

Europe Photonic Design Automation Market Forecast to 2030 - Regional Analysis - by Component (Solution and Service), Deployment (On-Premise and Cloud), Organization Size (SMEs and Large Enterprises), and Application (Academic Research and Industrial Research & Manufacturing)

https://marketpublishers.com/r/E28E6CD1FBDEEN.html

Date: July 2024 Pages: 90 Price: US\$ 2,485.00 (Single User License) ID: E28E6CD1FBDEEN

### **Abstracts**

The Europe photonic design automation market was valued at US\$ 281.18 million in 2022 and is expected to reach US\$ 791.25 million by 2030; it is estimated to register at a CAGR of 13.8% from 2022 to 2030.

Advancements in Photonic Devices Drive Europe Photonic Design Automation Market

The Europe photonic design automation market is experiencing growth due to continuous advancements in photonic devices, such as silicon photonics and lasers. These advanced devices require sophisticated design tools and automation techniques to optimize performance and functionality. Performance and functionality demands are gain linked to several microtrends such as growing demand for data transfer speed, increased usage of additive manufacturing, and surging applications of remote sensing. Photonic sensors, which detect precise emissions of light or energy within the photonic spectrum thus have an expanding scope of applications in several industries, including energy, telecommunications, manufacturing, aerospace, and defense. For example, incorporating fiber-optic sensor technology into monitoring and measurement applications in the energy sector can help reduce waste and pollution. Aerospace and defense industries are also experiencing growth due to the expanded use of automated applications and new remote-sensing tools, driving the demand for photonic design automation. Photonic integrated circuits (PICs) are another area of advancement in



photonic technologies. These circuits combine multiple photonic components on a single chip, enabling compact and efficient designs. The design and manufacturing of PICs require advanced automation software and techniques. The integration of metaoptics with waveguide technologies is also propelling photonic integrated circuits to new heights. The continuous advancements in photonic technologies highlight the need for sophisticated design tools and automation techniques to optimize the performance and functionality of these devices. Photonic design automation tools play a crucial role in streamlining the design process, automating repetitive tasks, and enabling faster design iterations. By utilizing these tools, designers can achieve efficiency gains, performance optimization, and cost reduction in their design workflows.

#### Europe Photonic Design Automation Market Overview

The market in Europe is segmented into France, Germany, Russia, the UK, Switzerland, and the Rest of Europe. The Europe photonic design automation market is a vibrant and rapidly evolving landscape that encompasses a wide range of industries and applications. Europe has solidified its position as a global leader in the photonics industry, owing to its extensive track record of technological innovation and unwavering commitment to research and development. A key driver behind the expansion of the Europe photonic design automation market is the region's steadfast dedication to research and development. Notably, countries such as Germany, France, and the Netherlands have a longstanding history of investing in pioneering technologies and nurturing partnerships between academia, industry, and government entities. This enduring focus on innovation and collaboration has played a pivotal role in establishing Europe as a frontrunner in the photonics industry. This collaborative approach has led to the development of advanced design tools and methodologies that enable the efficient and effective design of photonic devices and systems. Another significant driver for the Europe photonic design automation market is the region's robust telecommunications infrastructure. Europe has been at the forefront of the telecommunications revolution, with companies such as Nokia, Ericsson, and Deutsche Telekom leading the way in the development and deployment of advanced network technologies. These technologies, including fiber optics and high-speed data transmission, rely heavily on photonic devices and systems. As a result, there is a strong demand for sophisticated design automation tools that can handle the complexity of these technologies and ensure their optimal performance.

Europe Photonic Design Automation Market Revenue and Forecast to 2030 (US\$ Million)



Europe Photonic Design Automation Market Segmentation

The Europe photonic design automation market is segmented based on component, deployment, organization size, application, and country.

Based on component, the Europe photonic design automation market photonic design automation market is bifurcated into solution and service. The solution segment held a larger share in 2022.

In terms of deployment, the Europe photonic design automation market photonic design automation market is bifurcated into on-premise and cloud. The on-premise segment held a larger share in 2022.

By organization size, the Europe photonic design automation market photonic design automation market is bifurcated into SMEs and large enterprises. The large enterprises segment held a larger share in 2022.

In terms of application, the Europe photonic design automation market photonic design automation market is bifurcated into academic research and industrial research & manufacturing. The industrial research & manufacturing segment held a larger share in 2022.

