

# **PCB Double-Sided Exposure Machine Market Forecasts to 2034 – Global Analysis By Type (Fully Automatic, Semi Automatic, Manual and Other Types), Application, End User and By Geography**

<https://marketpublishers.com/r/P35F7C79F537EN.html>

Date: April 2026

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: P35F7C79F537EN

## **Abstracts**

According to Statistics MRC, the Global PCB Double-Sided Exposure Machine Market is accounted for \$707.1 million in 2026 and is expected to reach \$1197.0 million by 2034 growing at a CAGR of 6.8% during the forecast period. One essential piece of specialist equipment for the accurate production of printed circuit boards is a double-sided exposure machine for PCBs. Using photomasks and photoresist coatings; this machine transfers complex circuit layouts onto both sides of a PCB, which is a crucial step in the imaging process. In essence, these devices let a PCB's top and bottom sides to be exposed to light sources, usually UV lamps or LED arrays, which guarantees precise circuit design reproduction onto the photoresist-coated board.

Market Dynamics:

Driver:

Rising demand for flexible and rigid-flex PCBs

The need for bendable or foldable rigid-flex and flexible PCBs necessitates the use of specialist exposure equipment that can handle these unusual PCB varieties. Exposure machine manufacturers invest in features that are especially made to handle flexible fabrics without sacrificing accuracy or quality and the need for exposure machines that can produce various adaptable PCB types is driven by the increasing use of flexible and rigid-flex PCBs in applications such as wearable's, medical electronics, aerospace, automotive, and Internet of Things technologies.

#### Restraint:

##### Limited flexibility for varied PCB types

Exposure machines that are not adaptable enough to handle a variety of PCB types may find it difficult to keep up with the changing demands of the electronics sector. Market need for specialty PCBs, including flexible, rigid-flex, or high-density boards, may cause machines with fewer functions to lose appeal. Because numerous machines are required to handle different types of PCBs, manufacturers who use rigid exposure equipment may have to pay higher manufacturing expenses.

#### Opportunity:

##### Rising demand for electronics

The need for cutting-edge and technologically complex electronic gadgets means that complex, high-density circuitry PCBs are required. Superior precision and accuracy double-sided exposure machines are essential for creating these sophisticated printed circuit boards (PCBs) needed for state-of-the-art electronics. Exposure machine manufacturers are always improving their equipment to satisfy the demands of creating PCBs with cutting-edge technology. These enhancements meet the changing needs of intricate PCB designs and include enhanced alignment capabilities, higher-resolution images, and configurable exposure settings which drive the growth of the market.

#### Threat:

##### Rapid technological changes

Exposure devices may quickly become obsolete because to the swift rate of technical improvements in PCB production. Rapid technological advancements can make machinery obsolete, making it difficult for it to satisfy changing industry requirements or stay competitive. Exposure machine manufacturers and users may incur increased expenditures as a result of having to repair or upgrade their equipment frequently in order to stay up with technological improvements. Budgets may be strained by ongoing modifications to meet new imaging methods, resolution requirements, or material specifications.

#### Covid-19 Impact

The economic downturn and uncertainty brought on by the pandemic decreased demand for electrical gadgets, which in turn decreased demand for PCBs. Financial limitations and market concerns caused several businesses to delay or reduce their expenditures in new equipment, including double-sided exposure machines. The manufacture and transportation of equipment required in PCB fabrication, such as exposure machines, were impacted by the interruptions to the worldwide supply chain brought about by travel restrictions, lockdowns, and plant closures.

The fully automatic segment is expected to be the largest during the forecast period

The fully automatic segment is estimated to have a lucrative growth, owing to increase productivity by reducing human involvement. This trend is complemented by fully automatic exposure equipment, which provide increased throughput, shorter production cycle times, and better overall operational efficiency. Fully automatic equipment is becoming more and more popular in PCB production as efficiency, quality, and cost-effectiveness become more important considerations. Consequently, there is an increasing market need for these sophisticated exposure equipment.

