

# **Field Programmable Gate Array Market–Global Industry Size, Share, Trends, Opportunity, and Forecast, 2018-2028 Segmented By Technology (Flash, SRAM, Antifuse, EEPROM, and Others), By Application (3G, 4G, LTE, and WiMAX), By Configuration (Low-end FPGA, Mid-range FPGA, and High-end FPGA), By Vertical (IT and Telecommunication, Consumer Electronics, Automotive, Industrial, Military and Aerospace, and Other End-user Industries) By Region, Competition**

<https://marketpublishers.com/r/F780F69B2DE5EN.html>

Date: September 2023

Pages: 181

Price: US\$ 4,900.00 (Single User License)

ID: F780F69B2DE5EN

## **Abstracts**

Global Field Programmable Gate Array Market is anticipated to grow at a robust pace in the forecast period, 2024-2028 owing to the rise of the growing use of programmable gate arrays in numerous sectors and the development of low-cost devices with distinct properties. The Field-Programmable Gate Array (FPGA) Market is widely employed in mainstream embedded computing to develop complicated mission-critical systems. The Global Field-Programmable Gate Array (FPGA) Market study offers a comprehensive market analysis. It also enables users to design bespoke circuits using a programmable logic element organised in various combinations. Modern FPGA devices include memory blocks, programmable I/O, reprogrammable components, CPU cores, and other hardened blocks that do not require programming.

The Field Programmable Gate Array (FPGA) is a type of programmable logic device that has firmware that allows it to be configured internally. When FPGA is attached to a circuit, its functionalities are changeable or reprogrammable as needed. The increasing

emphasis on security, inspection, and network processing, among other things, is boosting demand for field programmable gate arrays. Furthermore, its widespread application in technologies like as the Internet of Things (IoT), artificial intelligence, cloud computing, and data centers, etc. is projected to drive market expansion. Similarly, fast advances in consumer electronics are expected to fuel FPGA demand. FPGA is also being used in the military and aerospace sectors for secure communication, image processing, data processing, and other applications. These are the market-driving elements for Field Programmable Gate Array.

### Rising SRAM Demand to Supplement the Growth of the Field Programmable Gate Array Industry

Because of its increased adaptability, reprogram ability, high integration, and excellent performance for a wide range of applications, static random-access memory (SRAM) generated the greatest income. The broad usage of SRAM-based FPGAs in military and aerospace, telecommunications and wireless communication networks, and consumer goods has propelled the industry ahead. Anti-fuse FPGAs, on the other hand, are more dependable than SRAM-based arrays, especially in radiation-prone areas. The anti-fuse category is expected to grow rapidly during the projection period due to their faster boot time and higher dependability.

Because SRAM-based FPGAs are inherently volatile and require a dedicated power source to store data, industry experts are continually seeking to develop revolutionary SRAM memory technologies to simplify and overcome this difficulty.

### Demand of augmented Integrated circuit will boost the FPGA market

The rising need for customised integrated circuits will move the sector forward in the coming years. The FPGA technology is developing, and the turnaround time is lowering as the cost spent is lower than the ASIC, and the power consumption is reduced. In comparison to ASICs, FPGAs are more versatile since they may be changed after the circuit has been developed and executed. This will be an important driver in the coming years, as FPGAs enable designers to update their designs after the final product has been deployed.

### Increasing Adoption of FPGA

The increased usage of FPGAs in the form of IaaS resources for cloud consumers will boost the market's growth. Many cloud service providers are implementing FPGAs,

which is propelling the market forward. Many cloud service providers will utilise field programming gate arrays to accelerate service-oriented operations such as network encryption, memory caching, deep learning, web page ranking, high frequency trading, and video conversion. This is another key factor responsible for the growth of the Field Programmable Gate Array Market.

## Market Segmentation

Global Field Programmable Gate Array Market is segmented by Technology, Application, Configuration, and by Vertical. Based on Technology, the market is segmented into Flash, SRAM, Antifuse, EEPROM, and Others. Based on Application, the it is segmented into 3G, 4G, LTE, and WiMAX. By Configuration, into Low-end FPGA, Mid-range FPGA, and High-end FPGA), and by Vertical into IT & Telecommunication, Consumer Electronics, Automotive, Industrial, Military & Aerospace, and Other End-user Industries).

## Market player

Major market players in the Global Field Programmable Gate Array Market are Xilinx Inc, Intel Corporation, Infineon Technologies AG, Lattice Semiconductor Corporation, Quicklogic Corporation, Achronix Semiconductor Corporation, Efinix Inc, Gowin Semiconductor Corporation, Texas Instruments Incorporated, Teledyne Technologies Incorporated.

