Global System-On-Chip Market Research Report, Type (Digital Signal, Analog Signal, Mixed Signal), Application (Consumer Electronics, Healthcare, Telecommunication, Automotive and Others) — Forecast till 2023

Market synopsis

Globally the market for system-on-chip is expected to grow from USD 131.83 billion in 2017 to USD 207.21 billion by 2023, at a compound annual growth rate (CAGR) of 8.3% during the forecast period.

Major factors such as the increasing demand for smart, compact and power-efficient electronic device and rise in adoption of IoT based technologies is spurring the growth of system-on-chip market globally. However, high initial cost of design & development and maintenance is expected to hinder the growth of this market. The requirement for compact and scalable ICs in the global electronic industry is expected to bring numerous opportunities, thereby supporting the growth of the system-on-chip market during the forecast period. The market for system-on-chip has seen considerable growth due to rising applications in end-user industries, with smartphones application having the largest market share. Industries such as telecommunication, consumer electronics, and healthcare are also leading verticals in adopting system-on-chip technology so as to improve the performance of networking devices and biomedical devices.

System-on-chip is an integrated circuit on which several electronic components are combined together such as transistors, control units, memory units, peripherals, and others, depending on the type of its application. It contains both hardware and software that results in better response time and efficient power consumption. SoC is an efficient way to enhance the performance of the device and helps to meet the ever-increasing computational demand. Also, due to the advancement in manufacturing process and availability of cost-effective silicon chip is expected to create better opportunities for many players in the semiconductor market.

System-On-Chip Market
By type, the market is segmented into analog signal, digital signal and mixed signal.

By application, the market is segmented into consumer electronics, healthcare, telecommunication, automotive and others.

By region, the market is segmented into North America, Europe, Asia-Pacific and the rest of the world.

Regional analysis

The global market for system-on-chip is estimated to grow at a significant rate during the forecast period from 2018 to 2023. The geographical analysis of system-on-chip market is studied for North America, Europe, Asia-Pacific, and the rest of the world.

The Asia-Pacific region is expected to dominate SoC market owing to the rise in demand for advanced consumer electronics from countries such as China, India, South Korea, Taiwan and Japan. Also, North America is expected to have a strong growth in the system-on-chip market due to the increasing adoption of IoT-based technologies integrated with consumer appliances which is assumed to gain popularity over the forecast duration.

Competitive Analysis

Key players in the market are involved in various acquisition and partnerships deals to sustain and grow in the market. Also, collaboration and joint ventures form a crucial part in the company’s inorganic strategy. Many established companies are aiming to acquire small companies so have to have strong hold in the high-potential regional markets. Companies also adopt product development and launch as their major organic strategy and are increasingly focusing on the launch of innovative products to meet the demands from major end-use industries such as consumer electronics and telecommunications. For instance, in 2017, Apple launched a new system-on-chip for the latest iPhone 8 named as A11 Bionic.

New entrants in the market may find it difficult to establish themselves in the market without any unique proposition due to competition from established players such as Samsung Electronics, Toshiba Corporation, Intel Corporation, Taiwan Semiconductor Manufacturing Company and many others, which already have strong hold and technology expertise in the market.

Key players

The major players in the system-on-chip market are Intel Corporation, Qualcomm Incorporated, Samsung Electronics Ltd, NXP Semiconductors N.V., Toshiba Corporation, Broadcom Limited, STMicroelectronics N.V., Apple Inc, MediaTek Inc, and Taiwan Semiconductor Manufacturing Company Limited.

Other players in the system-on-chip market are Infineon Technologies, Maxim Integrated Products Inc, Microchip Technology Inc, Texas Instruments, ON Semiconductor and many others.
Intended Audience

- SoC Manufacturers
- SoC Distributors
- Research/Consultancy firms
- Vendors from various industry verticals such as Automotive, and Electronics & Semiconductors among others
- OEMs
- Semiconductor Manufacturers

Contents:

TABLE OF CONTENTS

1 Executive Summary

2 Scope of the Report
  2.1 Market Definition
  2.2 Scope of the Study
    2.2.1 Research Objectives
    2.2.2 Assumptions & Limitations
  2.3 Markets Structure

3 Market Research Methodology
  3.1 Research Process
  3.2 Secondary Research
  3.3 Primary Research
  3.4 Forecast Model

4 Market Landscape
  4.1 Porter’s Five Forces Analysis
    4.1.1 Threat of New Entrants
    4.1.2 Bargaining power of buyers
    4.1.3 Threat of substitutes
    4.1.4 Segment rivalry
  4.2 Value Chain/Supply Chain of Global System-On-Chip Market

5 Industry Overview of Global System-On-Chip Market
  5.1 Introduction
  5.2 Growth Drivers
  5.3 Impact analysis
  5.4 Market Challenges

