

Graphics Card Market Assessment, By Type [Dedicated Graphic Cards, Integrated Graphic Cards], By Deployment [On-premises, Cloud], By Device Type [Computer, Tablet, Smartphone, Gaming Console, Television, Others], By Industry [Electronics, IT and Telecommunication, Defense and Intelligence, Media and Entertainment, Others], By Region, Opportunities and Forecast, 2016-2030F

<https://marketpublishers.com/r/G2A21F5B7D97EN.html>

Date: March 2025

Pages: 223

Price: US\$ 4,500.00 (Single User License)

ID: G2A21F5B7D97EN

Abstracts

Global graphics card market has experienced significant growth in recent years and is expected to maintain a strong pace of expansion in the coming years. With projected revenue of approximately USD 20.62 billion in 2022, the market is forecasted to reach a value of USD 52.16 billion by 2030, displaying a robust CAGR of 12.3% from 2023 to 2030.

A graphics card, often known as a Graphics Processing Unit, improves the visual performance of a computer. It improves gaming, video editing, and overall display quality by accelerating the rendering of photos, movies, and 3D graphics. GPUs free up CPU resources, enabling more effective multitasking and faster performance in activities requiring high graphical processing capability.

The graphics card market is experiencing growth due to rising demand for high-quality gaming experiences. The rise of AI and cryptocurrency mining is fueling the demand of GPU. Furthermore, advances in graphics technology need frequent upgrades, sustaining a tendency for continual market expansion.

Increasing demand for high-quality gaming experiences has boosted the graphics card market tremendously. Gamers are looking for GPUs that can give superior performance and visual quality as the gaming industry is becoming more demanding. Graphics cards are critical for producing modern graphics like 4K gaming, ray tracing, and virtual reality. Furthermore, the rise of eSports and live streaming fuels demand for powerful GPUs. GPU makers are constantly pushing the performance envelope, resulting in a competitive market in which gamers spend on expensive graphics cards to remain ahead.

For instance, in January 2023, Imagination Technologies introduced IMG DXT, a scalable ray tracing GPU, to increase ray tracing use in mobile devices enabling immersive visuals with minimum power impact across multiple market sectors.

Expanding Role of Graphics Cards in Professional Workloads

The use of graphics cards for professional workloads is critical for the expansion of the graphics card market. Video editing, 3D rendering, and scientific simulations require significant computer power and advanced visual rendering. As these sectors improve and expand, experts will require more powerful GPUs to speed up their work processes. Graphics card makers have responded by designing high-performance workstation GPUs, specifically for these applications. This market sector accounts for a sizable and growing portion of graphics card sales, fueling innovation and rivalry. It diversifies the market's revenue streams and assures consistent demand, considerably contributing to its growth.

For example, in June 2023, AMD introduced two new workstation graphics cards, the Radeon PRO W7600 and W7500, designed for professional use in a variety of industries. They include AMD's RDNA 3 architecture and provide efficiency, performance, and ray-tracing support.

AI Revolution Fueling the Graphics Card Market

Incorporating graphics cards into AI and machine learning processes has fueled the expansion of the graphics card market globally. AI and machine learning necessitate vast parallel computing capacity, for which contemporary GPUs are especially well-suited for. As these technologies gain traction in fields as diverse as healthcare, finance, and driverless vehicles, the demand for high-performance GPUs grows. Graphics card manufacturers have taken advantage of this trend, developing dedicated AI-oriented GPUs to boost sales and stimulate innovation. This diversification into non-

gaming applications diversifies the market, assuring long-term growth and reinforcing the graphics card market's critical role in the technology ecosystem.

For example, in May 2023, AMD unveiled the Radeon RX 7600 graphics card, which is built for 1080p gaming, streaming, and content creation. It has RDNA™ 3 architecture, better gameplay and streaming performance, and improved AI capabilities.

Dominance of Dedicated Graphics Cards

Dedicated graphics cards have cemented their dominance with strong statistics in the market. They frequently outperform integrated graphics in benchmarks, delivering much faster frame rates in games and speeding up workloads such as video rendering and 3D modeling. Market data shows that there is a growing need for high-end GPUs, with sales continually increasing. Major GPU manufacturers, such as NVIDIA and AMD, are constantly releasing innovative models, maintaining their dominant position. As industries become more reliant on graphics-intensive applications, dedicated cards remain an essential option, sustaining their dominance in the graphics card market.

For instance, in May 2023, Imagination Technologies introduced the IMG CXM GPU family, comprising the smallest GPU with native HDR capability. These GPUs improve visual experiences in consumer devices ranging from wearables to high-end TVs.

Asia-Pacific Dominates Graphics Card Market

Asia-Pacific is exerting its dominance in the graphics card market. It includes significant production hubs such as Taiwan and China, which are home to major GPU manufacturers such as NVIDIA and AMD. These businesses propel innovation and output. Demand is fueled by Asia-Pacific's large customer base, which includes rising countries such as India and Southeast Asia. The region's strong gaming culture, expanding e-sports industry, and increasing technology utilization play a significant role. Furthermore, Asia-Pacific is home to numerous data centers for AI and machine learning, which necessitate a large amount of GPU power. The confluence of variables solidifies the region's leadership position in the global graphics card market.

