

# Microprocessor in Embedded Applications: Global Markets

<https://marketpublishers.com/r/M3058482E9DDEN.html>

Date: October 2022

Pages: 192

Price: US\$ 5,500.00 (Single User License)

ID: M3058482E9DDEN

## Abstracts

### Report Scope:

The market scope is defined through consideration of MPU architecture such as ARM-based MPUs and x86-based MPUs and also focuses on various end-user industries for MPU, including networking devices, medical and healthcare, aerospace and defense, military, consumer electronics, computing and storage, industrial, automotive and transportation, and others. Market estimates are classified on the basis of architecture, technology, products, end-user industries, and geographic regions.

### Report Includes:

70 data tables and 56 additional tables

A brief general outlook of the global market for microprocessor in embedded applications

Analyses of the global and regional market trends, with historic market revenue for 2021, estimates for 2022 and 2023, and projections of compound annual growth rates (CAGRs) through 2027

Estimation of the actual market size and revenue forecast for global MPUs market in USD million terms, and corresponding market share analysis based on technology, architecture, product category, end-user industry, and region

Highlights of the emerging technology trends, opportunities and gaps estimating current and future demand for embedded microprocessors, and impact of

## COVID-19 on the progress of this market

Identification of the companies best positioned to meet this demand owing to their proprietary technologies, new product launches, M&A deals, and other strategic alliances

Insight into recent industry structure, competitive aspects of each product segment, major growth strategies, and company value share analysis based on their segmental revenues

Updated information on key mergers and acquisition deals, agreements, partnerships, collaborations and product launches within the embedded microprocessor marketplace

Profile descriptions of the leading global manufacturers of embedded microprocessors, including Apple, Huawei Technologies, Marvell Technology, Qualcomm Technologies and Samsung Electronics

## Contents

### **CHAPTER 1 INTRODUCTION**

- 1.1 Study Goals and Objectives
- 1.2 Intended Audience
- 1.3 Scope of Report
- 1.4 Research Methodology
- 1.5 Geographic Breakdown
- 1.6 Analyst's Credentials
- 1.7 BCC Custom Research
- 1.8 Related BCC Research Reports

### **CHAPTER 2 SUMMARY AND HIGHLIGHTS**

### **CHAPTER 3 MARKET OVERVIEW**

- 3.1 Introduction
  - 3.1.1 Current Market Scenario
- 3.2 History of MPUs
  - 3.2.1 Generations of Microprocessors
- 3.3 Impact of COVID-19 on the MPU Market
- 3.4 Porter's Five Force Analysis
  - 3.4.1 Threats of New Entrants
  - 3.4.2 Bargaining Power of Suppliers
  - 3.4.3 Bargaining Power of Buyers
  - 3.4.4 Threats of Substitute Products or Services
  - 3.4.5 Rivalry Among Existing Competitors
- 3.5 Price Trend Analysis
- 3.6 Government Policies for Manufacturing Semiconductor Chips

### **CHAPTER 4 MARKET DYNAMICS**

- 4.1 Introduction
- 4.2 Market Drivers
  - 4.2.1 Autonomous Driving and Electrification to Increase MPU Automotive Market
  - 4.2.2 Growing Demand for Connected Devices
  - 4.2.3 Implementation of 5G Communication Infrastructure
- 4.3 Market Restraints

- 4.3.1 Microprocessor Chip Design Architecture
- 4.4 Market Opportunities
  - 4.4.1 Growth in High-Performance Computing
  - 4.4.2 Growing Demand for Smartphones
  - 4.4.3 Rapid Growth in Wearables
- 4.5 Market Challenges
  - 4.5.1 Dependence on Third-Party Foundries and Component Suppliers

## **CHAPTER 5 MARKET BREAKDOWN BY ARCHITECTURE**

- 5.1 Introduction
- 5.2 ARM-based MPUs
- 5.3 x86-based MPUs

## **CHAPTER 6 MARKET BREAKDOWN BY TECHNOLOGY**

- 6.1 Introduction
- 6.2 RISC
- 6.3 Digital Signal Processors
- 6.4 ASICs
- 6.5 CISC
- 6.6 Superscalar