Based on country, the Europe photonic design automation market is categorized into Germany, France, the UK, Russia, Switzerland, and the Rest of Europe. Germany dominated the Europe photonic design automation market in 2022.

International BV, VPIphotonics GmbH, Optiwave Systems Inc, Luceda Photonics, Cadence Design Systems Inc, Siemens AG, and Synopsys Inc are some of the leading companies operating in the Europe photonic design automation market.



### Contents

#### 1. INTRODUCTION

- 1.1 The Insight Partners Research Report Guidance
- 1.2 Market Segmentation

#### 2. EXECUTIVE SUMMARY

- 2.1 Key Insights
- 2.2 Market Attractiveness

#### 3. RESEARCH METHODOLOGY

- 3.1 Coverage
- 3.2 Secondary Research
- 3.3 Primary Research

#### 4. EUROPE PHOTONIC DESIGN AUTOMATION MARKET LANDSCAPE

- 4.1 Overview
- 4.2 Ecosystem Analysis
- 4.2.1 List of Vendors in the Value Chain:

## 5. EUROPE PHOTONIC DESIGN AUTOMATION MARKET - KEY MARKET DYNAMICS

- 5.1 Europe Photonic Design Automation Market Key Market Dynamics
- 5.2 Market Drivers
- 5.2.1 Growing Demand for Automation
- 5.2.2 Increasing Need for Efficiency and Accuracy
- 5.3 Market Restraints

5.3.1 Lack of Awareness Regarding Benefits and Capabilities of Photonic Design Automation

5.4 Market Opportunities

- 5.4.1 Advancements in Photonic Devices
- 5.4.2 Emphasis on High Performance and Environmentally Sustainable Solutions
- 5.5 Future Trends
  - 5.5.1 Integration of Photonics in Electronic Design Automation (EDA) Tools



5.5.2 Advancements in Compact Modelling and Simulation Tools5.6 Impact of Drivers and Restraints:

#### 6. PHOTONIC DESIGN AUTOMATION MARKET - EUROPE MARKET ANALYSIS

6.1 Europe Photonic Design Automation Market Revenue (US\$ Million), 2022 - 20306.2 Europe Photonic Design Automation Market Forecast and Analysis

## 7. EUROPE PHOTONIC DESIGN AUTOMATION MARKET ANALYSIS - COMPONENT

7.1 Solution

- 7.1.1 Overview
- 7.1.2 Solution Market, Revenue and Forecast to 2030 (US\$ Million)
- 7.2 Service
- 7.2.1 Overview
- 7.2.2 Service Market, Revenue and Forecast to 2030 (US\$ Million)

## 8. EUROPE PHOTONIC DESIGN AUTOMATION MARKET ANALYSIS - DEPLOYMENT

- 8.1 On-Premise
  - 8.1.1 Overview

8.1.2 On-Premise Market, Revenue and Forecast to 2030 (US\$ Million) 8.2 Cloud

8.2.1 Overview

8.2.2 Cloud Market, Revenue and Forecast to 2030 (US\$ Million)

## 9. EUROPE PHOTONIC DESIGN AUTOMATION MARKET ANALYSIS - ORGANIZATION SIZE

- 9.1 SMEs
  - 9.1.1 Overview
  - 9.1.2 SMEs Market, Revenue and Forecast to 2030 (US\$ Million)
- 9.2 Large Enterprises
  - 9.2.1 Overview
  - 9.2.2 Large Enterprises Market, Revenue and Forecast to 2030 (US\$ Million)

#### **10. EUROPE PHOTONIC DESIGN AUTOMATION MARKET ANALYSIS -**



#### APPLICATION

10.1 Academic Research

10.1.1 Overview

10.1.2 Academic Research Market, Revenue and Forecast to 2030 (US\$ Million)

10.2 Industrial Research & Manufacturing

10.2.1 Overview

10.2.2 Industrial Research & Manufacturing Market, Revenue and Forecast to 2030 (US\$ Million)

#### **11. EUROPE PHOTONIC DESIGN AUTOMATION MARKET - COUNTRY ANALYSIS**

11.1 Europe

11.1.1 Europe Photonic Design Automation Market Revenue and Forecasts and Analysis - By Country

11.1.1.1 Europe Photonic Design Automation Market Revenue and Forecasts and Analysis - By Country

11.1.1.2 Germany Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn)

11.1.1.2.1 Germany Photonic Design Automation Market Breakdown, by Component

11.1.1.2.2 Germany Photonic Design Automation Market Breakdown, by Deployment

11.1.1.2.3 Germany Photonic Design Automation Market Breakdown, by Organization Size

11.1.1.2.4 Germany Photonic Design Automation Market Breakdown, by Application 11.1.1.3 France Photonic Design Automation Market Revenue and Forecasts to 2030