The printed board pretreatment segment is expected to have the highest CAGR during the forecast period

The printed board pretreatment segment is anticipated to witness the highest CAGR growth during the forecast period, as in order to guarantee that the PCB surface is free of impurities, oxidation, and undesirable residues, PCB pretreatment entails cleaning, etching, and surface preparation procedures. The quality of image during exposure is improved and photoresist materials adhere better to clean, thoroughly treated surfaces. Manufacturers are looking for integrated solutions that include exposure and pretreatment capabilities which enhances the growth of the market.

Region with largest share:

Asia Pacific is projected to hold the largest market share during the forecast period because for a number of industries, including consumer electronics, automobiles, telecommunications, and industrial equipment, Asia Pacific is a crucial hub for production. Advanced exposure equipment is necessary because of the increased demand for PCBs in these industries. Exposure machines that can handle a variety of PCB types are required because to the growing demand for innovative PCBs, including flexible, rigid-flex, and high-density boards.

### Region with highest CAGR:

Europe is projected to have the highest CAGR over the forecast period, owing to numerous top semiconductor and PCB firms that require advanced production equipment are located in the region. Modern exposure machines are necessary to fulfill market needs and remain competitive, and this concentration of major industry participants is what drives this demand. Innovation in PCB manufacturing technology is fostered by ongoing R&D expenditures made by businesses and government agencies. This involves improvements in exposure equipment to increase productivity, flexibility, and efficiency in order to meet changing industry standards.

### Key players in the market

Some of the key players profiled in the Printed Circuit Board (PCB) Double-Sided Exposure Machine Market include Bungard, KLA Corporation, Ambala Electronic Instruments, Dalesway Print Technology, Ushio Lighting, ORC Manufacturing Vertriebs, Beijing Golden Eagle Electronic Equipments, Jianhuagaoke (CETC), Electronic Equipment, Changsha Suny Electronic Technology, Guangdong KST Optical, Csun, U-GREAT, Mega Electronic, SEIMYUNG VACTRON and Kexin Electron

### Key Developments:

In May 2023, KLA and IMEC announce MOU to advance the electrification of the automotive industry. The initiative builds on over 25 years of collaboration between imec and KLA.

In November 2022, Ushio America, Inc. proudly introduces the Theia™ series, a combined illuminator and video processor system for research and original equipment manufacturers (OEMs) in microendoscopy applications.

In August 2021, Ushio America, Inc. introduces a new method to visually detect Far UV-C light. Dose222™ Indicator Cards are cost effective and easy to use to visually verify surfaces or areas that are receiving Far UV-C light exposure within the expected dosage range.

### Types Covered:

Fully Automatic

Semi Automatic

Manual

Other Types

Applications Covered:

Post-Exposure

Printed Board Pretreatment

Chemical Copper Plating

Other Applications

End Users Covered:

Consumer Electronics

Telecommunications

Medical Devices

Aerospace & Defense

Renewable Energy

Other End Users

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

Market share assessments for the regional and country-level segments

Strategic recommendations for the new entrants

Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2032 and 2034

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

Strategic recommendations in key business segments based on the market estimations

Competitive landscaping mapping the key common trends

Company profiling with detailed strategies, financials, and recent developments

Supply chain trends mapping the latest technological advancements

## Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

### Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

### Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

### Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

## Contents

### **1 EXECUTIVE SUMMARY**

### **2 PREFACE**

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
  - 2.4.1 Data Mining
  - 2.4.2 Data Analysis
  - 2.4.3 Data Validation
  - 2.4.4 Research Approach
- 2.5 Research Sources
  - 2.5.1 Primary Research Sources
  - 2.5.2 Secondary Research Sources
  - 2.5.3 Assumptions

### **3 MARKET TREND ANALYSIS**

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Application Analysis
- 3.7 End User Analysis
- 3.8 Emerging Markets
- 3.9 Impact of Covid-19

