super capacitor energy storage system market.

However, the growing adoption of lithium titanate batteries in automotive and energy harvesting for IoT applications may hamper the growth of global super capacitor energy storage systems market.

Key Players:
Some of the key players of global super capacitor energy storage system market includes Ioxus, Inc. (US), Mouser Electronics, Inc. (US), Nesscap Co. (US), Murata Manufacturing Co. (Japan), Panasonic (Japan), Adafruit Industries (US), AVX Corporation (US), Cornell Dubilier (US), Eaton Corporation (US), Nichicon (Japan) among others.

The Murata Manufacturing Co. offers a wide range of super capacitor energy storage systems to meet consumer demand for mobile devices with greater efficiency and functionality. The company offers three super capacitor energy storage systems—DMT series, DMF series, DMH series. DMT series has wide range of features such as wide operational capability, temperature range, and high reliability. The DMH series are used in slim devices such as wearable devices and smart cards.

Segmentation:
The global super capacitors energy storage system market is segmented on the basis of type, memory, and region.

By type, the market is segmented into electric double-layer capacitors, pseudo capacitors, and others. Murata’s electric double-layer capacitors (ELDC) offers much higher energy storage and power density which is ideal for various applications which requires pulse loads like LED flash, audio
circuits, power amplifiers, and smart meters.

By memory, the market is segmented into residential, non-residential, utility, and electric vehicle among others.

By region, the market is segmented into North America, Europe, Asia-Pacific, and the rest of the world.

Regional Analysis:
The geographical analysis of global super capacitors energy storage system market is studied for North America, Europe, Asia-Pacific, and the rest of the world.

North America holds the largest market share among other regions due to the presence of leading players in the market such as Ioxus Inc., Mouser Electronics, Nesscap Co., Adafruit Industries, AVX Corporation, Cornell Dubilier, Eaton Corporation due to the presence of early technology adopters in this region.

Asia-Pacific is expected to reach the highest CAGR in the global super capacitor energy storage market among other regions due to the rise in the Chinese supercapacitor manufacturers which are displacing western companies domestically in recent years. This region is expected to remain dominant, throughout the forecast period (2018–2023).

Target Audience:
- Battery energy storage system manufacturers
- Battery energy storage system providers
- Energy storage research institutions
- Government and research organizations
- Grid operators
- Research organizations and consulting companies
- Solid-state battery, electrochemical capacitor, and other energy storage technology manufacturers
- Technology standard organizations, forums, alliances, and associations

Contents:
TABLE OF CONTENTS
1 Executive Summary
2 Scope of the Report
  2.1 Market Definition
  2.2 Scope of the Study
  2.2.1 Research Objectives
  2.2.2 Assumptions & Limitations
  2.3 Markets Structure
3 Market Research Methodology
  3.1 Research Process
  3.2 Secondary Research
  3.3 Primary Research
  3.4 Forecast Model
4 Market Landscape
  4.1 Porter’s Five Forces Analysis
  4.1.1 Threat of New Entrants
  4.1.2 Bargaining power of buyers
  4.1.3 Threat of substitutes
  4.1.4 Segment rivalry
  4.1.5 Bargaining power of suppliers
  4.2 Value Chain/Supply Chain of Super Capacitor Energy Storage System Market
5 Industry Overview of Super Capacitor Energy Storage System Market

5.1 Introduction
5.2 Growth Drivers
5.3 Impact analysis
5.4 Market Challenges

6 Market Trends

6.1 Introduction
6.2 Growth Trends
6.3 Impact analysis

7. Super Capacitor Energy Storage System Market by Types

7.1 Introduction
7.2 Electric Double-Layer Capacitors
7.2.1 Market Estimates & Forecast, 2018–2023
7.2.2 Market Estimates & Forecast by Region, 2018–2023
7.3 Pseudo capacitors
7.3.1 Market Estimates & Forecast, 2018–2023
7.3.2 Market Estimates & Forecast by Region, 2018–2023

8. Super Capacitor Energy Storage System Market by Application

8.1 Introduction
8.2 Residential
8.2.1 Market Estimates & Forecast, 2018–2023
8.2.2 Market Estimates & Forecast by Region, 2018–2023
8.3 Non-residential
8.3.1 Market Estimates & Forecast, 2018–2023
8.3.2 Market Estimates & Forecast by Region, 2018–2023
8.4 Utility
8.4.1 Market Estimates & Forecast, 2018–2023
8.4.2 Market Estimates & Forecast by Region, 2018–2023
8.5 Electric Vehicle
8.5.1 Market Estimates & Forecast, 2018–2023
8.5.2 Market Estimates & Forecast by Region, 2018–2023