(US\$ Mn)

11.1.1.3.1 France Photonic Design Automation Market Breakdown, by Component

11.1.1.3.2 France Photonic Design Automation Market Breakdown, by Deployment

11.1.1.3.3 France Photonic Design Automation Market Breakdown, by Organization Size

11.1.1.3.4 France Photonic Design Automation Market Breakdown, by Application

11.1.1.4 UK Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn)

11.1.1.4.1 UK Photonic Design Automation Market Breakdown, by Component

11.1.1.4.2 UK Photonic Design Automation Market Breakdown, by Deployment

11.1.1.4.3 UK Photonic Design Automation Market Breakdown, by Organization



11.1.1.4.4 UK Photonic Design Automation Market Breakdown, by Application

11.1.1.5 Russia Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn)

11.1.1.5.1 Russia Photonic Design Automation Market Breakdown, by Component

11.1.1.5.2 Russia Photonic Design Automation Market Breakdown, by Deployment

11.1.1.5.3 Russia Photonic Design Automation Market Breakdown, by Organization Size

11.1.1.5.4 Russia Photonic Design Automation Market Breakdown, by Application

11.1.1.6 Switzerland Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn)

11.1.1.6.1 Switzerland Photonic Design Automation Market Breakdown, by Component

11.1.1.6.2 Switzerland Photonic Design Automation Market Breakdown, by Deployment

11.1.1.6.3 Switzerland Photonic Design Automation Market Breakdown, by Organization Size

11.1.1.6.4 Switzerland Photonic Design Automation Market Breakdown, by Application

11.1.1.7 Rest of Europe Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn)

11.1.1.7.1 Rest of Europe Photonic Design Automation Market Breakdown, by Component

11.1.1.7.2 Rest of Europe Photonic Design Automation Market Breakdown, by Deployment

11.1.1.7.3 Rest of Europe Photonic Design Automation Market Breakdown, by Organization Size

11.1.1.7.4 Rest of Europe Photonic Design Automation Market Breakdown, by Application

#### 12. INDUSTRY LANDSCAPE

12.1 Overview

12.2 Market Initiative

12.2 New Product Development

12.3 Merger and Acquisition

#### **13. COMPANY PROFILES**

13.1 LioniX International BV

Europe Photonic Design Automation Market Forecast to 2030 - Regional Analysis - by Component (Solution and Ser..



- 13.1.1 Key Facts
- 13.1.2 Business Description
- 13.1.3 Products and Services
- 13.1.4 Financial Overview
- 13.1.5 SWOT Analysis
- 13.1.6 Key Developments
- 13.2 VPIphotonics GmbH
  - 13.2.1 Key Facts
  - 13.2.2 Business Description
  - 13.2.3 Products and Services
- 13.2.4 Financial Overview
- 13.2.5 SWOT Analysis
- 13.2.6 Key Developments
- 13.3 Optiwave Systems Inc
- 13.3.1 Key Facts
- 13.3.2 Business Description
- 13.3.3 Products and Services
- 13.3.4 Financial Overview
- 13.3.5 SWOT Analysis
- 13.3.6 Key Developments
- 13.4 Luceda Photonics
  - 13.4.1 Key Facts
  - 13.4.2 Business Description
  - 13.4.3 Products and Services
  - 13.4.4 Financial Overview
  - 13.4.5 SWOT Analysis
- 13.4.6 Key Developments
- 13.5 Cadence Design Systems Inc
  - 13.5.1 Key Facts
  - 13.5.2 Business Description
  - 13.5.3 Products and Services
  - 13.5.4 Financial Overview
  - 13.5.5 SWOT Analysis
  - 13.5.6 Key Developments
- 13.6 Siemens AG
  - 13.6.1 Key Facts
  - 13.6.2 Business Description
  - 13.6.3 Products and Services
  - 13.6.4 Financial Overview