### **4 PORTERS FIVE FORCE ANALYSIS**

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

## **5 GLOBAL PCB DOUBLE-SIDED EXPOSURE MACHINE MARKET, BY TYPE**

- 5.1 Introduction
- 5.2 Fully Automatic
- 5.3 Semi Automatic
- 5.4 Manual
- 5.5 Other Types

## **6 GLOBAL PCB DOUBLE-SIDED EXPOSURE MACHINE MARKET, BY APPLICATION**

- 6.1 Introduction
- 6.2 Post-Exposure
- 6.3 Printed Board Pretreatment
- 6.4 Chemical Copper Plating
- 6.5 Other Applications

## **7 GLOBAL PCB DOUBLE-SIDED EXPOSURE MACHINE MARKET, BY END USER**

- 7.1 Introduction
- 7.2 Consumer Electronics
- 7.3 Telecommunications
- 7.4 Medical Devices
- 7.5 Aerospace & Defense
- 7.6 Renewable Energy
- 7.7 Other End Users

## **8 GLOBAL PCB DOUBLE-SIDED EXPOSURE MACHINE MARKET, BY GEOGRAPHY**

- 8.1 Introduction
- 8.2 North America
  - 8.2.1 US
  - 8.2.2 Canada
  - 8.2.3 Mexico
- 8.3 Europe
  - 8.3.1 Germany
  - 8.3.2 UK
  - 8.3.3 Italy

- 8.3.4 France
- 8.3.5 Spain
- 8.3.6 Rest of Europe
- 8.4 Asia Pacific
  - 8.4.1 Japan
  - 8.4.2 China
  - 8.4.3 India
  - 8.4.4 Australia
  - 8.4.5 New Zealand
  - 8.4.6 South Korea
  - 8.4.7 Rest of Asia Pacific
- 8.5 South America
  - 8.5.1 Argentina
  - 8.5.2 Brazil
  - 8.5.3 Chile
  - 8.5.4 Rest of South America
- 8.6 Middle East & Africa
  - 8.6.1 Saudi Arabia
  - 8.6.2 UAE
  - 8.6.3 Qatar
  - 8.6.4 South Africa
  - 8.6.5 Rest of Middle East & Africa

## **9 KEY DEVELOPMENTS**

- 9.1 Agreements, Partnerships, Collaborations and Joint Ventures
- 9.2 Acquisitions & Mergers
- 9.3 New Product Launch
- 9.4 Expansions
- 9.5 Other Key Strategies

## **13 COMPANY PROFILING**

- 10.1 Bungard
- 10.2 KLA Corporation
- 10.3 Ambala Electronic Instruments
- 10.4 Dalesway Print Technology
- 10.5 Ushio Lighting
- 10.6 ORC Manufacturing Vertriebs

- 10.7 Beijing Golden Eagle Electronic Equipments
- 10.8 Jianhuagaoke (CETC)
- 10.9 Electronic Equipment
- 10.10 Changsha Suny Electronic Technology
- 10.11 Guangdong KST Optical
- 10.12 Csun
- 10.13 U-GREAT
- 10.14 Mega Electronic
- 10.15 SEIMYUNG VACTRON
- 10.16 Kexin Electron

## List Of Tables

### LIST OF TABLES

Table 1 Global PCB Double-Sided Exposure Machine Market Outlook, By Region (2023–2034) (\$MN)

Table 2 Global PCB Double-Sided Exposure Machine Market Outlook, By Type (2023–2034) (\$MN)

Table 3 Global PCB Double-Sided Exposure Machine Market Outlook, By Fully Automatic (2023–2034) (\$MN)

Table 4 Global PCB Double-Sided Exposure Machine Market Outlook, By Semi Automatic (2023–2034) (\$MN)

Table 5 Global PCB Double-Sided Exposure Machine Market Outlook, By Manual (2023–2034) (\$MN)