## Report Scope:

In this report, the Global Field Programmable Gate Array Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

### Field Programmable Gate Array Market, By Technology:

Flash

SRAM

Antifuse

EEPROM

Others

Field Programmable Gate Array Market, By Application:

3G

4G

LTE

WiMax

Field Programmable Gate Array Market, By Configuration:

Low-end FPGA

Mid-range FPGA

High-end FPGA

Field Programmable Gate Array Market, By Vertical:

IT and Telecommunication

Consumer Electronics

Automotive

Industrial

Military and Aerospace

Other End-user Industries

Field Programmable Gate Array Market, By Region:

North America

United States

Canada

Mexico

Asia-Pacific

China

India

Japan

South Korea

Australia

Singapore

Malaysia

Europe

Germany

United Kingdom

France

Russia

Switzerland

Belgium

Italy

South America

Brazil

Argentina

Colombia

Peru

Chile

Middle East & Africa

Saudi Arabia

South Africa

UAE

Israel

Turkey

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global Field Programmable Gate Array Market.

Available Customizations:

Global Field Programmable Gate Array Market report with the given market data, Tech Sci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

## Contents

1. Service Overview

## 2. RESEARCH METHODOLOGY

## 3. IMPACT OF COVID-19 ON GLOBAL FIELD PROGRAMMABLE GATE ARRAY MARKET

## 4. EXECUTIVE SUMMARY

## 5. VOICE OF CUSTOMERS

## 6. GLOBAL FIELD PROGRAMMABLE GATE ARRAY MARKET OUTLOOK

6.1. Market Size & Forecast

6.1.1. By Value

6.2. Market Share & Forecast

6.2.1. By Technology (Flash, SRAM, Antifuse, EEPROM and Others)

6.2.2. By Application (3G, 4G, LTEs and WiMax)

6.2.3. By Configuration (Low-end FPGA, Mid-range FPGA, High-end FPGA)

6.2.4. By Vertical (IT and Telecommunication, Consumer Electronics, Automotive, Industrial, Military and Aerospace, Other End-user Industries)

