

Global Field Effect Transistor Market Size study & Forecast, by Type (JFET, MOSFET), by Application (Analog Switches, Amplifiers, Phase Shift Oscillator, Current Limiter and Digital Circuits), by End-User (Automotive, Consumer electronics, IT/Telecom, Power Generating Industries, Other End Uses) and Regional Analysis, 2022-2029

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Abstracts

Global Field Effect Transistor Market is valued at approximately USD XX billion in 2021 and is anticipated to grow with a healthy growth rate of more than XX % over the forecast period 2022-2029. Field Effect Transistor is a three-terminal active device that uses an electric field to control current flow. It has a high input impedance, which makes it useful in a variety of circuits.

The Field Effect Transistor market is expanding because of factors such as the rising demand for power-efficient electronic devices and the demand for green energy power generation

According to Statista, global electricity consumption is rising rapidly. In 2021, the electricity consumption reached around 25,300 terawatt-hours and is projected to grow in the coming years. Also, the consumer electronic market is estimated to generate revenue of USD 103.00 billion in 2023. And growing with a growth rate of around 2.17 %. Whereas rising government focus and spending on energy generation and demand from end-user industries create lucrative opportunities for the market. However, due to the static electric field effect, transistors can be damaged hampers the market growth throughout the forecast period of 2022-2029.

The key regions considered for the Global Field Effect Transistor Market study include

Asia Pacific, North America, Europe, Latin America, and the Rest of the World. North America dominated the market in terms of revenue, owing to the increasing demand from end-use industries such as automotive, and consumer electronics. Whereas the Asia Pacific is expected to grow with the highest CAGR during the forecast period, owing to factors such as increasing demand for electronic devices, rising consumer spending on electronics, and rising government regulations toward environmental protection.

Major market players included in this report are:

Nexperia
Infineon Technologies AG
Vishay Intertechnology, Inc.
Taiwan Semiconductor Manufacturing Company Ltd
STMicroelectronics
Semiconductor Components Industries, LLC
Sensitron Semiconductor
Shindengen America Inc
NATIONAL INSTRUMENTS CORP.
Texas Instruments Inc

Recent Developments in the Market:

In June 2022, The University of Tokyo's Institute of Industrial Science created three-dimensional vertically formed field-effect transistors to create high-density data storage devices using a ferroelectric gate insulator and an atomic-layer-deposited oxide semiconductor channel.

In June 2022, Nanosheets are a type of gate-all-around field-effect transistor (GAAFET), with a gate-encircling floating transistor fins. TSMC announced that nanosheets will be used in their 2nm process, which will go into production in 2025. TSMC is looking for novel transistor layouts that can reduce energy consumption in high-performance computing applications such as data centres, which contribute significantly to global warming.

Global Field Effect Transistor Market Report Scope:

Historical Data 2019-2020-2021

Base Year for Estimation 2021

Forecast period 2022-2029

Report Coverage Revenue forecast, Company Ranking, Competitive Landscape, Growth factors, and Trends

Segments Covered Type, Application, End-user, Region

Regional Scope North America; Europe; Asia Pacific; Latin America; Rest of the World

Customization Scope Free report customization (equivalent up to 8 analyst's working hours) with purchase. Addition or alteration to country, regional & segment scope*

The objective of the study is to define market sizes of different segments & countries in recent years and to forecast the values to the coming years. The report is designed to incorporate both qualitative and quantitative aspects of the industry within countries involved in the study.

The report also caters detailed information about the crucial aspects such as driving factors & challenges which will define the future growth of the market. Additionally, it also incorporates potential opportunities in micro markets for stakeholders to invest along with the detailed analysis of competitive landscape and product offerings of key players. The detailed segments and sub-segment of the market are explained below:

By Type:

JFET

MOSFET

By Application:

Analog Switches

Amplifiers

Phase Shift Oscillator

Current Limiter

Digital Circuits

Others

By End-user:

Automotive

Consumer electronics

IT/Telecom

Power Generating Industries

Other End Uses

By Region:

North America

U.S.

Canada

Europe

UK

Germany

France

Spain

Italy
ROE
Asia Pacific
China
India
Japan
Australia
South Korea
RoAPAC
Latin America
Brazil
Mexico
Rest of the World

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