

Microcontrollers, DSP, & IP Core Chip Market by Type, Applications (Automotive & Transportation, Consumer Electronics, Industrial, Communications, Security, and Medical & Healthcare) and Geography (Americas, Europe, APAC & ROW) - Analysis & Forecast to 2014 – 2020

https://marketpublishers.com/r/M84054B806BEN.html

Date: August 2014

Pages: 224

Price: US\$ 5,650.00 (Single User License)

ID: M84054B806BEN

# **Abstracts**

A microcontroller contains a processor core, memory, and programmable input/output peripherals, which means small computer on a single integrated circuit. Microcontrollers are used in devices which have automatic control functions such as medical devices, power tools, and smart homes devices. Any control system is brainless without microcontrollers. A DSP can be used for the enhancement of signal strength and also for the signal filtering purpose. DSP is majorly used for processing the digital signal to provide the needed signal strength. An IP (Intellectual Property) core is a revolution in the electronic design, which is a reusable unit or logic, cell, or a chip layout design and is an Intellectual Property of one party, which may be licensed to another party or can be used and owned and used by a single party alone.

Average Selling Price (ASP) of microcontroller is decreasing year on year, owing to high intense competition and increased number of foundries are declining the microcontroller's price, which is further driving the market. Microcontrollers are used in numerous devices to deliver high performance and controllable output through devices. ARM cores are another major driver for the growth of the microcontroller market. ARM cores is observed to witness rapid adoption as it offers high performance capabilities and advanced technological feature.

Increased numbers of new devices and applications, such as wearable electronics,



smartphone and tablets, imaging devices, and more, drive the demand of DSP. Applications such as mobile TV, online gaming, and Internet browsing increase the demand of DSP. These devices have created real time applications that have generated huge data, leading to demand of multi-core DSPs. DSPs provide low power consumption and high speed, which are required for new age devices.

In semiconductor, technology changes vary rapidly, so chip manufacturers decided to go for third party to reduce the cost and time to market. Adoption of third party IP core chips has created and is continuously creating demand of IP core chips. IP vendors rapidly adopt changes in technology and apply these changes in their design to sell it to chip manufacturers. This helps the chip manufacturers to save their cost, time to market, and stay ahead in the intense competition.

Some of the key players in this market include Analog Devices, Inc. (U.S.), Freescale Semiconductor, Inc. (U.S.), STMicroelectronics N.V. (Switzerland), Panasonic Corp. (Japan), Infineon Technologies AG (Germany), Renesas Electronics Corp (Japan), Maxim Integrated Products, Inc. (U.S.), Texas Instruments Inc. (U.S.), Xilinx, Inc. (U.S.), Altera Corp. (U.S.), ARM Holdings PLC (U.K.), Cadence Design Systems (U.S.), and Ceva Inc. (U.S.).



# **Contents**

#### 1 INTRODUCTION

- 1.1 OBJECTIVES
- 1.2 MARKETS COVERED
- 1.3 STAKEHOLDERS
- 1.4 RESEARCH METHODOLOGY
  - 1.4.1 MARKET SIZE ESTIMATION
  - 1.4.2 MARKET CRACKDOWN AND DATA TRIANGULATION
  - 1.4.3 KEY DATA TAKEN FROM SECONDARY SOURCES
  - 1.4.4 KEY DATA TAKEN FROM PRIMARY SOURCES
  - 1.4.5 ASSUMPTIONS MADE FOR THIS REPORT
  - 1.4.6 LIST OF COMPANIES COVERED DURING THE STUDY

# **2 EXECUTIVE SUMMARY**

### **3 MARKET OVERVIEW**

- 3.1 INTRODUCTION
- 3.2 MARKET DEFINITION
- 3.3 HISTORY AND EVOLUTION
- 3.4 MARKET DYNAMICS
  - 3.4.1 MARKET DRIVERS
    - 3.4.1.1 IoT and consumer electronics
    - 3.4.1.2 Small technology nodes (process nodes) drives the IC manufacturing market
    - 3.4.1.3 New devices in consumer electronics with novel applications
  - 3.4.2 MARKET RESTRAINTS
    - 3.4.2.1 Increasing competition
    - 3.4.2.2 Increased complexity in the semiconductor design
  - 3.4.3 MARKET OPPORTUNITY
    - 3.4.3.1 Developing economies: A huge opportunity
- 3.5 BURNING ISSUES
  - 3.5.1 IP THEFTS, COUNTERFEITS, AND CONFLICTS
  - 3.5.2 PROGRAMMING CHALLENGE
- 3.6 WINNING IMPERATIVES
  - 3.6.1 MULTICORE PROCESSORS
- 3.7 VALUE CHAIN ANALYSIS-IP CORE CHIPS
  - 3.7.1 VALUE CHAIN SEGMENTS