6.2.5. By Region

6.3. By Company (2022)

6.4. Market Map

## 7. NORTH AMERICA FIELD PROGRAMMABLE GATE ARRAY MARKET OUTLOOK

7.1. Market Size & Forecast

7.1.1. By Value

7.2. Market Share & Forecast

7.2.1. By Technology

7.2.2. By Application

7.2.3. By Configuration

7.2.4. By Vertical

7.2.5. By Country

### 7.3. North America: Country Analysis

#### 7.3.1. United States Field Programmable Gate Array Market Outlook

##### 7.3.1.1. Market Size & Forecast

###### 7.3.1.1.1. By Value

##### 7.3.1.2. Market Share & Forecast

###### 7.3.1.2.1. By Technology

###### 7.3.1.2.2. By Application

###### 7.3.1.2.3. By Configuration

###### 7.3.1.2.4. By Vertical

#### 7.3.2. Canada Field Programmable Gate Array Market Outlook

##### 7.3.2.1. Market Size & Forecast

###### 7.3.2.1.1. By Value

##### 7.3.2.2. Market Share & Forecast

###### 7.3.2.2.1. By Technology

###### 7.3.2.2.2. By Application

###### 7.3.2.2.3. By Configuration

###### 7.3.2.2.4. By Vertical

#### 7.3.3. Mexico Field Programmable Gate Array Market Outlook

##### 7.3.3.1. Market Size & Forecast

###### 7.3.3.1.1. By Value

##### 7.3.3.2. Market Share & Forecast

###### 7.3.3.2.1. By Technology

###### 7.3.3.2.2. By Application

###### 7.3.3.2.3. By Configuration

###### 7.3.3.2.4. By Vertical

## 8. ASIA-PACIFIC FIELD PROGRAMMABLE GATE ARRAY MARKET OUTLOOK

### 8.1. Market Size & Forecast

#### 8.1.1. By Value

### 8.2. Market Share & Forecast

#### 8.2.1. By Technology

#### 8.2.2. By Application

#### 8.2.3. By Configuration

#### 8.2.4. By Vertical

#### 8.2.5. By Country

### 8.3. Asia-Pacific: Country Analysis



- 8.3.1. China Field Programmable Gate Array Market Outlook
  - 8.3.1.1. Market Size & Forecast
    - 8.3.1.1.1. By Value
  - 8.3.1.2. Market Share & Forecast
    - 8.3.1.2.1. By Technology
    - 8.3.1.2.2. By Application
    - 8.3.1.2.3. By Configuration
    - 8.3.1.2.4. By Vertical
- 8.3.2. India Field Programmable Gate Array Market Outlook
  - 8.3.2.1. Market Size & Forecast
    - 8.3.2.1.1. By Value
  - 8.3.2.2. Market Share & Forecast
    - 8.3.2.2.1. By Technology
    - 8.3.2.2.2. By Application
    - 8.3.2.2.3. By Configuration
    - 8.3.2.2.4. By Vertical
- 8.3.3. Japan Field Programmable Gate Array Market Outlook
  - 8.3.3.1. Market Size & Forecast
    - 8.3.3.1.1. By Value
  - 8.3.3.2. Market Share & Forecast
    - 8.3.3.2.1. By Technology
    - 8.3.3.2.2. By Application
    - 8.3.3.2.3. By Configuration
    - 8.3.3.2.4. By Vertical
- 8.3.4. South Korea Field Programmable Gate Array Market Outlook
  - 8.3.4.1. Market Size & Forecast
    - 8.3.4.1.1. By Value
  - 8.3.4.2. Market Share & Forecast
    - 8.3.4.2.1. By Technology
    - 8.3.4.2.2. By Application
    - 8.3.4.2.3. By Configuration
    - 8.3.4.2.4. By Vertical
- 8.3.5. Australia Field Programmable Gate Array Market Outlook
  - 8.3.5.1. Market Size & Forecast
    - 8.3.5.1.1. By Value
  - 8.3.5.2. Market Share & Forecast
    - 8.3.5.2.1. By Technology
    - 8.3.5.2.2. By Application
    - 8.3.5.2.3. By Configuration

- 8.3.5.2.4. By Vertical
- 8.3.6. Singapore Field Programmable Gate Array Market Outlook
  - 8.3.6.1. Market Size & Forecast
    - 8.3.6.1.1. By Value
  - 8.3.6.2. Market Share & Forecast
    - 8.3.6.2.1. By Technology
    - 8.3.6.2.2. By Application
    - 8.3.6.2.3. By Configuration
    - 8.3.6.2.4. By Vertical
- 8.3.7. Malaysia Field Programmable Gate Array Market Outlook
  - 8.3.7.1. Market Size & Forecast
    - 8.3.7.1.1. By Value
  - 8.3.7.2. Market Share & Forecast
    - 8.3.7.2.1. By Technology
    - 8.3.7.2.2. By Application
    - 8.3.7.2.3. By Configuration
    - 8.3.7.2.4. By Vertical

## **9. EUROPE FIELD PROGRAMMABLE GATE ARRAY MARKET OUTLOOK**

- 9.1. Market Size & Forecast
  - 9.1.1. By Value
- 9.2. Market Share & Forecast
  - 9.2.1. By Technology
  - 9.2.2. By Application
  - 9.2.3. By Configuration
  - 9.2.4. By Vertical
- 9.3. Europe: Country Analysis
  - 9.3.1. Germany Field Programmable Gate Array Market Outlook
    - 9.3.1.1. Market Size & Forecast
      - 9.3.1.1.1. By Value
    - 9.3.1.2. Market Share & Forecast
      - 9.3.1.2.1. By Technology
      - 9.3.1.2.2. By Application
      - 9.3.1.2.3. By Configuration
      - 9.3.1.2.4. By Vertical
  - 9.3.2. United Kingdom Field Programmable Gate Array Market Outlook
    - 9.3.2.1. Market Size & Forecast
      - 9.3.2.1.1. By Value

- 9.3.2.2. Market Share & Forecast
  - 9.3.2.2.1. By Technology
  - 9.3.2.2.2. By Application
  - 9.3.2.2.3. By Configuration
  - 9.3.2.2.4. By Vertical
- 9.3.3. France Field Programmable Gate Array Market Outlook
  - 9.3.3.1. Market Size & Forecast
    - 9.3.3.1.1. By Value
  - 9.3.3.2. Market Share & Forecast
    - 9.3.3.2.1. By Technology
    - 9.3.3.2.2. By Application
    - 9.3.3.2.3. By Configuration
    - 9.3.3.2.4. By Vertical
- 9.3.4. Russia Field Programmable Gate Array Market Outlook
  - 9.3.4.1. Market Size & Forecast
    - 9.3.4.1.1. By Value
  - 9.3.4.2. Market Share & Forecast
    - 9.3.4.2.1. By Technology
    - 9.3.4.2.2. By Application
    - 9.3.4.2.3. By Configuration
    - 9.3.4.2.4. By Vertical
- 9.3.5. Switzerland Field Programmable Gate Array Market Outlook
  - 9.3.5.1. Market Size & Forecast
    - 9.3.5.1.1. By Value
  - 9.3.5.2. Market Share & Forecast
    - 9.3.5.2.1. By Technology
    - 9.3.5.2.2. By Application
    - 9.3.5.2.3. By Configuration
    - 9.3.5.2.4. By Vertical
- 9.3.6. Belgium Field Programmable Gate Array Market Outlook
  - 9.3.6.1. Market Size & Forecast
    - 9.3.6.1.1. By Value
  - 9.3.6.2. Market Share & Forecast
    - 9.3.6.2.1. By Technology
    - 9.3.6.2.2. By Application
    - 9.3.6.2.3. By Configuration
    - 9.3.6.2.4. By Vertical
- 9.3.7. Italy Field Programmable Gate Array Market Outlook
  - 9.3.7.1. Market Size & Forecast

