FPGA Market by Configuration (Low-end FPGA, Mid-range FPGA, High-end FPGA), Technology (SRAM, Flash, Antifuse), Node Size (=16 nm, 20-90 nm, >90 nm), Vertical (Telecommunications, Data Center & Computing, Automotive) and Region - Global Forecast to 2028

Market Report | 2023-07-13 | 315 pages | MarketsandMarkets

AVAILABLE LICENSES:

- Single User $4950.00
- Multi User $6650.00
- Corporate License $8150.00
- Enterprise Site License $10000.00

Report description:

The FPGA market is valued at USD 9.7 billion in 2023 and is projected to reach USD 19.1 billion by 2028, growing at a CAGR of 14.6% from 2023 to 2028. Increasing number of data centers and high-performance computing (HPC) is one of the major driving factors in the market.

"Market for low-end FPGA's to hold largest share during the forecast period."

Low-end FPGAs offers improved power efficiency and are designed to provide high performance while minimizing battery usage. By incorporating power-saving features and optimizing the use of hardware resources, low-end FPGAs offer effective processing and lower power consumption in various applications. Lattice Semiconductor specializes in low-end FPGA solutions that prioritize power efficiency. Its low-power FPGA families include the Lattice iCE40 and Lattice ECP families, designed for battery-operated systems, IoT, and portable devices.

"Market for SARM segment is expected to hold the largest share during the forecast period"

In SRAM-based FPGAs, each configuration bit has an associated SRAM cell. These FPGAs employ the latest complementary metal-oxide-semiconductor (CMOS) technology without requiring additional process steps. Companies offer SRAM technology-based FPGAs with and without internal flash memory. Key players providing SRAM FPGAs include Xilinx, Inc. (Advanced Micro Devices, Inc.) (US), Microchip Technology Inc. (US), GOWIN Semiconductor Corporation (China), Efinix, Inc. (US), and Intel Corporation (US).

"Market for telecommunication application segment to witness largest share during the forecast period"

The use of FPGAs in telecom and networking applications is growing rapidly and is expected to continue in the coming years.

These devices offer interfacing and control functionality, while IP integration for processing and common interface has increased the effectiveness of FPGAs. With advancements in silicon technology, the count of logic elements has also increased. Additionally, the telecommunications industry has seen significant progress due to the increasing number of internet users, resulting in a rise of network infrastructure providers and mobile network operators worldwide.
?
"North America is expected to have second-largest market size during the forecast period"
The FPGA market has seen an increase in growth due to the rise of data centers in North America. Countries such as the US, Canada, and Mexico have a high concentration of data centers where FPGAs are used to enhance their performance. With their capacity for high-speed data processing, FPGAs provide low-latency connections to storage systems and networks. Additionally, the deployment of new data centers in the region is expected to further boost demand for FPGAs.
In the process of determining and verifying the market size for several segments and subsegments gathered through secondary research, extensive primary interviews have been conducted with key industry experts in the FPGA space. The break-up of primary participants for the report has been shown below:
-□By Company Type: Tier 1 - 50%, Tier 2 - 30%, and Tier 3 - 20%
-□By Designation: C-level Executives - 10%, Directors -20%, and Others - 70%
-□By Region: North America -20%, Europe - 15%, Asia Pacific- 55%, and RoW - 10%
The report profiles key players in the FPGA market with their respective market ranking analysis. Prominent players profiled in this report are include Intel Corporation (US), Advanced Micro Devices (Xilinx, Inc.) (US), Microchip Technology Inc. (US), Achronix Semiconductor Corporation (US), and Lattice Semiconductor Corporation (US). Apart from these AGM Micro(China), Renesas Electronics Corporation (Japan), Shanghai Anlu Information Technology Co., Ltd. (China), Xi'an Zhiduojing Microelectronics Co., Ltd. (China), Shenzhen Ziguang Tongchuang Electronics Co., Ltd. (China), are among a few emerging companies in the FPGA market.
Report Coverage
The report defines, describes, and forecasts the FPGA market based on configuration, node size, technology, FPGA and eFPGA market size, vertical, and region. It provides detailed information regarding drivers, restraint, opportunities, and challenges influencing the growth of FPGA market. It also analyzes competitive developments such as product launches, acquisition, collaboration, partnership, and action carries out by the key players to grow the market.
Reasons to Buy This Report
The report will help the market leaders/new entrants in the market with information on the closest approximations of the revenue for the overall FPGA market and the subsegments. The report will help stakeholders understand the competitive landscape and gain more insight to position their business better and plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provide them information on key drivers, restraint, opportunities, and challenge.
The report will provide insights to following pointers:
-□Analysis of key drivers (Increasing adoption of AI and IoT technologies), opportunities (Rising demand for FPGAs in high bandwidth devices) and challenges (Lack of improved and standardized verification techniques) of the FPGA market.
-□Product development /Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the FPGA market.
-□Market Development: Comprehensive information about lucrative markets, the report analyses the FPGA market across various regions.
-□Market Diversification: Exhaustive information about new product & services, untapping geographies, recent developments, and investments in the FPGA market.
-□Competitive Assessment: In depth assessment of market share, growth strategies, and services, offering of leading players like Intel Corporation (US), Advanced Micro Devices (Xilinx, Inc.) (US), Lattice Semiconductor Corporation (US), Microchip Technology Inc. (US), Achronix Semiconductor Corporation (US), among others in FPGA market.

Table of Contents:

FPGA Market by Configuration (Low-end FPGA, Mid-range FPGA, High-end FPGA), Technology (SRAM, Flash, Antifuse), Node Size (=16 nm, 20-90 nm, >90 nm), Vertical (Telecommunications, Data Center & Computing, Automotive) and Region - Global Forecast to 2028

Market Report | 2023-07-13 | 315 pages | MarketsandMarkets

To place an Order with Scotts International:

- - Print this form
- - Complete the relevant blank fields and sign
- - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User	$4950.00
	Multi User	$6650.00
	Corporate License	$8150.00
	Enterprise Site License	$10000.00
	VAT	
	Total	

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*		Phone*	
First Name*		Last Name*	
Job title*			
Company Name*		EU Vat / Tax ID / NIP number*	
Address*		City*	

Zip Code*		Country*	
		Date	2026-03-11
		Signature	