
Synopsis of Application Specific Integrated Circuit Market:

Market Scenario:

Application specific integrated circuit has high adoption in manufacturing of flat panel displays such as global positioning system (GPS), voice memo, web browsing, e-mail, answering machine, wireless PDA and two-way paging. Its features such as compact size, lightweight, affordability, high-bandwidth, and a better battery life ensure its use in a wide array of applications.

Technology giants such as Intel Corporation (U.S.), Texas Instruments Inc. (U.S.), STMicroelectronics N.V (Switzerland), Infineon Technologies AG (Germany), Renesas Electronics Corporation (Japan) are some of the major players in ASIC market. Intel Corporation, a prominent player in ASIC market, facilitate users by offering high quality application-specific integrated service (ASIC) to users through proven design expertise and experience in developing complex ASICs chip design with advanced silicon technology. The Intel’s ASIC development team has expertise on the latest technology. Texas Instruments Inc., a significant player in ASIC market, has designed an automotive ASIC design. The automotive ASIC design comprises of brakes, sensors interface, voltage regulators, LED drivers, and automotive specific standard devices. Infineon Technologies AG has designed an ASIC solution that increases the bandwidth required to develop & market innovative products and solutions with technology experts, extensive research on IP technology. The company’s global network of design centers and their partnership with program management set-up provides users with customized solutions & ASIC design expertise, and local support. They focus on customer needs by providing optimized solutions to enable customer’s time-to-market success.

The factors driving the growth of the application specific integrated circuit market is the growing demand of ASIC in the consumer electronics sector owing to the energy efficient solutions, and low cost of implementation are some of the prime drivers fuelling the market growth. The technological inconsistency in semiconductor industry & electronics industry, which makes it difficult for the vendors to keep up with the pace of innovation. The above mentioned reason is one of the major restraints hampering the growth of the application specific integrated circuit market.

The global application specific integrated circuit market is expected to grow at a CAGR of approximately 9% during the forecast period 2017-2023.

Application Specific Integrated Circuit Market
Key Players:

Some of the prominent players in the global application specific integrated circuit market: Intel Corporation (U.S.), Texas Instruments Inc. (U.S.), STMicroelectronics N.V (Switzerland), Infineon Technologies AG (Germany), Renesas Electronics Corporation (Japan), Maxim Integrated Products Inc. (U.S.), Analog Devices, Inc. (U.S.), ON Semiconductor (U.S.), NXP Semiconductors N.V (The Netherlands), Qualcomm, Inc. (U.S.), Linear Technology Corporation (U.S.) and others.

Segments:

The global application specific integrated circuit market is segmented by product type and application. The product type segment is bifurcated into Full Custom Design ASIC, Semi-custom Design ASIC, and Programmable ASIC. The semi-custom design ASIC is further sub-segmented into standard cell-based ASIC and gate array based ASIC. The application segment consists of IT & telecommunication, industrial, automotive, consumer electronics and others.

Regional Analysis:

The global application specific integrated circuit market is studied for Asia Pacific, North America, Europe, and Rest of the World. It has been observed that Asia Pacific market accounts for the largest share in the global application specific integrated circuit market. The aspects such as the presence of major semiconductor manufacturing hub in countries such as China, Japan, and South Korea is one of the major factors boosting application specific integrated circuit market in the region. Other factors such as advanced technology implementation in manufacturing consumer electronics products and increase in sales of consumer electronics goods are expected to be the other key drivers of application specific integrated circuit market.

Intended Audience

- Technology Investors
- Research/Consultancy firms
- Technology Solution Providers
- Original Equipment Manufactures
- Hardware manufacturers

Source: MRFR Analysis
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 Application Specific Integrated Circuit Market

5 Industry Overview of Global Application Specific Integrated Circuit 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 Application Specific Integrated Circuit Market by Product Type
7.1 Full Custom Design ASIC
7.1.1 Market Estimates & Forecast, 2017-2023
7.1.2 Market Estimates & Forecast by Region, 2017-2023
7.2 Semi-custom Design ASIC
7.2.1 Market Estimates & Forecast, 2017-2023
7.2.2 Market Estimates & Forecast by Region, 2017-2023
7.3 Programmable ASIC
7.3.1 Market Estimates & Forecast, 2017-2023
7.3.2 Market Estimates & Forecast by Region, 2017-2023