- 9.3.7.1.1. By Value
- 9.3.7.2. Market Share & Forecast
  - 9.3.7.2.1. By Technology
  - 9.3.7.2.2. By Application
  - 9.3.7.2.3. By Configuration
  - 9.3.7.2.4. By Vertical

## **10. SOUTH AMERICA FIELD PROGRAMMABLE GATE ARRAY MARKET OUTLOOK**

- 10.1. Market Size & Forecast
  - 10.1.1. By Value
- 10.2. Market Share & Forecast
  - 10.2.1. By Technology
  - 10.2.2. By Application
  - 10.2.3. By Configuration
  - 10.2.4. By Vertical
  - 10.2.5. By Country
- 10.3. South America: Country Analysis
  - 10.3.1. Brazil Field Programmable Gate Array Market Outlook
    - 10.3.1.1. Market Size & Forecast
      - 10.3.1.1.1. By Value
    - 10.3.1.2. Market Share & Forecast
      - 10.3.1.2.1. By Technology
      - 10.3.1.2.2. By Application
      - 10.3.1.2.3. By Configuration
      - 10.3.1.2.4. By Vertical
  - 10.3.2. Argentina Field Programmable Gate Array Market Outlook
    - 10.3.2.1. Market Size & Forecast
      - 10.3.2.1.1. By Value
    - 10.3.2.2. Market Share & Forecast
      - 10.3.2.2.1. By Technology
      - 10.3.2.2.2. By Application
      - 10.3.2.2.3. By Configuration
      - 10.3.2.2.4. By Vertical
  - 10.3.3. Colombia Field Programmable Gate Array Market Outlook
    - 10.3.3.1. Market Size & Forecast
      - 10.3.3.1.1. By Value
    - 10.3.3.2. Market Share & Forecast

- 10.3.3.2.1. By Technology
- 10.3.3.2.2. By Application
- 10.3.3.2.3. By Configuration
- 10.3.3.2.4. By Vertical
- 10.3.4. Peru Field Programmable Gate Array Market Outlook
  - 10.3.4.1. Market Size & Forecast
    - 10.3.4.1.1. By Value
  - 10.3.4.2. Market Share & Forecast
    - 10.3.4.2.1. By Technology
    - 10.3.4.2.2. By Application
    - 10.3.4.2.3. By Configuration
    - 10.3.4.2.4. By Vertical
- 10.3.5. Chile Field Programmable Gate Array Market Outlook
  - 10.3.5.1. Market Size & Forecast
    - 10.3.5.1.1. By Value
  - 10.3.5.2. Market Share & Forecast
    - 10.3.5.2.1. By Technology
    - 10.3.5.2.2. By Application
    - 10.3.5.2.3. By Configuration
    - 10.3.5.2.4. By Vertical

## **11. MIDDLE EAST & AFRICA FIELD PROGRAMMABLE GATE ARRAY MARKET OUTLOOK**

- 11.1. Market Size & Forecast
  - 11.1.1. By Value
- 11.2. Market Share & Forecast
  - 11.2.1. By Technology
  - 11.2.2. By Application
  - 11.2.3. By Configuration
  - 11.2.4. By Vertical
  - 11.2.5. By Country
- 11.3. Middle East & Africa: Country Analysis
  - 11.3.1. Saudi Arabia Field Programmable Gate Array Market Outlook
    - 11.3.1.1. Market Size & Forecast
      - 11.3.1.1.1. By Value
    - 11.3.1.2. Market Share & Forecast
      - 11.3.1.2.1. By Technology
      - 11.3.1.2.2. By Application