## **CHAPTER 7 MARKET BREAKDOWN BY PRODUCT**

- 7.1 Introduction
- 7.2 Smartphones
- 7.3 Personal Computers
- 7.4 Tablets
- 7.5 Laptops
- 7.6 Embedded Devices
- 7.7 Other Devices

## **CHAPTER 8 MARKET BREAKDOWN BY END-USER INDUSTRY**

- 8.1 Introduction
- 8.2 Automotive and Transportation
- 8.3 Consumer Electronics and Home Appliances
- 8.4 Industrial

- 8.5 Medical and Healthcare
- 8.6 Military
- 8.7 Aerospace and Defense
- 8.8 Computing and Storage
- 8.9 Networking Devices
- 8.10 Other Applications

## **CHAPTER 9 MARKET BREAKDOWN BY REGION**

- 9.1 Introduction
- 9.2 North America
  - 9.2.1 U.S.
  - 9.2.2 Canada
  - 9.2.3 Mexico
- 9.3 Europe
  - 9.3.1 Germany
  - 9.3.2 U.K.
  - 9.3.3 France
  - 9.3.4 Rest of Europe
- 9.4 Asia-Pacific
  - 9.4.1 China
  - 9.4.2 Taiwan
  - 9.4.3 Japan
  - 9.4.4 India
  - 9.4.5 Rest of Asia-Pacific
- 9.5 Rest of the World

## **CHAPTER 10 PATENT ANALYSIS**

- 10.1 Patent Analysis

## **CHAPTER 11 COMPETITIVE LANDSCAPE**

- 11.1 Top Companies
- 11.2 Strategic Analysis

## **CHAPTER 12 COMPANY PROFILES**

ADVANCED MICRO DEVICES INC.

ANALOG DEVICES INC.  
APPLE INC.  
BROADCOM INC.  
HUAWEI TECHNOLOGIES CO. LTD.  
IBM CORP.  
INFINEON TECHNOLOGIES AG  
INTEL CORP.  
MARVELL TECHNOLOGY INC.  
MEDIATEK INC.  
MICROCHIP TECHNOLOGY INC.  
NVIDIA CORP.  
NXP SEMICONDUCTORS N.V.  
QUALCOMM TECHNOLOGIES INC.  
RENESAS ELECTRONICS CORP.  
SAMSUNG ELECTRONICS CO. LTD.  
STMICROELECTRONICS N.V.  
TAIWAN SEMICONDUCTOR MANUFACTURING CO. (TSMC) LTD.  
TEXAS INSTRUMENTS INC.  
UNISOC TECHNOLOGIES CO. LTD.

## **CHAPTER 13 APPENDIX: LIST OF ABBREVIATIONS**

## List Of Tables

### LIST OF TABLES

- Summary Table: Global Market for Microprocessors, by Region, Through 2027
- Table 1: Global Market for Microprocessors, by Architecture, Through 2027
- Table 2: Global Market Volume for Microprocessors, by Architecture, Through 2027
- Table 3: Average Selling Price of Microprocessors, by Architecture, 2021-2027
- Table 4: Global Market for ARM-based MPUs, by Region, Through 2027
- Table 5: Global Market for x86-based MPUs, by Region, Through 2027
- Table 6: Global Market for Microprocessors, by Technology, Through 2027
- Table 7: Global Market for RISC Microprocessors, by Region, Through 2027
- Table 8: Global Market for DSP Microprocessors, by Region, Through 2027
- Table 9: Global Market for ASIC Microprocessors, by Region, Through 2027
- Table 10: Global Market for CISC Microprocessors, by Region, Through 2027
- Table 11: Global Market for Superscalar Microprocessors, by Region, Through 2027
- Table 12: Global Market for Microprocessors, by Product Type, Through 2027
- Table 13: Global Market for Microprocessors in Smartphones, by Region, Through 2027
- Table 14: Global Market for Microprocessors in PCs, by Region, Through 2027
- Table 15: Global Market for Microprocessors in Tablets, by Region, Through 2027
- Table 16: Global Market for Microprocessors in Laptops, by Region, Through 2027
- Table 17: Global Market for Microprocessors in Embedded Devices, by Region, Through 2027
- Table 18: Global Market for Microprocessors in Other Products, by Region, Through 2027
- Table 19: Global Market for Microprocessors, by End-User Industry, Through 2027
- Table 20: Global Market for Microprocessors in Automotive and Transportation End Uses, by Region, Through 2027
- Table 21: Global Market for Microprocessors in Consumer Electronics and Home Appliances, by Region, Through 2027
- Table 22: Global Market for Microprocessors in Industrial End Uses, by Region, Through 2027
- Table 23: Global Market for Microprocessors in Medical and Healthcare End Uses, by Region, Through 2027
- Table 24: Global Market for Microprocessors in Military End Uses, by Region, Through 2027
- Table 25: Global Market for Microprocessors in Aerospace and Defense End Uses, by Region, Through 2027
- Table 26: Global Market for Microprocessors in Computing and Storage End Uses, by