11 Super Capacitor Energy Storage System Market by Region

11.1 Introduction
11.2 North America
11.2.1 Market Estimates & Forecast, 2018–2023
11.2.2 Market Estimates & Forecast by Types, 2018–2023
11.2.3 Market Estimates & Forecast by Application, 2018–2023
11.2.4 US
11.2.4.1 Market Estimates & Forecast, 2018–2023
11.2.4.2 Market Estimates & Forecast by Types, 2018–2023
11.2.4.3 Market Estimates & Forecast by Application, 2018–2023
11.2.5 Canada
11.2.5.1 Market Estimates & Forecast, 2018–2023
11.2.5.2 Market Estimates & Forecast by Types, 2018–2023
11.2.5.3 Market Estimates & Forecast by Application, 2018–2023
11.2.6 Mexico
11.2.6.1 Market Estimates & Forecast, 2018–2023
11.2.6.2 Market Estimates & Forecast by Types, 2018–2023
11.2.6.3 Market Estimates & Forecast by Application, 2018–2023

11.3 Europe
11.3.1 Market Estimates & Forecast, 2018–2023
11.3.2 Market Estimates & Forecast by Types, 2018–2023
11.3.3 Market Estimates & Forecast by Application, 2018–2023
11.3.4 Germany
11.3.4.1 Market Estimates & Forecast, 2018–2023
11.3.4.2 Market Estimates & Forecast by Types, 2018–2023
11.3.4.3 Market Estimates & Forecast by Application, 2018–2023
11.3.5 France
11.3.5.1 Market Estimates & Forecast, 2018–2023
11.3.5.2 Market Estimates & Forecast by Types, 2018–2023
11.3.5.3 Market Estimates & Forecast by Application, 2018–2023
11.3.6 Italy
11.3.6.1 Market Estimates & Forecast, 2018–2023
11.3.6.2 Market Estimates & Forecast by Types, 2018–2023
11.3.6.3 Market Estimates & Forecast by Application, 2018–2023
11.3.7 Spain
11.3.7.1 Market Estimates & Forecast, 2018–2023
11.3.7.2 Market Estimates & Forecast by Types, 2018–2023
11.3.7.3 Market Estimates & Forecast by Application, 2018–2023
11.3.8 UK
11.3.8.1 Market Estimates & Forecast, 2018–2023
11.3.8.2 Market Estimates & Forecast by Types, 2018–2023
11.3.8.3 Market Estimates & Forecast by Application, 2018–2023
11.4 Asia-Pacific
11.4.1 Market Estimates & Forecast, 2018–2023
11.4.2 Market Estimates & Forecast by Types, 2018–2023
11.4.3 Market Estimates & Forecast by Application, 2018–2023
11.4.4 China
11.4.4.1 Market Estimates & Forecast, 2018–2023
11.4.4.2 Market Estimates & Forecast by Types, 2018–2023
11.4.4.3 Market Estimates & Forecast by Application, 2018–2023
11.4.5 India
11.4.5.1 Market Estimates & Forecast, 2018–2023
11.4.5.2 Market Estimates & Forecast by Types, 2018–2023
11.4.5.3 Market Estimates & Forecast by Application, 2018–2023
11.4.6 Japan
11.4.6.1 Market Estimates & Forecast, 2018–2023
11.4.6.2 Market Estimates & Forecast by Types, 2018–2023
11.4.6.3 Market Estimates & Forecast by Application, 2018–2023
11.4.7 Rest of Asia-Pacific
11.4.7.1 Market Estimates & Forecast, 2018–2023
11.4.7.2 Market Estimates & Forecast by Types, 2018–2023
11.4.7.3 Market Estimates & Forecast by Application, 2018–2023
11.5 Rest of the World
11.5.1 Market Estimates & Forecast, 2018–2023
11.5.2 Market Estimates & Forecast by Types, 2018–2023
11.5.3 Market Estimates & Forecast by Application, 2018–2023
11.5.4 Middle East & Africa
11.5.4.1 Market Estimates & Forecast by Types, 2018–2023
11.5.4.2 Market Estimates & Forecast by Application, 2018–2023
11.5.5 Latin America
11.5.5.1 Market Estimates & Forecast by Types, 2018–2023
11.5.5.2 Market Estimates & Forecast by Application, 2018–2023

12. Company Landscape

13. Company Profiles
13.1 Ioxus Inc.
13.1.1 Company Overview
13.1.2 Product/Business Segment Overview
13.1.3 Financial Updates
13.1.4 Key Developments
13.2 Mouser Electronics Inc.
13.2.1 Company Overview
13.2.2 Product/Business Segment Overview
13.2.3 Financial Updates
13.2.4 Key Developments
13.3 Nesscap Co. Ltd.
13.3.1 Company Overview
13.3.2 Product/Business Segment Overview
13.3.3 Financial Updates
13.3.4 Key Developments
13.4 Murata Manufacturing Co. Ltd.
13.4.1 Company Overview
13.4.2 Product/Business Segment Overview
13.4.3 Financial Updates
13.4.4 Key Developments
13.5 Panasonic Corporation
13.5.1 Company Overview
13.5.2 Product/Business Segment Overview
13.5.3 Financial Updates
13.5.4 Key Developments
13.6 Adafruit
13.6.1 Company Overview
13.6.2 Product/Business Segment Overview
13.6.3 Financial Updates
13.6.4 Key Developments
13.7 AVX Corporation
13.7.1 Company Overview
13.7.2 Product/Business Segment Overview
13.7.3 Financial Updates
13.7.4 Key Developments
13.8 Cornell Dubilier Electronics Inc.
13.8.1 Company Overview
13.8.2 Product/Business Segment Overview
13.8.3 Financial Updates
13.8.4 Key Developments