6 Market Trends
  6.1 Introduction
  6.2 Growth Trends
  6.3 Impact analysis

7 Global System-On-Chip Market by Type
  7.1 Introduction
  7.2 Analog signal
    7.2.1 Market Estimates & Forecast, 2018–2023
    7.2.2 Market Estimates & Forecast by Region, 2018–2023
  7.3 Digital signal
    7.3.1 Market Estimates & Forecast, 2018–2023
    7.3.2 Market Estimates & Forecast by Region, 2018–2023
  7.4 Mixed signal
7.4.1 Market Estimates & Forecast, 2018–2023
7.4.2 Market Estimates & Forecast by Region, 2018–2023
8 Global System-On-Chip Market by Application
8.1 Introduction
8.2 Consumer Electronics
8.2.1 Market Estimates & Forecast, 2018–2023
8.2.2 Market Estimates & Forecast, by Region, 2018–2023
8.3 Healthcare
8.3.1 Market Estimates & Forecast, 2018–2023
8.3.2 Market Estimates & Forecast, by Region, 2018–2023
8.4 Telecommunication
8.4.1 Market Estimates & Forecast, 2018–2023
8.4.2 Market Estimates & Forecast, by Region, 2018–2023
8.5 Automotive
8.5.1 Market Estimates & Forecast, 2018–2023
8.5.2 Market Estimates & Forecast, by Region, 2018–2023
8.6 Others
8.6.1 Market Estimates & Forecast, 2018–2023
8.6.2 Market Estimates & Forecast, by Region, 2018–2023
9. Global System-On-Chip Market by Region
9.1 Introduction
9.2 North America
9.2.2 Market Estimates & Forecast, by Type, 2018–2023
9.2.3 Market Estimates & Forecast, by Application, 2018–2023
9.2.6 US
9.2.6.1 Market Estimates & Forecast, by Type, 2018–2023
9.2.6.2 Market Estimates & Forecast, by Application, 2018–2023
9.2.7 Canada
9.2.7.1 Market Estimates & Forecast, by Type, 2018–2023
9.2.7.2 Market Estimates & Forecast, by Application, 2018–2023
9.2.8 Mexico
9.2.8.1 Market Estimates & Forecast, by Type, 2018–2023
9.2.8.2 Market Estimates & Forecast, by Application, 2018–2023
9.3 Europe
9.3.1 Market Estimates & Forecast, Country, 2018–2023
9.3.2 Market Estimates & Forecast, by Type, 2018–2023
9.3.3 Market Estimates & Forecast, by Application, 2018–2023
9.3.6 Germany
9.3.6.1 Market Estimates & Forecast, by Type, 2018–2023
9.3.6.2 Market Estimates & Forecast, by Application, 2018–2023
9.3.7 France
9.3.7.1 Market Estimates & Forecast, 2018–2023
9.3.7.2 Market Estimates & Forecast, by Type, 2018–2023
9.3.7.3 Market Estimates & Forecast, by Application, 2018–2023
9.3.8 Italy
9.3.8.1 Market Estimates & Forecast, by Type, 2018–2023
9.3.8.2 Market Estimates & Forecast, by Application, 2018–2023
9.3.9 Spain
9.3.9.1 Market Estimates & Forecast, by Type, 2018–2023
9.3.9.2 Market Estimates & Forecast, by Application 2018–2023
9.3.10 UK
9.3.10.1 Market Estimates & Forecast, by Type, 2018–2023
9.3.10.2 Market Estimates & Forecast, by Application, 2018–2023
9.4 Asia-Pacific
9.4.2 Market Estimates & Forecast, by Type, 2018–2023
9.4.3 Market Estimates & Forecast, by Application, 2018–2023
9.4.6 China
9.4.6.1 Market Estimates & Forecast, by Type, 2018–2023
9.4.6.2 Market Estimates & Forecast, by Application, 2018–2023
9.4.7 India
9.4.7.1 Market Estimates & Forecast, by Type, 2018–2023
9.4.7.2 Market Estimates & Forecast, by Application, 2018–2023
9.4.8 Japan
9.4.8.1 Market Estimates & Forecast, by Type, 2018–2023
9.4.8.2 Market Estimates & Forecast, by Application, 2018–2023
9.4.9 Rest of Asia-Pacific
9.4.9.1 Market Estimates & Forecast, by Type, 2018–2023
9.4.9.2 Market Estimates & Forecast, by Application, 2018–2023
9.5 The rest of the world
9.5.1 Market Estimates & Forecast, Country, 2018–2023
9.5.2 Market Estimates & Forecast, by Type, 2018–2023
9.5.3 Market Estimates & Forecast, by Application, 2018–2023
9.5.6 Middle East & Africa
9.5.6.1 Market Estimates & Forecast, by Type, 2018–2023
9.5.6.2 Market Estimates & Forecast, by Application, 2018–2023
9.5.7 Latin America
9.5.7.1 Market Estimates & Forecast, by Type, 2018–2023
9.5.7.2 Market Estimates & Forecast, by Application, 2018–2023