Table 6 Global PCB Double-Sided Exposure Machine Market Outlook, By Other Types (2023–2034) (\$MN)

Table 7 Global PCB Double-Sided Exposure Machine Market Outlook, By Application (2023–2034) (\$MN)

Table 8 Global PCB Double-Sided Exposure Machine Market Outlook, By Post-Exposure (2023–2034) (\$MN)

Table 9 Global PCB Double-Sided Exposure Machine Market Outlook, By Printed Board Pretreatment (2023–2034) (\$MN)

Table 10 Global PCB Double-Sided Exposure Machine Market Outlook, By Chemical Copper Plating (2023–2034) (\$MN)

Table 11 Global PCB Double-Sided Exposure Machine Market Outlook, By Other Applications (2023–2034) (\$MN)

Table 12 Global PCB Double-Sided Exposure Machine Market Outlook, By End User (2023–2034) (\$MN)

Table 13 Global PCB Double-Sided Exposure Machine Market Outlook, By Consumer Electronics (2023–2034) (\$MN)

Table 14 Global PCB Double-Sided Exposure Machine Market Outlook, By Telecommunications (2023–2034) (\$MN)

Table 15 Global PCB Double-Sided Exposure Machine Market Outlook, By Medical Devices (2023–2034) (\$MN)

Table 16 Global PCB Double-Sided Exposure Machine Market Outlook, By Aerospace & Defense (2023–2034) (\$MN)

Table 17 Global PCB Double-Sided Exposure Machine Market Outlook, By Renewable Energy (2023–2034) (\$MN)

Table 18 Global PCB Double-Sided Exposure Machine Market Outlook, By Other End

Users (2023–2034) (\$MN)

Table 19 North America PCB Double-Sided Exposure Machine Market Outlook, By Country (2023–2034) (\$MN)

Table 20 North America PCB Double-Sided Exposure Machine Market Outlook, By Type (2023–2034) (\$MN)

Table 21 North America PCB Double-Sided Exposure Machine Market Outlook, By Fully Automatic (2023–2034) (\$MN)

Table 22 North America PCB Double-Sided Exposure Machine Market Outlook, By Semi Automatic (2023–2034) (\$MN)

Table 23 North America PCB Double-Sided Exposure Machine Market Outlook, By Manual (2023–2034) (\$MN)

Table 24 North America PCB Double-Sided Exposure Machine Market Outlook, By Other Types (2023–2034) (\$MN)

Table 25 North America PCB Double-Sided Exposure Machine Market Outlook, By Application (2023–2034) (\$MN)

Table 26 North America PCB Double-Sided Exposure Machine Market Outlook, By Post-Exposure (2023–2034) (\$MN)

Table 27 North America PCB Double-Sided Exposure Machine Market Outlook, By Printed Board Pretreatment (2023–2034) (\$MN)

Table 28 North America PCB Double-Sided Exposure Machine Market Outlook, By Chemical Copper Plating (2023–2034) (\$MN)

Table 29 North America PCB Double-Sided Exposure Machine Market Outlook, By Other Applications (2023–2034) (\$MN)

Table 30 North America PCB Double-Sided Exposure Machine Market Outlook, By End User (2023–2034) (\$MN)

Table 31 North America PCB Double-Sided Exposure Machine Market Outlook, By Consumer Electronics (2023–2034) (\$MN)

Table 32 North America PCB Double-Sided Exposure Machine Market Outlook, By Telecommunications (2023–2034) (\$MN)

Table 33 North America PCB Double-Sided Exposure Machine Market Outlook, By Medical Devices (2023–2034) (\$MN)

Table 34 North America PCB Double-Sided Exposure Machine Market Outlook, By Aerospace & Defense (2023–2034) (\$MN)

Table 35 North America PCB Double-Sided Exposure Machine Market Outlook, By Renewable Energy (2023–2034) (\$MN)