Region, Through 2027

Table 27: Global Market for Microprocessors in Networking Devices, by Region, Through 2027

Table 28: Global Market for Microprocessors in Other End Uses, by Region, Through 2027

Table 29: Global Microprocessor Market, by Region, Through 2027

Table 30: North American Microprocesssor Market, by Country, Through 2027

Table 31: North American Microprocessor Market, by Architecture, Through 2027

Table 32: North American Microproecssor Market, by Technology, Through 2027

Table 33: North American Microprocessor Market, by Product, Through 2027

Table 34: North American Microprocessor Market for, by End-User Industry, Through 2027

Table 35: European Microprocessor Market, by Country, Through 2027

Table 36: European Microprocessor Market, by Architecture, Through 2027

Table 37: European Microprocessor Market, by Technology, Through 2027

Table 38: European Microprocessor Market, by Product Type, Through 2027

Table 39: European Microprocessor Market, by End-User Industry, Through 2027

Table 40: Asia-Pacific Microprocessor Market, by Country, Through 2027

Table 41: Asia-Pacific Microprocessor Market, by Architecture, Through 2027

Table 42: Asia-Pacific Microprocessor Market, by Technology, Through 2027

Table 43: Asia-Pacific Microprocessor Market, by Product Type, Through 2027

Table 44: Asia-Pacific Microprocessor Market, by End-User Industry, Through 2027

Table 45: RoW Microprocessor Market, by Subregion, Through 2027

Table 46: RoW Microprocessor Market, by Architecture, Through 2027

Table 47: RoW Microprocessor Market, by Technology, Through 2027

Table 48: RoW Microprocessor Market, by Product Type, Through 2027

Table 49: RoW Microprocessor Market, by End-User Application, Through 2027

Table 50: Top Microprocessor Patent Assignees, 2021

Table 51: Product Launches and Developments, March 2020 to September 2022

Table 52: Collaborations, Agreements and Partnerships, September 2021 to June 2022