- 3.7.1.1 IP core developers
- 3.7.1.2 IP licensing vendors
- 3.7.1.3 Open source IP vendors
- 3.7.1.4 IP aggregators
- 3.7.1.5 IP customers
- 3.7.2 THE EFFECT OF FOUNDRIES ON THE IP CORE CHIP MARKET
- 3.7.3 IP CORE CHIP BUSINESS MODELS
  - 3.7.3.1 Per-use business model
  - 3.7.3.2 Time-based business model
  - 3.7.3.3 Royalty-based business model
  - 3.7.3.4 Access-based business model
- 3.8 VALUE CHAIN ANALYSIS MICROCONTROLLER & DSP
  - 3.8.1 RAW MATERIAL SUPPLIERS
  - 3.8.2 ASSEMBLY, TESTING, & PACKAGING (ATP)
  - 3.8.3 ORIGINAL EQUIPMENT MANUFACTURERS (OEMS)
  - 3.8.4 EXISTING PLAYERS IN THE VALUE CHAIN
    - 3.8.4.1 Original Device Manufacturers (ODMs)
    - 3.8.4.2 Assembly, Testing, & Packaging services (ATP)
    - 3.8.4.3 Original Equipment Manufacturers (OEMs)
    - 3.8.4.4 Fabrication facilities
    - 3.8.4.5 IP vendors
    - 3.8.4.6 Pure play foundries
    - 3.8.4.7 EDA vendors
    - 3.8.4.8 IDM foundries
- 3.9 PORTER'S FIVE FORCES MODEL MICROCONTROLLER, DSP, AND IP CORE CHIP MARKET
  - 3.9.1 DEGREE OF COMPETITION
  - 3.9.2 BARGAINING POWER OF BUYERS
  - 3.9.3 BARGAINING POWER OF SUPPLIERS
  - 3.9.4 THREAT OF SUBSTITUTES
  - 3.9.5 THREAT OF NEW ENTRANTS

# 4 MICROCONTROLLER MARKET

- 4.1 INTRODUCTION
- 4.2 MICROPROCESSOR VS. MICROCONTROLLER
- 4.3 GENERAL ARCHITECTURE OF A MICROCONTROLLER
  - 4.3.1 CENTRAL PROCESSING UNIT (CPU)
  - 4.3.2 PROGRAM COUNTER (PC)



- 4.3.3 INSTRUCTION REGISTER (IR)
- 4.3.4 ARITHMETIC LOGIC UNIT (ALU)
- 4.3.5 REGISTERS
- 4.3.6 I/O PORTS
- 4.4 CLASSIFICATION OF MICROCONTROLLERS
  - 4.4.1 8-BIT MICROCONTROLLER
  - 4.4.2 16-BIT MICROCONTROLLER
  - 4.4.3 32-BIT MICROCONTROLLER
- 4.5 MARKET DYNAMICS MICROCONTROLLERS
  - 4.5.1 DRIVERS
    - 4.5.1.1 Growth in the automobile sector will drive the microcontroller market
    - 4.5.1.2 Declining price of microcontrollers is expected to fuel the growth
    - 4.5.1.3 Increased adoption of ARM cores
- 4.5.1.4 Migration to the small technology nodes further drives the 32-bit microcontroller market
  - 4.5.1.5 Smartphones boost the microcontroller market
  - 4.5.2 MARKET RESTRAINT
    - 4.5.2.1 Large number of companies in the market
  - 4.5.3 MARKET OPPORTUNITY
    - 4.5.3.1 Smart-grid projects act as attractive prospects for the microcontroller market

# 5 DIGITAL SIGNAL PROCESSOR (DSP) MARKET

- 5.1 INTRODUCTION
- 5.2 ARCHITECTURE OF A DIGITAL SIGNAL PROCESSOR
- 5.3 CLASSIFICATION BY PRODUCT SEGMENT
  - 5.3.1 GENERAL PURPOSE DSP
  - 5.3.2 APPLICATION SPECIFIC DSP
  - 5.3.3 PROGRAMMABLE (FPGA & PLD) DSP
- 5.4 CLASSIFICATION BY CORE TYPE
  - 5.4.1 SINGLE-CORE DSP MARKET
  - 5.4.2 MULTI-CORE DSP MARKET
- 5.5 MARKET DYNAMICS DSP
  - 5.5.1 DRIVERS
- 5.5.1.1 Booming number of wireless devices and developments in the wireless infrastructure
  - 5.5.1.2 Upsurge in the global mobile data traffic
  - 5.5.1.3 Emergence of new devices and modish applications
  - 5.5.1.4 Internet Protocol (IP) video surveillance



