LED Chip Market Report by Product (Blue LED Chips, Red LED Chips, Green LED Chips, Infrared LED Chips, Yellow LED Chips, White LED Chips, and Others), Application (Backlighting, Illumination, Automotive, Signs and Signal, and Others), and Region 2024-2032

Market Report | 2024-01-30 | 149 pages | IMARC Group

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Report description:

The global LED chip market size reached US$ 28.1 Billion in 2023. Looking forward, IMARC Group expects the market to reach US$ 75.5 Billion by 2032, exhibiting a growth rate (CAGR) of 11.3% during 2024-2032.

LED stands for light emitting diode, which is a two-lead semiconductor light source. These are used in a wide range of applications that vary from backlighting in electronic products such as LCD TVs, laptops, and phones, as well as in street lighting and automotive lighting, and general illumination. This can be attributed to the better picture quality offered by LEDs due to their higher degree of power efficiency and brightness. The LED chip, also known as the die, represents the most essential and cost-intensive component of the LED. It is a critical factor in determining the light quality. The chips have different ratings for brightness, wavelength and voltage. After installing the LED chip and passing current through an electrical source, a particular color of light is emitted, which is determined by the dominant wavelength.

These lights are more energy-efficient in terms of power consumption and provide high luminous intensity. They use electroluminescence to produce light without generating heat and convert electricity into energy with minimum wastage. Furthermore, these products have a longer lifespan as compared to incandescent bulbs, which further drives their demand. However, with technological innovations and research and development, the cost of manufacturing LEDs per kilolumen has decreased. This has significantly reduced the average selling price (ASP) of LEDs, making them a preferred choice among consumers. Moreover, incentives provided by governments across the globe to promote the usage of energy-efficient lighting is also elevating the demand for LED products.

Key Market Segmentation:
IMARC Group provides an analysis of the key trends in each sub-segment of the global LED chip market report, along with forecasts at the global and regional level from 2024-2032. Our report has categorized the market based on product and application.

Breakup by Product:

Blue LED Chips
Red LED Chips
Green LED Chips
Infrared LED Chips
Yellow LED Chips
White LED Chips
Others

Breakup by Application:

Backlighting
Illumination
Automotive
Signs and Signal
Others

Breakup by Region:

Asia Pacific
North America
Europe
Middle East and Africa
Latin America
Competitive Landscape:
The competitive landscape of the market is characterized by the presence of numerous small and large manufacturers who compete in terms of prices and quality. Some of the leading players operating in the market are:

AVA Technologies, Inc.
Bright LED Electronics Corporation
Cree, Inc.
Bridgelux, Inc.
Hitachi Cable, Ltd.
Huga Optech, Inc.
Dowa Electronics Materials Co., Ltd.
Epistar Corporation
Nichia Corporation
Formosa Epitaxy, Inc.
Goldeneye, Inc.
Kingbright Electronic Co. Ltd.

Optek Technology (TT Electronic PLC)
OSA Opto Light GmbH
Osram Opto Semiconductors GmbH

Key Questions Answered in This Report

1. What was the size of the global LED chip market in 2023?
2. What is the expected growth rate of the global LED chip market during 2024-2032?
3. What are the key factors driving the global LED chip market?
4. What has been the impact of COVID-19 on the global LED chip market?
5. What is the breakup of the global LED chip market based on the product?
6. What is the breakup of the global LED chip market based on the application?
7. What are the key regions in the global LED chip market?
8. Who are the key players/companies in the global LED chip market?

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