Table 53: Acquisitions and Expansions, May 2021 to May 2022

Table 54: Advanced Micro Devices: Net Revenue, 2019-2021

Table 55: Advanced Micro Devices: Products

Table 56: Advanced Micro Devices: Key Management

Table 57: Advanced Micro Devices: Recent Developments, 2021

Table 58: Analog Devices: Net Revenue, 2019-2021

Table 59: Analog Devices: Products

Table 60: Analog Devices: Key Management

Table 61: Apple: Net Revenue, 2019-2021



- Table 62: Apple: Products
- Table 63: Apple: Key Management
- Table 64: Apple: Recent Developments, 2021
- Table 65: Broadcom: Net Revenue, 2019-2021
- Table 66: Broadcom: Products
- Table 67: Broadcom: Key Management
- Table 68: Huawei Technologies: Net Revenue, 2019-2021
- Table 69: Huawei Technologies: Products
- Table 70: Huawei Technologies: Key Management
- Table 71: IBM: Net Revenue, 2019-2021
- Table 72: IBM: Products
- Table 73: IBM: Key Management
- Table 74: IBM: Recent Developments, 2021
- Table 75: Infineon Technologies: Net Revenue, 2019-2021
- Table 76: Infineon Technologies: Products
- Table 77: Infineon Technologies: Key Management
- Table 78: Intel: Net Revenue, 2019-2021
- Table 79: Intel: Products
- Table 80: Intel: Key Management
- Table 81: Intel: Recent Developments, 2021
- Table 82: Marvell Technology: Net Revenue, 2019-2021
- Table 83: Marvell Technology: Products
- Table 84: Marvell Technology: Key Management
- Table 85: Marvell Technology: Recent Developments, 2021
- Table 86: MediaTek: Net Revenue, 2019-2021
- Table 87: MediaTek: Products
- Table 88: MediaTek: Key Management
- Table 89: Microchip Technology: Net Revenue, 2019-2021
- Table 90: Microchip Technology: Products
- Table 91: Microchip Technology: Key Management
- Table 92: Nvidia: Net Revenue, 2019-2021
- Table 93: Nvidia: Products
- Table 94: Nvidia: Key Management
- Table 95: Nvidia: Recent Developments, 2021
- Table 96: NXP Semiconductors: Net Revenue, 2019-2021
- Table 97: NXP Semiconductors: Products
- Table 98: NXP Semiconductors: Key Management
- Table 99: NXP Semiconductors: Recent Developments, 2021
- Table 100: Qualcomm Technologies: Net Revenue, 2019-2021

Table 101: Qualcomm Technologies: Products

Table 102: Qualcomm Technologies: Key Management

Table 103: Qualcomm Technologies: Recent Developments, 2021

Table 104: Renesas Electronics: Net Revenue, 2019-2021

Table 105: Renesas Electronics: Products

Table 106: Renesas Electronics: Key Management

Table 107: Renesas Electronics: Recent Developments, 2021

Table 108: Samsung Electronics: Net Revenue, 2019-2021

Table 109: Samsung Electronics: Products

Table 110: Samsung Electronics: Key Management

Table 111: Samsung Electronics: Recent Developments, 2021

Table 112: STMicroelectronics: Net Revenue, 2019-2021

Table 113: STMicroelectronics: Products

Table 114: STMicroelectronics: Key Management

Table 115: STMicroelectronics: Recent Developments, 2021

Table 116: TSMC: Net Revenue, 2019-2021

Table 117: TSMC: Key Management

Table 118: Texas Instruments: Net Revenue, 2019-2021

Table 119: Texas Instruments: Products

Table 120: Texas Instruments: Key Management

Table 121: Texas Instruments: Recent Developments, 2021

Table 122: Unisoc Technologies Co. Ltd.: Net Revenue, 2021

Table 123: Unisoc Technologies: Products

Table 124: Unisoc Technologies: Recent Developments, 2021

Table 125: List of Abbreviations

## List Of Figures

### LIST OF FIGURES

- Summary Figure: Global Market Share of Microprocessor, by Region, 2021
- Figure 1: Global Microprocessor Market Share, by Architecture, 2021
- Figure 2: Global Microprocessor Market Share, by Architecture, 2027
- Figure 3: Global ARM-based MPU Market Share, by Region, 2021
- Figure 4: Global ARM-based MPU Market Share, by Region, 2027
- Figure 5: Global x86-based MPU Market Share, by Region, 2021
- Figure 6: Global x86-based MPU Market Share, by Region, 2027
- Figure 7: Global Microprocessor Market Share, by Technology, 2021
- Figure 8: Global Microprocessor Market Share, by Technology, 2027
- Figure 9: Global RISC Microprocessor Market Share, by Region, 2021
- Figure 10: Global RISC Microprocessor Market Share, by Region, 2027
- Figure 11: Global DSP Microprocessor Market Share, by Region, 2021
- Figure 12: Global DSP Microprocessor Market Share, by Region, 2027
- Figure 13: Global ASIC Microprocessor Market Share, by Region, 2021
- Figure 14: Global ASIC Microprocessor Market Share, by Region, 2027
- Figure 15: Global CISC Microprocessor Market Share, by Region, 2021
- Figure 16: Global CISC Microprocessor Market Share, by Region, 2027
- Figure 17: Global Superscaler Microprocessor Market Share, by Region, 2021
- Figure 18: Global Superscalar Microprocessor Market Share, by Region, 2027
- Figure 19: Global Microprocessor Market Share, by Product, 2021
- Figure 20: Global Microprocessor Market Share, by Product, 2027
- Figure 21: Global Market Share of Microprocessors for Smartphones, by Region, 2021
- Figure 22: Global Market Share of Microprocessors for Smartphones, by Region, 2027
- Figure 23: Global Market Share of Microprocessors for Personal Computers, by Region, 2021
- Figure 24: Global Market Share of Microprocessors for Personal Computers, by Region, 2027
- Figure 25: Global Market Share of Microprocessors in Tablets, by Region, 2021
- Figure 26: Global Market Share of Microprocessors in Tablets, by Region, 2027
- Figure 27: Global Market Share of Microprocessors in Laptops, by Region, 2021
- Figure 28: Global Market Share of Microprocessors in Laptops, by Region, 2027
- Figure 29: Global Market Share of Microprocessors in Embedded Devices, by Region, 2021
- Figure 30: Global Market Share of Microprocessors in Embedded Devices, by Region, 2027

