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Global Artificial Intelligence (AI) Semiconductor Market: Size, Trends & Forecasts (2018-2022)

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Abstracts

Scope of the Report

The report titled “Global Artificial Intelligence (AI) Semiconductor Market: Size, Trends & Forecasts (2018-2022)”, provides an in-depth analysis of the global AI semiconductor market by value, by platform, by segment and by penetration etc.

The report also assesses the key opportunities in the market and outlines the factors that are and will be driving the growth of the industry. Growth of the overall global AI semiconductor market has also been forecasted for the period 2018-2022, taking into consideration the previous growth patterns, the growth drivers and the current and future trends.

The artificial intelligence (AI) semiconductor market is dominated by few players, but there are other new players, private label players as well. However, the competition in the global AI semiconductor market is dominated by Nvidia Corporation, Intel Corporation, ASML Holdings, International Business Machines Corporation (IBM) and Hitachi, Ltd. (Hitachi High-Technologies Corporation), who are also profiled with their financial information and respective business strategies.

Company Coverage

Nvidia Corporation

Intel Corporation

ASML Holdings

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International Business Machines Corporation (IBM)

Hitachi, Ltd. (Hitachi High-Technologies Corporation)

Executive Summary

A semiconductor is a substance designed to manage and control the flow of current in electronic devices and equipment. A semiconductor can conduct electricity between conductors (copper, gold, etc.) and insulators (glass), under certain conditions, and is and commonly used in the development of electronic chips, computing components and devices.

Artificial intelligence (AI) is a branch of computer science that emphasizes the creation of intelligent machines that work and react like humans.

AI brings about improvements in semiconductor manufacturing, by speeding up the process, increasing chip performance, reducing production costs, and increasing output. AI is influencing the semiconductor market by creating demand for new technologies, opening up new market opportunities, and by improving the semiconductor fabrication process as well. Growth in AI is one of the major reason for the growth of semiconductors and has led to development of AI-based semiconductors.

The artificial intelligence (AI) semiconductor market can be segmented on the basis of process and platform used. On the basis of process, AI semiconductor are segmented as AI training and AI inference. On the basis of process, AI semiconductors are segmented as AI in the cloud and AI at the edge.

The global artificial intelligence (AI) semiconductor market has increased at a significant CAGR over the years and projections are made that the market would rise in the next four years i.e. 2018-2022 tremendously. The AI semiconductor market is expected to increase due to growing AI applications, increasing demand from memory sectors, rising Internet of Things (IoT), growing personal electronics, increasing smartphone users, etc. Yet the market faces some challenges such as shortage of raw material and challenge in edge computing etc.

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