- 11.3.1.2.3. By Configuration
- 11.3.1.2.4. By Vertical
- 11.3.2. South Africa Field Programmable Gate Array Market Outlook
  - 11.3.2.1. Market Size & Forecast
    - 11.3.2.1.1. By Value
  - 11.3.2.2. Market Share & Forecast
    - 11.3.2.2.1. By Technology
    - 11.3.2.2.2. By Application
    - 11.3.2.2.3. By Configuration
    - 11.3.2.2.4. By Vertical
- 11.3.3. UAE Field Programmable Gate Array Market Outlook
  - 11.3.3.1. Market Size & Forecast
    - 11.3.3.1.1. By Value
  - 11.3.3.2. Market Share & Forecast
    - 11.3.3.2.1. By Technology
    - 11.3.3.2.2. By Application
    - 11.3.3.2.3. By Configuration
    - 11.3.3.2.4. By Vertical
- 11.3.4. Israel Field Programmable Gate Array Market Outlook
  - 11.3.4.1. Market Size & Forecast
    - 11.3.4.1.1. By Value
  - 11.3.4.2. Market Share & Forecast
    - 11.3.4.2.1. By Technology
    - 11.3.4.2.2. By Application
    - 11.3.4.2.3. By Configuration
    - 11.3.4.2.4. By Vertical
- 11.3.5. Turkey Field Programmable Gate Array Market Outlook
  - 11.3.5.1. Market Size & Forecast
    - 11.3.5.1.1. By Value
  - 11.3.5.2. Market Share & Forecast
    - 11.3.5.2.1. By Technology
    - 11.3.5.2.2. By Application
    - 11.3.5.2.3. By Configuration
    - 11.3.5.2.4. By Vertical

## **12. MARKET DYNAMICS**

### 12.1. Drivers

- 12.1.1. The FPGA industry is expected to be driven by rising demand for AI and IoT.

12.1.2. Worldwide demand for energy.

## 12.2. Challenges

12.2.1. The issue of excessive power usage will stymie market expansion.

12.2.2. Risks associated with new technologies

## 13. MARKET TRENDS & DEVELOPMENTS

13.1. Rising utilization is pushing embedded board limits in numerous directions.

13.2. Rising demand for high end applications.

13.3. Increased adoption of Field Programmable Gate Array in IT sector.

## 14. COMPANY PROFILES

### 14.1. Xilinx Inc

14.1.1. Business Overview

14.1.2. Key Revenue and Financials

14.1.3. Recent Developments

14.1.4. Key Personnel

14.1.5. Key Product/End-user Industry

### 14.2. Intel Corporation

14.2.1. Business Overview

14.2.2. Key Revenue and Financials

14.2.3. Recent Developments

14.2.4. Key Personnel

14.2.5. Key Product/Services

### 14.3. Infineon Technologies AG

14.3.1. Business Overview

14.3.2. Key Revenue and Financials

14.3.3. Recent Developments

14.3.4. Key Personnel

14.3.5. Key Product/Services

### 14.4. Lattice Semiconductor Corporation

14.4.1. Business Overview

14.4.2. Key Revenue and Financials

14.4.3. Recent Developments

14.4.4. Key Personnel

14.4.5. Key Product/Services

### 14.5. Quicklogic Corporation

14.5.1. Business Overview

- 14.5.2. Key Revenue and Financials
- 14.5.3. Recent Developments
- 14.5.4. Key Personnel
- 14.5.5. Key Product/Services
- 14.6. Achronix Semiconductor Corporation
  - 14.6.1. Business Overview
  - 14.6.2. Key Revenue and Financials
  - 14.6.3. Recent Developments
  - 14.6.4. Key Personnel
  - 14.6.5. Key Product/Services
- 14.7. Efinix Inc
  - 14.7.1. Business Overview
  - 14.7.2. Key Revenue and Financials
  - 14.7.3. Recent Developments
  - 14.7.4. Key Personnel
  - 14.7.5. Key Product/Services
- 14.8. GOWIN Semiconductor Corporation
  - 14.8.1. Business Overview
  - 14.8.2. Key Revenue and Financials
  - 14.8.3. Recent Developments
  - 14.8.4. Key Personnel
  - 14.8.5. Key Product/Services
- 14.9. Texas Instruments Incorporated
  - 14.9.1. Business Overview
  - 14.9.2. Key Revenue and Financials
  - 14.9.3. Recent Developments
  - 14.9.4. Key Personnel
  - 14.9.5. Key Product/Services
- 14.10. Teledyne Technologies Incorporated
  - 14.10.1. Business Overview
  - 14.10.2. Key Revenue and Financials
  - 14.10.3. Recent Developments
  - 14.10.4. Key Personnel
  - 14.10.5. Key Product/Services

## **15. STRATEGIC RECOMMENDATIONS**

## **16. ABOUT US & DISCLAIMER**



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