Table 36 North America PCB Double-Sided Exposure Machine Market Outlook, By Other End Users (2023–2034) (\$MN)

Table 37 Europe PCB Double-Sided Exposure Machine Market Outlook, By Country (2023–2034) (\$MN)

Table 38 Europe PCB Double-Sided Exposure Machine Market Outlook, By Type (2023–2034) (\$MN)

Table 39 Europe PCB Double-Sided Exposure Machine Market Outlook, By Fully Automatic (2023–2034) (\$MN)

Table 40 Europe PCB Double-Sided Exposure Machine Market Outlook, By Semi Automatic (2023–2034) (\$MN)

Table 41 Europe PCB Double-Sided Exposure Machine Market Outlook, By Manual (2023–2034) (\$MN)

Table 42 Europe PCB Double-Sided Exposure Machine Market Outlook, By Other Types (2023–2034) (\$MN)

Table 43 Europe PCB Double-Sided Exposure Machine Market Outlook, By Application (2023–2034) (\$MN)

Table 44 Europe PCB Double-Sided Exposure Machine Market Outlook, By Post-Exposure (2023–2034) (\$MN)

Table 45 Europe PCB Double-Sided Exposure Machine Market Outlook, By Printed Board Pretreatment (2023–2034) (\$MN)

Table 46 Europe PCB Double-Sided Exposure Machine Market Outlook, By Chemical Copper Plating (2023–2034) (\$MN)

Table 47 Europe PCB Double-Sided Exposure Machine Market Outlook, By Other Applications (2023–2034) (\$MN)

Table 48 Europe PCB Double-Sided Exposure Machine Market Outlook, By End User (2023–2034) (\$MN)

Table 49 Europe PCB Double-Sided Exposure Machine Market Outlook, By Consumer Electronics (2023–2034) (\$MN)

Table 50 Europe PCB Double-Sided Exposure Machine Market Outlook, By Telecommunications (2023–2034) (\$MN)

Table 51 Europe PCB Double-Sided Exposure Machine Market Outlook, By Medical Devices (2023–2034) (\$MN)

Table 52 Europe PCB Double-Sided Exposure Machine Market Outlook, By Aerospace & Defense (2023–2034) (\$MN)

Table 53 Europe PCB Double-Sided Exposure Machine Market Outlook, By Renewable Energy (2023–2034) (\$MN)

Table 54 Europe PCB Double-Sided Exposure Machine Market Outlook, By Other End Users (2023–2034) (\$MN)

Table 55 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Country (2023–2034) (\$MN)

Table 56 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Type (2023–2034) (\$MN)

Table 57 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Fully

Automatic (2023–2034) (\$MN)

Table 58 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Semi Automatic (2023–2034) (\$MN)

Table 59 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Manual (2023–2034) (\$MN)

Table 60 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Other Types (2023–2034) (\$MN)

Table 61 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Application (2023–2034) (\$MN)

Table 62 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Post-Exposure (2023–2034) (\$MN)

Table 63 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Printed Board Pretreatment (2023–2034) (\$MN)

Table 64 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Chemical Copper Plating (2023–2034) (\$MN)

Table 65 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Other Applications (2023–2034) (\$MN)

Table 66 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By End User (2023–2034) (\$MN)

Table 67 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Consumer Electronics (2023–2034) (\$MN)

Table 68 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Telecommunications (2023–2034) (\$MN)

Table 69 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Medical Devices (2023–2034) (\$MN)

Table 70 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Aerospace & Defense (2023–2034) (\$MN)

Table 71 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Renewable Energy (2023–2034) (\$MN)

Table 72 Asia Pacific PCB Double-Sided Exposure Machine Market Outlook, By Other End Users (2023–2034) (\$MN)

Table 73 South America PCB Double-Sided Exposure Machine Market Outlook, By Country (2023–2034) (\$MN)

Table 74 South America PCB Double-Sided Exposure Machine Market Outlook, By Type (2023–2034) (\$MN)