- 13.6.5 SWOT Analysis
- 13.6.6 Key Developments
- 13.7 Synopsys Inc
  - 13.7.1 Key Facts
  - 13.7.2 Business Description
  - 13.7.3 Products and Services
  - 13.7.4 Financial Overview
  - 13.7.5 SWOT Analysis
  - 13.7.6 Key Developments

#### 14. APPENDIX

14.1 Word Index



### **List Of Tables**

#### LIST OF TABLES

 Table 1. Europe Photonic Design Automation Market Segmentation

Table 2. Europe Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Million)

Table 3. Europe Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Million) - Component

Table 4. Europe Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Million) - Deployment

Table 5. Europe Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Million) - Organization Size

Table 6. Europe Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Million) - Application

Table 7. Europe Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Country

Table 8. Germany Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Component

Table 9. Germany Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Deployment

Table 10. Germany Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Organization Size

Table 11. Germany Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Application

Table 12. France Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Component

Table 13. France Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Deployment

Table 14. France Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Organization Size

Table 15. France Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Application

Table 16. UK Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Component

Table 17. UK Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Deployment

Table 18. UK Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Organization Size



Table 19. UK Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Application Table 20. Russia Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Component Table 21. Russia Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Deployment Table 22. Russia Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Organization Size Table 23. Russia Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Application Table 24. Switzerland Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Component Table 25. Switzerland Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Deployment Table 26. Switzerland Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Organization Size Table 27. Switzerland Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Application Table 28. Rest of Europe Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Component Table 29. Rest of Europe Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Deployment Table 30. Rest of Europe Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Organization Size Table 31. Rest of Europe Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn) - By Application Table 32. List of Abbreviation12. List of Figures Figure 1. Europe Photonic Design Automation Market Segmentation, By Country Figure 2. Ecosystem: Europe Photonic Design Automation Market Figure 3. Impact Analysis of Drivers and Restraints Figure 4. Europe Photonic Design Automation Market Revenue (US\$ Million), 2022 -2030 Figure 5. Europe Photonic Design Automation Market Share (%) - Component, 2022 and 2030 Figure 6. Solution Market Revenue and Forecasts to 2030 (US\$ Million) Figure 7. Service Market Revenue and Forecasts to 2030 (US\$ Million) Figure 8. Europe Photonic Design Automation Market Share (%) - Deployment, 2022 and 2030 Figure 9. On-Premise Market Revenue and Forecasts to 2030 (US\$ Million)



Figure 10. Cloud Market Revenue and Forecasts to 2030 (US\$ Million)

Figure 11. Europe Photonic Design Automation Market Share (%) - Organization Size, 2022 and 2030

Figure 12. SMEs Market Revenue and Forecasts to 2030 (US\$ Million)

Figure 13. Large Enterprises Market Revenue and Forecasts to 2030 (US\$ Million)

Figure 14. Europe Photonic Design Automation Market Share (%) - Application, 2022 and 2030

Figure 15. Academic Research Market Revenue and Forecasts to 2030 (US\$ Million)

Figure 16. Industrial Research & Manufacturing Market Revenue and Forecasts to 2030 (US\$ Million)

Figure 17. Europe Photonic Design Automation Market- Revenue by Key Countries 2022 (US\$ Million)

Figure 18. Europe Photonic Design Automation Market Breakdown by Key Countries, 2022 and 2030 (%)

Figure 19. Germany Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn)

Figure 20. France Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn)

Figure 21. UK Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn)

Figure 22. Russia Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn)

Figure 23. Switzerland Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn)

Figure 24. Rest of Europe Photonic Design Automation Market Revenue and Forecasts to 2030 (US\$ Mn)



#### I would like to order

Product name: Europe Photonic Design Automation Market Forecast to 2030 - Regional Analysis - by Component (Solution and Service), Deployment (On-Premise and Cloud), Organization Size (SMEs and Large Enterprises), and Application (Academic Research and Industrial Research & Manufacturing)

Product link: https://marketpublishers.com/r/E28E6CD1FBDEEN.html

Price: US\$ 2,485.00 (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 <u>https://marketpublishers.com/r/E28E6CD1FBDEEN.html</u>

# To pay by Wire Transfer, please, fill in your contact details in the form below:

First name: Last name: Email: Company: Address: City: Zip code: Country: Tel: Fax: Your message:

\*\*All fields are required

Custumer signature \_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <u>https://marketpublishers.com/docs/terms.html</u>



To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970