- Figure 31: Global Market Share of Microprocessors in Other Products, by Region, 2021
- Figure 32: Global Market Share of Microprocessors in Other Products, by Region, 2027
- Figure 33: Global Microprocessor Market Share, by End-User Industry, 2021
- Figure 34: Global Microprocessor Market Share, by End-User Industry, 2027
- Figure 35: Global Market Share of Microprocessors in Automotive and Transportation End Uses, by Region, 2021
- Figure 36: Global Market Share of Microprocessors in Automotive and Transportation End Uses, by Region, 2027
- Figure 37: Global Market Share of Microprocessors in Consumer Electronics and Home Appliances, by Region, 2021
- Figure 38: Global Market Share of Microprocessors in Consumer Electronics and Home Appliances, by Region, 2027
- Figure 39: Global Market Share of Microprocessors in Industrial End Uses, by Region, 2021
- Figure 40: Global Market Share of Microprocessors in Industrial End Uses, by Region, 2027
- Figure 41: Global Market Share of Microprocessors in Medical and Healthcare End Uses, by Region, 2021
- Figure 42: Global Market Share of Microprocessors in Medical and Healthcare End Uses, by Region, 2027
- Figure 43: Global Market Share of Microprocessors in Military End Uses, by Region, 2021
- Figure 44: Global Market Share of Microprocessors in Military End Uses, by Region, 2027
- Figure 45: Global Market Share of Microprocessors in Aerospace and Defense End Uses, by Region, 2021
- Figure 46: Global Market Share of Microprocessors in Aerospace and Defense End Uses, by Region, 2027
- Figure 47: Global Market Share of Microcomputers in Computing and Storage End Uses, by Region, 2021
- Figure 48: Global Market Share of Microprocessors in Computing and Storage End Uses, by Region, 2027
- Figure 49: Global Market Share of Microprocessors in Networking Devices, by Region, 2021
- Figure 50: Global Market Share of Microprocessors in Networking Devices, by Region, 2027
- Figure 51: Global Market Share of Microprocessors in Other End Uses, by Region, 2021
- Figure 52: Global Market Share of Microprocessors in Other End Uses, by Region, 2027
- Figure 53: Global Microprocessor Market Share, by Region, 2021