For instance, in September 2023, SAPPHIRE Technology unveiled SAPPHIRE PURE AMD Radeon™ RX 7800 XT and RX 7700 XT graphics cards, based on AMD RDNA™ 3 architecture, developed for gamers and creators with attractive design and efficient cooling.

Government Initiatives Acting as Catalyst

The government's strategic investment in research and development has considerably enhanced the graphics card market. They've improved GPU performance, energy efficiency, and cost-effectiveness by financing new semiconductor technology and encouraging innovation. Furthermore, tax breaks and collaborations with prominent manufacturers have increased domestic output, lowering reliance on imports. These actions have increased the availability and affordability of high-performance graphics cards and established specific countries as vital players in the graphics card market, promoting economic growth and technical innovation.

For example, in August 2023, The CHIPS and Science Act led to considerable investments in domestic semiconductor production, research, and workforce development, which had an unforeseen impact on the graphics card market by strengthening the semiconductor supply chain.

Impact of COVID-19

Before COVID-19, the graphics card market continuously expanded, fueled by increased gaming and data-driven applications. The pandemic, on the other hand, interrupted global supply lines and created production delays, resulting in shortages. After COVID-19, the market revived strongly as remote work and gaming became increasingly popular. The increased demand for high-quality graphics cards for gaming, virtual conferencing, and content creation prompted more innovation. This demand and investments in the semiconductor sector positioned graphics cards as critical components in a post-pandemic world driven by technology, defining the industry's recovery and expansion.

Key Players Landscape and Outlook

Key participants in the graphics card market include Nvidia Corporation, Advanced Micro Devices, Inc., Intel Corporation, Qualcomm Technologies, Inc., and Samsung Electronics Co., Ltd. Continuous innovation characterizes this landscape, as these companies compete to outperform one another in terms of GPU performance, energy efficiency, and unique features. The market prognosis remains positive, owing to increased demand for high-quality gaming, AI, and professional workloads. Graphics card manufacturers are concerned with supply chain resilience, energy efficiency, and environmental practices, which will likely define the industry's future. Collaborations and developing technologies are projected to increase competition in this fast-paced market.

In May 2023, SAPPHIRE released the SAPPHIRE PULSE AMD Radeon™ RX 7600 8GB Graphics Card, which provides steady, silent, factory-overclocked 1080p gameplay with better visuals and Dual-X Cooling Technology in a compact form.

In May 2023, ZOTAC unveiled the GeForce RTX 4060 product line, which is built on NVIDIA's Ada Lovelace architecture and provides impressive performance for mainstream gamers and producers at 1080P resolution with capabilities like Ray Tracing and DLSS 3.

Contents

1. RESEARCH METHODOLOGY

2. PROJECT SCOPE & DEFINITIONS

3. IMPACT OF COVID-19 ON GLOBAL GRAPHICS CARD MARKET

4. EXECUTIVE SUMMARY

5. VOICE OF CUSTOMER

5.1. Product and Market Intelligence

5.2. Mode of Brand Awareness

5.3. Factors Considered in Purchase Decisions

5.3.1. Features and other value-added service

5.3.2. IT Infrastructure Compatibility

5.3.3. Efficiency of Solutions

5.3.4. After-Sales Support

5.4. Consideration of Privacy & Safety Regulations

6. GLOBAL GRAPHICS CARD MARKET OUTLOOK, 2016-2030F

6.1. Market Size & Forecast

6.1.1. By Value

6.1.2. By Volume

6.2. By Type

6.2.1. Dedicated Graphic Cards

6.2.2. Integrated Graphic Cards

6.3. By Deployment

6.3.1. On-premises

6.3.2. Cloud

6.4. By Device Type

6.4.1. Computer

6.4.2. Tablet

6.4.3. Smartphone

6.4.4. Gaming Console

6.4.5. Television

6.4.6. Others

6.5. By Industry

- 6.5.1. Electronics
- 6.5.2. IT and Telecommunication
- 6.5.3. Defense and Intelligence
- 6.5.4. Media and Entertainment
- 6.5.5. Others

6.6. By Region

- 6.6.1. North America
- 6.6.2. Europe
- 6.6.3. Asia-Pacific
- 6.6.4. South America
- 6.6.5. Middle East and Africa

6.7. By Company Market Share (%), 2022

7. GLOBAL GRAPHICS CARD MARKET OUTLOOK, BY REGION, 2016-2030F

7.1. North America*

7.1.1. Market Size & Forecast

- 7.1.1.1. By Value
- 7.1.1.2. By Volume

7.1.2. By Type

- 7.1.2.1. Dedicated Graphic Cards
- 7.1.2.2. Integrated Graphic Cards

7.1.3. By Deployment

- 7.1.3.1. On-premises
- 7.1.3.2. Cloud

7.1.4. By Device Type

- 7.1.4.1. Computer
- 7.1.4.2. Tablet
- 7.1.4.3. Smartphone
- 7.1.4.4. Gaming Console
- 7.1.4.5. Television
- 7.1.4.6. Others