8. Global Application Specific Integrated Circuit Market by Application
8.1 Introduction
8.2 IT & Telecommunication
  8.2.1 Market Estimates & Forecast, 2017-2023
  8.2.2 Market Estimates & Forecast by Region, 2017-2023
8.3 Industrial
  8.3.1 Market Estimates & Forecast, 2017-2023
  8.3.2 Market Estimates & Forecast by Region, 2017-2023
8.4 Automotive
  8.4.1 Market Estimates & Forecast, 2017-2023
  8.4.2 Market Estimates & Forecast by Region, 2017-2023
8.5 Consumer Electronics
  8.5.1 Market Estimates & Forecast, 2017-2023
  8.5.2 Market Estimates & Forecast by Region, 2017-2023
8.6 Others
  8.6.1 Market Estimates & Forecast, 2017-2023
  8.6.2 Market Estimates & Forecast by Region, 2017-2023

9. Global Application Specific Integrated Circuit Market by Region
9.1 Introduction
9.2 North America
  9.2.1 Market Estimates & Forecast, 2017-2023
  9.2.2 Market Estimates & Forecast by Product Type, 2017-2023
  9.2.3 Market Estimates & Forecast by Application, 2017-2023
  9.2.4 U.S.A
    9.2.4.1 Market Estimates & Forecast, 2017-2023
    9.2.4.2 Market Estimates & Forecast by Product Type, 2017-2023
    9.2.4.3 Market Estimates & Forecast by Application, 2017-2023
  9.2.5 Mexico
    9.2.5.1 Market Estimates & Forecast, 2017-2023
    9.2.5.2 Market Estimates & Forecast by Product Type, 2017-2023
    9.2.5.3 Market Estimates & Forecast by Application, 2017-2023
  9.2.6 Canada
    9.2.6.1 Market Estimates & Forecast, 2017-2023
    9.2.6.2 Market Estimates & Forecast by Product Type, 2017-2023
    9.2.6.3 Market Estimates & Forecast by Application, 2017-2023
9.3 Europe
  9.3.1 Market Estimates & Forecast, 2017-2023
  9.3.2 Market Estimates & Forecast by Product Type, 2017-2023
  9.3.3 Market Estimates & Forecast by Application, 2017-2023
  9.3.4 Germany
9.3.4.1 Market Estimates & Forecast, 2017-2023
9.3.4.2 Market Estimates & Forecast by Product Type, 2017-2023
9.3.4.3 Market Estimates & Forecast by Application, 2017-2023
9.3.5 France
9.3.5.1 Market Estimates & Forecast, 2017-2023
9.3.5.2 Market Estimates & Forecast by Product Type, 2017-2023
9.3.5.3 Market Estimates & Forecast by Application, 2017-2023
9.3.6 Italy
9.3.6.1 Market Estimates & Forecast, 2017-2023
9.3.6.2 Market Estimates & Forecast by Product Type, 2017-2023
9.3.6.3 Market Estimates & Forecast by Application, 2017-2023
9.3.7 Spain
9.3.7.1 Market Estimates & Forecast, 2017-2023
9.3.7.2 Market Estimates & Forecast by Product Type, 2017-2023
9.3.7.3 Market Estimates & Forecast by Application, 2017-2023
9.3.8 U.K
9.3.8.1 Market Estimates & Forecast, 2017-2023
9.3.8.2 Market Estimates & Forecast by Product Type, 2017-2023
9.3.8.3 Market Estimates & Forecast by Application, 2017-2023

