World Embedded Computing Market - Opportunities and Forecast, 2015 - 2022

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Description:

Embedded computing system is a combination of embedded hardware and software, designed to perform a specific dedicated function in an electronic device or a machine. It can work as an independent system or a part of a larger system. The hardware and software are two distinguished parts of any embedded computing system, which are activated by a set of commands called program to perform an operation as lone system. "Embedded" denotes the fact that hardware and software are inseparable part of the system. For embedded computing, microcontrollers (MCUs) or microprocessors (MPUs) or custom designed chips are used to run the system along with supporting software in ROM (Read Only Memory). They have strong characteristics of high speed, low power consumption, accuracy, adaptability, reliability, reusability, size and others. Elements in any embedded computing include interfaces, input/output devices, display, memory and others. In general, it encompasses storage, timers, power supply, system application circuits & serial communication port.

Embedded computing systems are used to control, monitor or perform a specific function of an electronic equipment by fixed set of program, plan or rules. They perform functions such as reading the sensor inputs, processing that data, display required output, generating & transmitting commands and transforming the data into information. Embedded computing systems are vastly used in a variety of applications including home applications, office automation, banking and financial institutes, security, automobile, defense, personal, healthcare and other sectors. The market for embedded computing has been driven by growing adoption of consumer electronics and rise in adoption of artificial intelligence. Other factors impacting the global embedded computing market include growing digitization in healthcare, industrial automation and increasing demand in automobile, defense and other sectors. The demand for embedded computing is increasing worldwide on account of potential growth in emerging economies as well as evolution in Internet of Things (IoTs). Also, the hardware of embedded system has limitations of its own including limited life-span, memory capacity and others.

The market for embedded computing is segmented on the basis of its types, end users and
geography. The types include hardware and software segment. The hardware segment further includes microprocessor, microcontroller, digital signal processor, and others (ASIC, & FPGA) sub-segment. The end users for embedded computing market include automotive, industrial, healthcare, energy, communications, consumer electronics and others (BFSI, defense and transportation).

KEY BENEFITS:

This report provides an in-depth knowledge of the world embedded computing market to elucidate opportunities in the market.

Current trends and future estimations have been outlined to determine the overall market potential and single out profitable trends to gain a stronger foothold.

A quantitative analysis of the current market trends and forecast from 2016 to 2022 has been provided to highlight the financial competency of the market.

Porter’s Five Forces analysis of the industry illustrates the potency of buyers and suppliers operating in the market.

Value chain analysis provides a clear understanding of the roles of stakeholders involved.

EMBEDDED COMPUTING MARKET SEGMENTATION:

BY TYPE

Hardware
Microprocessor
Microcontroller
Digital Signal Processor
Others (ASIC & FPGA)
Software

BY END USER

Automotive
Industrial
Healthcare
Energy
Communications
Consumers Electronics
Others (Banking, Transport, Government, Robotics, Defense)

BY GEOGRAPHY

North America
United States
Canada
Mexico
Europe
United Kingdom
Germany
France
Spain
Italy
Rest of Europe
Asia-Pacific
China
Japan
India
Singapore
South Korea
Rest of Asia-Pacific
LAMEA
Latin America
Middle East
Africa
KEY PLAYERS

Atmel Corporation
Microchip Technology Inc.
Intel Corporation
Renesas Electronics Corporation
Fujitsu Limited
ARM Holdings plc.
International Business Machines Corporation
Microsoft Corporation
QUALCOMM Incorporated
Texas Instruments Incorporated

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