- Figure 54: Global Microprocessor Market Share, by Region, 2027
- Figure 55: North American Microprocessor Market Share, by Country, 2021
- Figure 56: North American Microprocessor Market Share, by Country, 2027
- Figure 57: U.S. Microprocessor Market, 2021-2027
- Figure 58: Canadian Microprocessor Market, 2021-2027
- Figure 59: Mexican Microprocessor Market, 2021-2027
- Figure 60: European Microprocessor Market Share, by Country, 2021
- Figure 61: European Microprocessor Market Share, by Country, 2027
- Figure 62: German Microprocessor Market, 2021-2027
- Figure 63: U.K. Microprocessor Market, 2021-2027
- Figure 64: French Microprocessor Market, 2021-2027
- Figure 65: Rest of European Microprocessor Market, 2021-2027
- Figure 66: Asia-Pacific Microprocessor Market Share, by Country, 2021
- Figure 67: Asia-Pacific Microprocessor Market Share, by Country, 2027
- Figure 68: Chinese Microprocessor Market, 2021-2027
- Figure 69: Taiwanese Microprocessor Market, 2021-2027
- Figure 70: Japanese Microprocessor Market, 2021-2027
- Figure 71: Indian Microprocessor Market, 2021-2027
- Figure 72: Rest of Asia-Pacific Microprocessor Market, 2021-2027
- Figure 73: RoW Shares of the Microprocessor Market, by Subregion, 2021
- Figure 74: RoW Shares of the Microprocessor Market, by Subregion, 2027
- Figure 75: Published Patents, by Year, 2018-2022
- Figure 76: Share of Microprocessor Patents, by Country, 2021
- Figure 77: Share of the Most Followed Strategies in Global Microprocessor Market, January 2020 to September 2022
- Figure 78: Advanced Micro Devices: Sales Share, by Business Segment, 2021
- Figure 79: Advanced Micro Devices: Sales Share, by Region/Country, 2021
- Figure 80: Analog Devices: Sales Share, by Business Segment, 2021
- Figure 81: Analog Devices: Sales Share, by Region/Country, 2021
- Figure 82: Apple: Sales Share, by Business Segment, 2021
- Figure 83: Apple: Sales Share, by Region/Country, 2021
- Figure 84: Broadcom: Sales Share, by Business Segment, 2021
- Figure 85: Broadcom: Sales Share, by Region, 2021
- Figure 86: Huawei Technologies: Sales Share, by Business Segment, 2021
- Figure 87: Huawei Technologies: Sales Share, by Region/Country, 2021
- Figure 88: IBM: Sales Share, by Business Segment, 2021
- Figure 89: IBM: Sales Share, by Region, 2021
- Figure 90: Infineon Technologies: Sales Share, by Business Segment, 2021
- Figure 91: Infineon Technologies: Sales Share, by Region/Country, 2021

- Figure 92: Intel: Sales Share, by Business Segment, 2021
- Figure 93: Intel: Sales Share, by Region/Country, 2021
- Figure 94: Marvell Technology: Sales Share, by Business Segment, 2021
- Figure 95: Marvell Technology: Sales Share, by Region/Country, 2021
- Figure 96: MediaTek: Sales Share, by Region/Country, 2021
- Figure 97: Microchip Technology: Sales Share, by Business Segment, 2021
- Figure 98: Microchip Technology: Sales Share, by Region, 2021
- Figure 99: Nvidia: Sales Share, by Business Segment, 2021
- Figure 100: Nvidia: Sales Share, by Region/Country, 2021
- Figure 101: NXP Semiconductors: Sales Share, by Business Segment, 2021
- Figure 102: NXP Semiconductors: Sales Share, by Region/Country, 2021
- Figure 103: Qualcomm Technologies: Sales Share, by Business Segment, 2021
- Figure 104: Qualcomm Technologies: Sales Share, by Region/Country, 2021
- Figure 105: Renesas Electronics: Sales Share, by Business Segment, 2021
- Figure 106: Renesas Electronics: Sales Share, by Region/Country, 2021
- Figure 107: Samsung Electronics: Sales Share, by Business Segment, 2021
- Figure 108: Samsung Electronics: Sales Share, by Region/Country, 2021
- Figure 109: STMicroelectronics: Sales Share, by Business Segment, 2021
- Figure 110: STMicroelectronics: Sales Share, by Region, 2021
- Figure 111: TSMC: Sales Share, by Business Segment, 2021
- Figure 112: TSMC: Sales Share, by Region/Country, 2021
- Figure 113: Texas Instruments: Sales Share, by Business Segment, 2021
- Figure 114: Texas Instruments: Sales Share, by Region/Country, 2021

## I would like to order

Product name: Microprocessor in Embedded Applications: Global Markets

Product link: <https://marketpublishers.com/r/M3058482E9DDEN.html>

Price: US\$ 5,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/M3058482E9DDEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:  
Last name:  
Email:  
Company:  
Address:  
City:  
Zip code:  
Country:  
Tel:  
Fax:  
Your message:

**\*\*All fields are required**

Customer signature \_\_\_\_\_

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970