13.9 Eaton Corporation

13.9.1 Company Overview

13.9.2 Product/Business Segment Overview

13.9.3 Financial Updates

13.9.4 Key Developments

13.10 Nichicon Corporation

13.10.1 Company Overview

13.10.2 Product/Business Segment Overview

13.10.3 Financial Updates

13.10.4 Key Developments

14 Conclusion

List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Global Super Capacitor Energy Storage System Market, by Region, 2018–2023</td>
</tr>
<tr>
<td>Table 2</td>
<td>North America: Super Capacitor Energy Storage System Market, by Country, 2018–2023</td>
</tr>
<tr>
<td>Table 3</td>
<td>Europe: Super Capacitor Energy Storage System Market, by Country, 2018–2023</td>
</tr>
<tr>
<td>Table 4</td>
<td>Asia-Pacific: Super Capacitor Energy Storage System Market, by Country, 2018–2023</td>
</tr>
<tr>
<td>Table 5</td>
<td>Middle East &amp; Africa: Super Capacitor Energy Storage System Market, by Country, 2018–2023</td>
</tr>
<tr>
<td>Table 6</td>
<td>Latin America: Super Capacitor Energy Storage System Market, by Country, 2018–2023</td>
</tr>
<tr>
<td>Table 7</td>
<td>Global Super Capacitor Energy Storage System Type Market, by Region, 2018–2023</td>
</tr>
<tr>
<td>Table 8</td>
<td>North America: Super Capacitor Energy Storage System Type Market, by Country, 2018–2023</td>
</tr>
<tr>
<td>Table 9</td>
<td>Europe: Super Capacitor Energy Storage System Type Market, by Country, 2018–2023</td>
</tr>
<tr>
<td>Table 10</td>
<td>Asia-Pacific: Super Capacitor Energy Storage System Type Market, by Country, 2018–2023</td>
</tr>
<tr>
<td>Table 11</td>
<td>Middle East &amp; Africa: Super Capacitor Energy Storage System Type Market, by Country, 2018–2023</td>
</tr>
<tr>
<td>Table 12</td>
<td>Latin America: Super Capacitor Energy Storage System Type Market, by Country, 2018–2023</td>
</tr>
<tr>
<td>Table 13</td>
<td>Global Super Capacitor Energy Storage System Application Market, by Region, 2018–2023</td>
</tr>
<tr>
<td>Table 15</td>
<td>Europe: Super Capacitor Energy Storage System Application Market, by Country, 2018–2023</td>
</tr>
<tr>
<td>Table 17</td>
<td>Middle East &amp; Africa: Super Capacitor Energy Storage System Application Market, by Country, 2018–2023</td>
</tr>
<tr>
<td>Table 18</td>
<td>Latin America: Super Capacitor Energy Storage System Application Market, by Country, 2018–2023</td>
</tr>
<tr>
<td>Table 19</td>
<td>Global Services Market, by Region, 2018–2023</td>
</tr>
<tr>
<td>Table 20</td>
<td>North America: Super Capacitor Energy Storage System Market, by Country</td>
</tr>
<tr>
<td>Table 21</td>
<td>North America: Super Capacitor Energy Storage System Market, By Type</td>
</tr>
<tr>
<td>Table 22</td>
<td>North America: Super Capacitor Energy Storage System Market, By Application</td>
</tr>
<tr>
<td>Table 23</td>
<td>Europe: Super Capacitor Energy Storage System Market, By Country</td>
</tr>
<tr>
<td>Table 24</td>
<td>Europe: Super Capacitor Energy Storage System Market, By Type</td>
</tr>
<tr>
<td>Table 25</td>
<td>Europe: Super Capacitor Energy Storage System Market, By Application</td>
</tr>
<tr>
<td>Table 26</td>
<td>Europe: Super Capacitor Energy Storage System Market, By Application</td>
</tr>
</tbody>
</table>

LIST OF FIGURES

FIGURE 1 Global Super Capacitor Energy Storage System Market Segmentation

FIGURE 2 Forecast Methodology

FIGURE 3 Porter’s Five Forces Analysis of Global Super Capacitor Energy Storage System Market

FIGURE 4 Value Chain of Global Super Capacitor Energy Storage System Market

FIGURE 5 Share of Super Capacitor Energy Storage System Market in 2018, by Country (in %)

FIGURE 6 Global Super Capacitor Energy Storage System Market, 2018–2023,

FIGURE 7 Global Super Capacitor Energy Storage System Market size by Type, 2018–2023
FIGURE 8 Share of Global Super Capacitor Energy Storage System Market by Type, (in %)
FIGURE 9 Global Super Capacitor Energy Storage System Market size by Application, 2018–2023
FIGURE 10 Share of Global Super Capacitor Energy Storage System Market by Application, (in %)