

# Quantum Computing Market - Strategic Insights and Forecasts (2026-2031)

<https://marketpublishers.com/r/QB3ADFFFC59CEN.html>

Date: February 2026

Pages: 144

Price: US\$ 3,950.00 (Single User License)

ID: QB3ADFFFC59CEN

## Abstracts

The Global Quantum Computing market is forecast to grow at a CAGR of 31.7%, reaching USD 9.9 billion in 2031 from USD 2.5 billion in 2026.

The global quantum computing market represents a transformative frontier in advanced computing technologies. It is positioned at the intersection of high-performance computing, artificial intelligence, and next-generation digital infrastructure. Organizations across industries are investing in quantum technologies to address computational challenges that conventional systems cannot efficiently solve. Governments, research institutions, and technology companies are collectively driving development through funding, partnerships, and innovation initiatives. The increasing demand for faster data processing, advanced modeling capabilities, and complex optimization solutions is reshaping computing architectures. As industries pursue digital transformation and data-driven decision-making, quantum computing is emerging as a strategic capability with long-term impact across financial services, healthcare, manufacturing, and logistics.

### Market Drivers

Rising demand for high-performance computing is a central growth driver. Traditional computing systems face limitations when handling complex simulations, optimization problems, and large-scale data analysis. Quantum computing addresses these challenges by leveraging advanced processing capabilities that significantly accelerate problem solving. This advantage supports applications in pharmaceuticals, financial modeling, logistics optimization, and scientific research.

Growing investment in quantum technologies is another major factor. Governments and

private organizations are allocating substantial funding to research and development, hardware engineering, and algorithm innovation. This financial support accelerates technological advancement and expands commercial adoption across industries. Increased hardware development, including advanced quantum processors and precision components, further strengthens market expansion.

In addition, technological progress in machine learning, cryptography, and optimization is enhancing the practical value of quantum systems. These advancements expand the range of applications and encourage enterprise experimentation with quantum-enabled solutions.

### Market Restraints

High initial investment requirements remain a major barrier to adoption. Quantum systems require specialized infrastructure, advanced hardware components, and significant maintenance costs. These financial demands limit participation by smaller organizations and slow broader commercialization.

Technical complexity also presents operational challenges. The development and management of quantum hardware and software require specialized expertise and ongoing research. Integration with existing computing environments can be difficult, particularly for organizations with legacy systems.

In addition, the technology remains in an early stage of maturity. Reliability, scalability, and error correction remain ongoing technical challenges, which may delay widespread industrial deployment.

### Technology and Segment Insights

The market is segmented by component, deployment model, application, industry vertical, and region. Component segmentation includes hardware, software, and services. Hardware accounts for significant development activity due to the growing need for advanced quantum processors and supporting infrastructure.

By deployment, solutions are offered through on-premises systems and cloud-based platforms. Cloud-based deployment is expanding rapidly due to its scalability and accessibility for enterprises and research organizations.

Application areas include artificial intelligence and machine learning, computational

chemistry, drug design, cybersecurity, financial modeling, and logistics optimization. Artificial intelligence and machine learning represent a major application segment because of their computational intensity.

Industry adoption spans BFSI, automotive, manufacturing, healthcare, IT and telecom, and energy. Automotive and technology sectors are showing strong engagement due to optimization and simulation requirements.

### Competitive and Strategic Outlook

The competitive landscape includes global technology firms, research institutions, and emerging quantum startups. Companies are investing heavily in processor development, algorithm design, and cloud-based quantum services. Strategic collaborations between public and private sectors are shaping innovation pipelines and accelerating commercialization.

Regional dynamics vary significantly. Asia Pacific is gaining prominence due to rising demand across multiple industries and growing technological investment. North America continues to play a significant role due to established research ecosystems and technology leadership.

Ongoing partnerships, product launches, and infrastructure development indicate a highly dynamic competitive environment. Firms that deliver scalable systems, advanced software frameworks, and integrated service platforms are likely to strengthen market positioning.

### Key Takeaways

The quantum computing market is advancing rapidly as demand for next-generation computational power increases. Growth is supported by technological innovation, expanding industry applications, and sustained investment. However, cost barriers and technical complexity remain key considerations for long-term market expansion.

### Key Benefits of this Report

**Insightful Analysis:** Gain detailed market insights across regions, customer segments, policies, socio-economic factors, consumer preferences, and industry verticals.

**Competitive Landscape:** Understand strategic moves by key players to identify optimal market entry approaches.

**Market Drivers and Future Trends:** Assess major growth forces and emerging developments shaping the market.

**Actionable Recommendations:** Support strategic decisions to unlock new revenue streams.

**Caters to a Wide Audience:** Suitable for startups, research institutions, consultants, SMEs, and large enterprises.

What businesses use our reports for

Industry and market insights, opportunity assessment, product demand forecasting, market entry strategy, geographical expansion, capital investment decisions, regulatory analysis, new product development, and competitive intelligence.