10 Company Landscape

11 Company Profiles
11.1 Intel Corporation
11.1.1 Company Overview
11.1.2 Product/Business Segment Overview
11.1.3 Financial Updates
11.1.4 Key Developments
11.2 Qualcomm Incorporated
11.2.1 Company Overview
11.2.2 Product/Business Segment Overview
11.2.3 Financial Updates
11.2.4 Key Developments
11.3 Samsung Electronics Ltd
11.3.1 Company Overview
11.3.2 Product/Business Segment Overview
11.3.3 Financial Updates
11.3.4 Key Developments
11.4 NXP Semiconductors N.V.
11.4.1 Company Overview
11.4.2 Product/Business Segment Overview
11.4.3 Financial Updates
11.4.4 Key Developments
11.5 Toshiba Corporation
11.5.1 Company Overview
11.5.2 Product/Business Segment Overview
11.5.3 Financial Updates
11.5.4 Key Developments
11.6 Broadcom Limited
11.6.1 Company Overview
11.6.2 Product/Business Segment Overview
11.6.3 Financial Updates
11.6.4 Key Developments
11.7 STMicroelectronics N.V.
11.7.1 Company Overview
11.7.2 Product/Business Segment Overview
11.7.3 Financial Updates
11.7.4 Key Developments
11.8 Apple Inc
11.8.1 Company Overview
11.8.2 Product/Business Segment Overview
11.8.3 Financial Updates
11.8.4 Key Developments
11.9 MediaTek Inc
11.9.1 Company Overview
11.9.2 Product/Business Segment Overview
11.9.3 Financial Updates
11.9.4 Key Developments
11.10 Microchip Technology Inc
11.10.1 Company Overview
11.10.2 Product/Business Segment Overview
11.10.3 Financial Updates
11.10.4 Key Developments
12 Conclusion

LIST OF TABLES
Table 1 Global System-On-Chip Market, by Region, 2018–2023
Table 2 North America: System-On-Chip Market, by Country, 2018–2023
Table 3 Europe: System-On-Chip Market, by Country, 2018–2023
Table 4 Asia-Pacific: System-On-Chip Market, by Country, 2018–2023
Table 5 Middle East & Africa: System-On-Chip Market, by Country, 2018–2023
Table 6 Latin America: System-On-Chip Market, by Country, 2018–2023
Table 7 Global System-On-Chip Type Market, by Region, 2018–2023
Table 8 North America: System-On-Chip Type Market, by Country, 2018–2023
Table 9 Europe: System-On-Chip Type Market, by Country, 2018–2023
Table 10: Asia-Pacific: System-On-Chip Type Market, by Country, 2018–2023
Table 11: Middle East & Africa: System-On-Chip Type Market, by Country, 2018–2023
Table 12: Latin America: System-On-Chip Type Market, by Country, 2018–2023
Table 13: Global System-On-Chip Application Market, by Region, 2018–2023
Table 15: Europe: System-On-Chip Application Market, by Country, 2018–2023
Table 17: Middle East & Africa: System-On-Chip Application Market, by Country, 2018–2023
Table 18: Latin America: System-On-Chip Application Market, by Country, 2018–2023
Table 19: Asia-Pacific: System-On-Chip Market, by Country
Table 20: Asia-Pacific: System-On-Chip Market, by Type
Table 21: Asia-Pacific: System-On-Chip Market, by Application
Table 22: Middle East & Africa: System-On-Chip Market, by Country
Table 23: Middle East & Africa: System-On-Chip Market, by Type
Table 24: Middle East & Africa: System-On-Chip Market, by Application
Table 25: Latin America: System-On-Chip Market, by Country
Table 26: Latin America: System-On-Chip Market, by Type
Table 27: Latin America: System-On-Chip Market, by Application

LIST OF FIGURES

FIGURE 1: Global System-On-Chip Market Segmentation
FIGURE 2: Forecast Methodology
FIGURE 3: Porter’s Five Forces Analysis of Global System-On-Chip Market
FIGURE 4: Value Chain of Global System-On-Chip Market
FIGURE 5: Share of Global System-On-Chip Market in 2017, by Country (in %)
FIGURE 6: Global System-On-Chip Market, 2018–2023
FIGURE 7: Global System-On-Chip Market Size, by Type, 2018
FIGURE 8: Share of Global System-On-Chip Market, by Type, 2018 to 2023
FIGURE 9: Global System-On-Chip Market Size, by Application, 2018
FIGURE 10: Share of Global System-On-Chip Market, by Application, 2018 to 2023