Table 75 South America PCB Double-Sided Exposure Machine Market Outlook, By Fully Automatic (2023–2034) (\$MN)

Table 76 South America PCB Double-Sided Exposure Machine Market Outlook, By Semi Automatic (2023–2034) (\$MN)

Table 77 South America PCB Double-Sided Exposure Machine Market Outlook, By Manual (2023–2034) (\$MN)

Table 78 South America PCB Double-Sided Exposure Machine Market Outlook, By Other Types (2023–2034) (\$MN)

Table 79 South America PCB Double-Sided Exposure Machine Market Outlook, By Application (2023–2034) (\$MN)

Table 80 South America PCB Double-Sided Exposure Machine Market Outlook, By Post-Exposure (2023–2034) (\$MN)

Table 81 South America PCB Double-Sided Exposure Machine Market Outlook, By Printed Board Pretreatment (2023–2034) (\$MN)

Table 82 South America PCB Double-Sided Exposure Machine Market Outlook, By Chemical Copper Plating (2023–2034) (\$MN)

Table 83 South America PCB Double-Sided Exposure Machine Market Outlook, By Other Applications (2023–2034) (\$MN)

Table 84 South America PCB Double-Sided Exposure Machine Market Outlook, By End User (2023–2034) (\$MN)

Table 85 South America PCB Double-Sided Exposure Machine Market Outlook, By Consumer Electronics (2023–2034) (\$MN)

Table 86 South America PCB Double-Sided Exposure Machine Market Outlook, By Telecommunications (2023–2034) (\$MN)

Table 87 South America PCB Double-Sided Exposure Machine Market Outlook, By Medical Devices (2023–2034) (\$MN)

Table 88 South America PCB Double-Sided Exposure Machine Market Outlook, By Aerospace & Defense (2023–2034) (\$MN)

Table 89 South America PCB Double-Sided Exposure Machine Market Outlook, By Renewable Energy (2023–2034) (\$MN)

Table 90 South America PCB Double-Sided Exposure Machine Market Outlook, By Other End Users (2023–2034) (\$MN)

Table 91 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook, By Country (2023–2034) (\$MN)

Table 92 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook, By Type (2023–2034) (\$MN)

Table 93 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook, By Fully Automatic (2023–2034) (\$MN)

Table 94 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook, By Semi Automatic (2023–2034) (\$MN)

Table 95 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook, By Manual (2023–2034) (\$MN)

Table 96 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook,

By Other Types (2023–2034) (\$MN)

Table 97 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook,  
By Application (2023–2034) (\$MN)

Table 98 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook,  
By Post-Exposure (2023–2034) (\$MN)

Table 99 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook,  
By Printed Board Pretreatment (2023–2034) (\$MN)

Table 100 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook,  
By Chemical Copper Plating (2023–2034) (\$MN)

Table 101 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook,  
By Other Applications (2023–2034) (\$MN)

Table 102 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook,  
By End User (2023–2034) (\$MN)

Table 103 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook,  
By Consumer Electronics (2023–2034) (\$MN)

Table 104 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook,  
By Telecommunications (2023–2034) (\$MN)

Table 105 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook,  
By Medical Devices (2023–2034) (\$MN)

Table 106 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook,  
By Aerospace & Defense (2023–2034) (\$MN)

Table 107 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook,  
By Renewable Energy (2023–2034) (\$MN)

Table 108 Middle East & Africa PCB Double-Sided Exposure Machine Market Outlook,  
By Other End Users (2023–2034) (\$MN)

## I would like to order

Product name: PCB Double-Sided Exposure Machine Market Forecasts to 2034 – Global Analysis By Type (Fully Automatic, Semi Automatic, Manual and Other Types), Application, End User and By Geography

Product link: <https://marketpublishers.com/r/P35F7C79F537EN.html>

Price: US\$ 4,150.00 (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/P35F7C79F537EN.html>