7.1.5. By Industry

- 7.1.5.1. Electronics
- 7.1.5.2. IT and Telecommunication
- 7.1.5.3. Defense and Intelligence
- 7.1.5.4. Media and Entertainment
- 7.1.5.5. Others

7.1.6. United States*

7.1.6.1. Market Size & Forecast

7.1.6.1.1. By Value

7.1.6.1.2. By Volume

7.1.6.2. By Type

7.1.6.2.1. Dedicated Graphic Cards

7.1.6.2.2. Integrated Graphic Cards

7.1.6.3. By Deployment

7.1.6.3.1. On-premises

7.1.6.3.2. Cloud

7.1.6.4. By Device Type

7.1.6.4.1. Computer

7.1.6.4.2. Tablet

7.1.6.4.3. Smartphone

7.1.6.4.4. Gaming Console

7.1.6.4.5. Television

7.1.6.4.6. Others

7.1.6.5. By Industry

7.1.6.5.1. Electronics

7.1.6.5.2. IT and Telecommunication

7.1.6.5.3. Defense and Intelligence

7.1.6.5.4. Media and Entertainment

7.1.6.5.5. Others

7.1.7. Canada

7.1.8. Mexico

*All segments will be provided for all regions and countries covered

7.2. Europe

7.2.1. Germany

7.2.2. France

7.2.3. Italy

7.2.4. United Kingdom

7.2.5. Russia

7.2.6. Netherlands

7.2.7. Spain

7.2.8. Turkey

7.2.9. Poland

7.3. Asia-Pacific

7.3.1. India

7.3.2. China

- 7.3.3. Japan
- 7.3.4. Australia
- 7.3.5. Vietnam
- 7.3.6. South Korea
- 7.3.7. Indonesia
- 7.3.8. Philippines
- 7.4. South America
 - 7.4.1. Brazil
 - 7.4.2. Argentina
- 7.5. Middle East & Africa
 - 7.5.1. Saudi Arabia
 - 7.5.2. UAE
 - 7.5.3. South Africa

8. MARKET MAPPING, 2022

- 8.1. By Type
- 8.2. By Deployment
- 8.3. By Device Type
- 8.4. By Industry
- 8.5. By Region

9. MACRO ENVIRONMENT AND INDUSTRY STRUCTURE

- 9.1. Demand Supply Analysis
- 9.2. Import Export Analysis
- 9.3. Value Chain Analysis
- 9.4. PESTEL Analysis
 - 9.4.1. Political Factors
 - 9.4.2. Economic System
 - 9.4.3. Social Implications
 - 9.4.4. Technological Advancements
 - 9.4.5. Environmental Impacts
 - 9.4.6. Legal Compliances and Regulatory Policies (Statutory Bodies Included)
- 9.5. Porter's Five Forces Analysis
 - 9.5.1. Supplier Power
 - 9.5.2. Buyer Power
 - 9.5.3. Substitution Threat
 - 9.5.4. Threat from New Entrant

9.5.5. Competitive Rivalry

10. MARKET DYNAMICS

10.1. Growth Drivers

10.2. Growth Inhibitors (Challenges and Restraints)

11. KEY PLAYERS LANDSCAPE

11.1. Competition Matrix of Top Five Market Leaders

11.2. Market Revenue Analysis of Top Five Market Leaders (in %, 2022)

11.3. Mergers and Acquisitions/Joint Ventures (If Applicable)

11.4. SWOT Analysis (For Five Market Players)

11.5. Patent Analysis (If Applicable)

12. CASE STUDIES

13. KEY PLAYERS OUTLOOK

13.1. Advanced Micro Devices, Inc.

13.1.1. Company Details

13.1.2. Key Management Personnel

13.1.3. Products & Services

13.1.4. Financials (As reported)

13.1.5. Key Market Focus & Geographical Presence

13.1.6. Recent Developments

13.2. EVGA Corporation

13.3. Imagination Technologies Limited

13.4. Intel Corporation

13.5. Nvidia Corporation

13.6. Qualcomm Technologies, Inc.

13.7. Samsung Electronics Co., Ltd.

13.8. SAPPHIRE Technology Limited

13.9. TUL Corporation

13.10. Zotac Technology Limited

*Companies mentioned above DO NOT hold any order as per market share and can be changed as per information available during research work.

14. STRATEGIC RECOMMENDATIONS

15. ABOUT US & DISCLAIMER

I would like to order

Product name: Graphics Card Market Assessment, By Type [Dedicated Graphic Cards, Integrated Graphic Cards], By Deployment [On-premises, Cloud], By Device Type [Computer, Tablet, Smartphone, Gaming Console, Television, Others], By Industry [Electronics, IT and Telecommunication, Defense and Intelligence, Media and Entertainment, Others], By Region, Opportunities and Forecast, 2016-2030F

Product link: <https://marketpublishers.com/r/G2A21F5B7D97EN.html>

Price: US\$ 4,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G2A21F5B7D97EN.html>