Report Coverage

Historical data from 2021 to 2025 and forecast data from 2026 to 2031

Growth opportunities, challenges, supply chain outlook, regulatory framework, and trend analysis

Competitive positioning, strategies, and market share evaluation

Revenue growth and forecast assessment across segments and regions

Company profiling including strategies, products, financials, and key developments

## Contents

### **1. EXECUTIVE SUMMARY**

### **2. MARKET SNAPSHOT**

- 2.1. Market Overview
- 2.2. Market Definition
- 2.3. Scope of the Study
- 2.4. Market Segmentation

### **3. BUSINESS LANDSCAPE**

- 3.1. Market Drivers
- 3.2. Market Restraints
- 3.3. Market Opportunities
- 3.4. Porter's Five Forces Analysis
- 3.5. Industry Value Chain Analysis
- 3.6. Policies and Regulations
- 3.7. Strategic Recommendations

### **4. TECHNOLOGICAL OUTLOOK**

### **5. QUANTUM COMPUTING MARKET BY COMPONENT**

- 5.1. Introduction
- 5.2. Hardware
- 5.3. Software and Service

### **6. QUANTUM COMPUTING MARKET BY DEPLOYMENT**

- 6.1. Introduction
- 6.2. On-Premises
- 6.3. Cloud-Based

### **7. QUANTUM COMPUTING MARKET BY APPLICATION**

- 7.1. Introduction
- 7.2. Artificial Intelligence & Machine Learning

- 7.3. Computational Chemistry
- 7.4. Drug Design & Development
- 7.5. Cybersecurity & Cryptography
- 7.6. Financial Modelling
- 7.7. Logistics Optimisation
- 7.8. Others

## **8. QUANTUM COMPUTING MARKET BY INDUSTRY VERTICAL**

- 8.1. Introduction
- 8.2. BFSI
- 8.3. Automotive
- 8.4. Manufacturing
- 8.5. Healthcare
- 8.6. IT & Telecom
- 8.7. Energy & Power
- 8.8. Others

## **9. QUANTUM COMPUTING MARKET BY GEOGRAPHY**

- 9.1. Introduction
- 9.2. North America
  - 9.2.1. By Component
  - 9.2.2. By Deployment
  - 9.2.3. By Application
  - 9.2.4. By Industry Vertical
  - 9.2.5. By Country
    - 9.2.5.1. United States
    - 9.2.5.2. Canada
    - 9.2.5.3. Mexico
- 9.3. South America
  - 9.3.1. By Component
  - 9.3.2. By Deployment
  - 9.3.3. By Application
  - 9.3.4. By Industry Vertical
  - 9.3.5. By Country
    - 9.3.5.1. Brazil
    - 9.3.5.2. Argentina
    - 9.3.5.3. Others

## 9.4. Europe

- 9.4.1. By Component
- 9.4.2. By Deployment
- 9.4.3. By Application
- 9.4.4. By Industry Vertical
- 9.4.5. By Country
  - 9.4.5.1. United Kingdom
  - 9.4.5.2. Germany
  - 9.4.5.3. France
  - 9.4.5.4. Spain
  - 9.4.5.5. Others

## 9.5. Middle East & Africa

- 9.5.1. By Component
- 9.5.2. By Deployment
- 9.5.3. By Application
- 9.5.4. By Industry Vertical
- 9.5.5. By Country
  - 9.5.5.1. Saudi Arabia
  - 9.5.5.2. UAE
  - 9.5.5.3. Others

## 9.6. Asia Pacific

- 9.6.1. By Component
- 9.6.2. By Deployment
- 9.6.3. By Application
- 9.6.4. By Industry Vertical
- 9.6.5. By Country
  - 9.6.5.1. China
  - 9.6.5.2. Japan
  - 9.6.5.3. India
  - 9.6.5.4. South Korea
  - 9.6.5.5. Indonesia
  - 9.6.5.6. Taiwan
  - 9.6.5.7. Others

## **10. COMPETITIVE ENVIRONMENT AND ANALYSIS**

10.1. Major Players and Strategy Analysis

10.2. Market Share Analysis

10.3. Mergers, Acquisitions, Agreements, and Collaborations

## 10.4. Competitive Dashboard

## **11. COMPANY PROFILES**

- 11.1. IBM
- 11.2. Microsoft
- 11.3. Quantum Computing Inc.
- 11.4. Intel Corporation
- 11.5. D-Wave Quantum Inc.
- 11.6. Quix Quantum BV
- 11.7. Alpine Quantum Technologies GmbH
- 11.8. ORCA Computing
- 11.9. Rigetti & Co, LLC.
- 11.10. Google LLC
- 11.11. Nanofiber Quantum Technologies
- 11.12. IQM Quantum Computers
- 11.13. IonQ, Inc.

## **12. APPENDIX**

- 12.1. Currency
- 12.2. Assumptions
- 12.3. Base and Forecast Years Timeline
- 12.4. Key Benefits for the Stakeholders
- 12.5. Research Methodology
- 12.6. Abbreviations

## I would like to order

Product name: Quantum Computing Market - Strategic Insights and Forecasts (2026-2031)

Product link: <https://marketpublishers.com/r/QB3ADFFFC59CEN.html>

Price: US\$ 3,950.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/QB3ADFFFC59CEN.html>