9.4 Asia Pacific
9.4.1 Market Estimates & Forecast, 2017-2023
9.4.2 Market Estimates & Forecast by Product Type, 2017-2023
9.4.3 Market Estimates & Forecast by Application, 2017-2023
9.4.4 China
9.4.4.1 Market Estimates & Forecast, 2017-2023
9.4.4.2 Market Estimates & Forecast by Product Type, 2017-2023
9.4.4.3 Market Estimates & Forecast by Application, 2017-2023
9.4.5 India
9.4.5.1 Market Estimates & Forecast, 2017-2023
9.4.5.2 Market Estimates & Forecast by Product Type, 2017-2023
9.4.5.3 Market Estimates & Forecast by Application, 2017-2023
9.4.6 Japan
9.4.6.1 Market Estimates & Forecast, 2017-2023
9.4.6.2 Market Estimates & Forecast by Product Type, 2017-2023
9.4.6.3 Market Estimates & Forecast by Application, 2017-2023
9.4.7 Rest of Asia Pacific
9.4.7.1 Market Estimates & Forecast, 2017-2023
9.4.7.2 Market Estimates & Forecast by Product Type, 2017-2023
9.4.7.3 Market Estimates & Forecast by Application, 2017-2023

9.5 Rest of the World
9.5.1 Market Estimates & Forecast, 2017-2023
9.5.2 Market Estimates & Forecast by Product Type, 2017-2023
9.5.3 Market Estimates & Forecast by Application, 2017-2023

9.6 The Middle East & Africa
9.6.1 Market Estimates & Forecast, 2017-2023
9.6.2 Market Estimates & Forecast by Product Type, 2017-2023
9.6.3 Market Estimates & Forecast by Application, 2017-2023

9.7 Latin America
9.7.1 Market Estimates & Forecast, 2017-2023
9.7.2 Market Estimates & Forecast by Product Type, 2017-2023
9.7.3 Market Estimates & Forecast by Application, 2017-2023

10. Company Profiles
10.1 Intel Corporation (U.S.)
10.1.1 Company Overview
10.1.2 Product Type/Business Segment Overview
10.1.3 Financial Updates
10.1.4 Key Developments

10.2 Texas Instruments Inc. (U.S.)
10.2.1 Company Overview
10.2.2 Product Type/Business Segment Overview
10.2.3 Financial Updates
10.2.4 Key Developments

10.3 STMicroelectronics N.V (Switzerland)
10.3.1 Company Overview
10.3.2 Product Type/Business Segment Overview
10.3.3 Financial Updates
10.3.4 Key Developments

10.4 Infineon Technologies AG (Germany)
10.4.1 Company Overview
10.4.2 Product Type/Business Segment Overview
10.4.3 Financial Updates
10.4.4 Key Developments

10.5 Renesas Electronics Corporation (Japan)
10.5.1 Company Overview
10.5.2 Product Type/Business Segment Overview
10.5.3 Financial Updates
10.5.4 Key Developments

10.6 Maxim Integrated Products Inc. (U.S.)
10.6.1 Company Overview
10.6.2 Product Type/Business Segment Overview
10.6.3 Financial Updates
10.6.4 Key Developments
10.7 Analog Devices, Inc. (U.S.)
10.7.1 Company Overview
10.7.2 Product Type/Business Segment Overview
10.7.3 Financial Updates
10.7.4 Key Developments
10.8 ON Semiconductor (U.S.)
10.8.1 Company Overview
10.8.2 Product Type/Business Segment Overview
10.8.3 Financial Updates
10.8.4 Key Developments
10.9 NXP Semiconductors N.V (The Netherlands)
10.9.1 Company Overview
10.9.2 Product Type/Business Segment Overview
10.9.3 Financial Updates
10.9.4 Key Developments
10.10 Qualcomm, Inc. (U.S.)
10.10.1 Company Overview
10.10.2 Product Type/Business Segment Overview
10.10.3 Financial Updates
10.10.4 Key Developments

