

# Field Programmable Gate Array Market Size, Share & Trends Analysis Report By Technology (SRAM, Antifuse, Flash), By Application (Military & Aerospace, Telecom), By Region, And Segment Forecasts, 2020 - 2027

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## Abstracts

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The global field programmable gate array market size is anticipated to reach USD 18.8 billion by 2027, registering a CAGR of 9.7% over the forecast period, according to a new report by Grand View Research, Inc. The increased adoption of field programmable gate array (FPGA) across networking, data center, and Internet of Things (IoT) is projected to drive the industry growth over the forecast period.

Growing application of the FPGAs in the aerospace and military sector to develop drone systems for flight control, sensor interfacing, and image processing is driving the industry growth. Flash-based field programmable gate arrays are resistant to radiation-induced configuration shocks and also offer efficient functionality at high altitudes. The flash segment is anticipated to witness a substantial growth over the forecast period, owing to their abilities of consuming less power and delivering security, safety, and reliability throughout the design and deployment process.

Companies are largely seen to be leveraging the power of field programmable gate arrays to develop Artificial Intelligence (AI) based solutions for automotive applications. For instance, in June 2018, Xilinx, Inc. collaborated with Daimler AG to help the deep learning professionals from the Mercedes-Benz R&D centers for developing AI algorithms on the Xilinx adaptable acceleration platform. The automotive segment is likely to fully exploit the capacities of the FPGAs for deploying neural networks for

intelligent vehicle systems and optimizing battery management, power conversions, and electric motor control systems of the Electric Vehicles (EV) and Hybrid-Electric Vehicles (HEV).

Further key findings from the report suggest:

The FPGA market is anticipated to witness a noteworthy growth over the forecast period owing to increased usage of FPGAs in EVs, vehicle networking and connectivity, self-driving cars, and automotive infotainment

The SRAM technology segment is expected to witness significant growth over the forecast period owing to its features including greater logic density, better performance, non-volatility, and its manufacturing simplicity

The FPGAs used in the consumer electronics sector generated a revenue of over USD 1.0 billion in the year 2019, due to growing adoption of digital displays, televisions, cameras and camcorders, eReaders, and set-top boxes for households

The Asia Pacific region is expected to witness a substantial growth from 2020 to 2027 due to increase in sale of consumer electronics, especially smartphones, in countries like China and India, and growing number of data centers in the region

Xilinx, Inc.; Intel Corporation, Microsemi Corporation; Texas Instruments; Lattice Semiconductor Corporation; and Taiwan Semiconductor Manufacturing Company are some of the key players in the FPGA market.

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