LIST OF TABLES

Table 1 Global Application Specific Integrated Circuit Market: By Region, 2017-2023
Table 2 North America Application Specific Integrated Circuit Market: By Country, 2017-2023
Table 3 Europe Application Specific Integrated Circuit Market: By Country, 2017-2023
Table 4 Asia Pacific Application Specific Integrated Circuit Market: By Country, 2017-2023
Table 5 Rest of the World Application Specific Integrated Circuit Market: By Country, 2017-2023
Table 6 Latin America Application Specific Integrated Circuit Market: By Country, 2017-2023
Table 7 Global Application Specific Integrated Circuit by Product Type Market: By Regions, 2017-2023
Table 8 North America Application Specific Integrated Circuit by Product Type Market: By Country, 2017-2023
Table 9 Europe Application Specific Integrated Circuit by Product Type Market: By Country, 2017-2023
Table10 Asia Pacific Application Specific Integrated Circuit by Product Type Market: By Country, 2017-2023
Table11 The Middle East & Africa Application Specific Integrated Circuit by Product Type Market: By Country, 2017-2023
Table10 Latin America Application Specific Integrated Circuit by Product Type Market: By Country, 2017-2023
Table11 Global Application Specific Integrated Circuit by Product Type Market: By Regions, 2017-2023
Table12 North America Application Specific Integrated Circuit by Product Type Market: By Country, 2017-2023
Table 13 Europe Application Specific Integrated Circuit by Product Type Market: By Country, 2017-2023
Table 14 Asia Pacific Application Specific Integrated Circuit by Product Type Market: By Country, 2017-2023
Table 15 Rest of the World Application Specific Integrated Circuit by Product Type Market: By Country, 2017-2023
Table 16 Latin America Application Specific Integrated Circuit by Product Type Market: By Country, 2017-2023
Table 17 North America Application Specific Integrated Circuit by Product Type Market: By Country, 2017-2023
Table 18 Europe Application Specific Integrated Circuit for Product Type Market: By Country, 2017-2023
Table 19 Asia Pacific Application Specific Integrated Circuit for Product Type Market: By Country, 2017-2023
Table 20 Rest of the World Application Specific Integrated Circuit for Product Type Market: By Country, 2017-2023
Table 21 Latin America Application Specific Integrated Circuit for Product Type Market: By Country, 2017-2023
Table 22 Global Product Type Market: By Region, 2017-2023
Table 23 Global Constructive Method Market: By Region, 2017-2023
Table 24 Global Product Type Market: By Region, 2017-2023
Table 25 North America Application Specific Integrated Circuit Market, By Country
Table 26 North America Application Specific Integrated Circuit Market, By Product Type
Table 27 North America Application Specific Integrated Circuit Market, By Product Type
Table 28 Europe: Application Specific Integrated Circuit Market, By Country
Table 29 Europe: Application Specific Integrated Circuit Market, By Product Type
Table 30 Europe: Application Specific Integrated Circuit Market, By Product Type
Table 31 Asia-Pacific: Application Specific Integrated Circuit Market, By Country
Table 32 Asia-Pacific: Application Specific Integrated Circuit Market, By Product Type
Table 33 Asia-Pacific: Application Specific Integrated Circuit Market, By Product Type
Table 34 Rest of the World: Application Specific Integrated Circuit Market, By Country
Table 35 Rest of the World: Application Specific Integrated Circuit Market, By Product Type
Table 36 Rest of the World: Application Specific Integrated Circuit Market, By Product Type
Table 37 Latin America: Application Specific Integrated Circuit Market, By Country
Table 38 Latin America: Application Specific Integrated Circuit Market, By Product Type
Table 39 Latin America: Application Specific Integrated Circuit Market, By Product Type

LIST OF FIGURES

FIGURE 1 Global Application Specific Integrated Circuit Market segmentation
FIGURE 2 Forecast Methodology
FIGURE 3 Five Forces Analysis of Global Application Specific Integrated Circuit Market
FIGURE 4 Value Chain of Global Application Specific Integrated Circuit Market
FIGURE 5 Share of Global Application Specific Integrated Circuit Market in 2017, by country (in %)
FIGURE 6 Global Application Specific Integrated Circuit Market, 2017-2023,
FIGURE 7 Sub segments of Product Type
FIGURE 8 Global Application Specific Integrated Circuit Market size by Product Type, 2017
FIGURE 9 Share of Global Application Specific Integrated Circuit Market by Product Type, 2017 TO 2023
FIGURE 10 Global Application Specific Integrated Circuit Market size by Application, 2017
FIGURE 11 Share of Global Application Specific Integrated Circuit Market by Application, 2017 TO 2023