## 5.5.2 RESTRAINT

5.5.2.1 Price war affecting performance parameters

# 5.5.3 OPPORTUNITIES

- 5.5.3.1 Increasing demand for VoIP and IP video
- 5.5.3.2 Emerging economies

### **6 IP CORE CHIP MARKET**

- **6.1 INTRODUCTION**
- 6.2 CLASSIFICATION BY IP NATURE
  - 6.2.1 SOFT CORE
  - 6.2.2 HARD CORE
- 6.3 CLASSIFICATION BY CUSTOMIZATION
  - 6.3.1 STANDARD IP CORE
  - 6.3.2 CUSTOMIZABLE IP CORE
- 6.4 MARKET DYNAMICS
  - 6.4.1 MARKET DRIVERS
- 6.4.1.1 Continuously rising chip design cost and expenditure acts as a major driver for the IP core chip market
  - 6.4.1.2 Adopting third party IP core chips due to rapidly changing technology nodes
  - 6.4.1.3 Fierce competition requiring lesser time-to-market in consumer electronics
  - 6.4.2 MARKET RESTRAINTS
    - 6.4.2.1 Volatility in the process nodes of chip manufacturing
    - 6.4.2.2 Effects of changing process nodes on the global Semiconductor IP market
      - 6.4.2.2.1
      - 6.4.2.2.2
  - 6.4.3 MARKET OPPORTUNITIES
  - 6.4.3.1 Avionics, aerospace, and defense
  - 6.4.3.2 Embedded and programmable DSP IP market segments

# **7 MARKET BY APPLICATION**

- 7.1 INTRODUCTION
- 7.2 AUTOMOTIVE AND TRANSPORTATION
  - 7.2.1 AUTOMOTIVE BODY ELECTRONICS
  - 7.2.2 AUTOMOTIVE INFOTAINMENT APPLICATIONS
  - 7.2.3 AUTOMOTIVE CONTROL SYSTEMS
  - 7.2.4 AUTOMOTIVE SENSORS
  - 7.2.5 IN-VEHICLE NETWORKING



## 7.3 COMPUTER SECTOR

- 7.3.1 SUPERCOMPUTER
- 7.3.2 MAINFRAME COMPUTERS AND COMPUTER SERVERS
- 7.3.3 PC & PC PERIPHERALS
- 7.4 CONSUMER ELECTRONICS SECTOR
  - 7.4.1 SMARTPHONES AND TABLETS
  - 7.4.2 WEARABLE DEVICES
  - 7.4.3 WHITE GOODS (APPLIANCES)
  - 7.4.4 PC AND PC PERIPHERALS
  - 7.4.5 CAMERAS AND PROJECTORS
  - 7.4.6 SET-TOP BOXES AND DIGITAL TVS
  - 7.4.7 DVD. BLUE-RAY PLAYERS. AND HOME AUDIO SYSTEMS
  - **7.4.8 OTHERS**
- 7.5 COMMUNICATIONS SECTOR
  - 7.5.1 WIRELESS COMMUNICATION APPLICATION
  - 7.5.2 WIRELESS LAN
  - 7.5.3 RFID APPLICATION
  - 7.5.4 TELECOMMUNICATION APPLICATION
  - 7.5.5 SURVEILLANCE APPLICATION
  - 7.5.6 VOIP APPLICATION
- 7.6 INDUSTRIAL, BUILDING, & HOME SECTOR
  - 7.6.1 INDUSTRIAL AUTOMATION APPLICATION
  - 7.6.2 INDUSTRIAL CONTROL SYSTEMS
  - 7.6.3 INDUSTRIAL NETWORK
  - 7.6.4 SMART METERING APPLICATIONS
  - 7.6.5 LIGHTING APPLICATIONS
  - 7.6.6 INDUSTRIAL SENSORS
- 7.7 SECURITY SECTOR
  - 7.7.1 SECURE MICROCONTROLLERS
  - 7.7.2 SMART CARDS
- 7.8 MEDICAL AND HEALTHCARE SECTOR
  - 7.8.1 MEDICAL TELEMETRY DEVICES
  - 7.8.2 IMPLANTable MEDICAL DEVICES
  - 7.8.3 MONITORING APPLICATION
  - 7.8.4 HIGH VOLTAGE MEDICAL DEVICES
  - **7.8.5 OTHERS**
- 7.9 MILITARY, DEFENSE, AND AEROSPACE SECTOR
- 7.9.1 DSP -BASED FIELD PROGRAMMABLE ARRAY APPLICATIONS
- 7.9.2 RAD-HARD ASIC AND FPGA BASED DSP



# 7.1 RF AND OTHERS SECTOR

- 7.10.1 RF DSP APPLICATION
- 7.10.2 RADAR COMMUNICATION APPLICATION
- 7.10.3 OSCILLOSCOPE AND ANALYZER APPLICATION
- 7.10.4 OTHERS

### **8 MARKET BY GEOGRAPHY**

- 8.1 INTRODUCTION
- 8.2 NORTH AMERICA
  - 8.2.1 THE U.S.
  - 8.2.2 CANADA
  - **8.2.3 MEXICO**
- 8.3 SOUTH AMERICA
  - 8.3.1 BRAZIL
  - 8.3.2 ARGENTINA
  - **8.3.3 OTHERS**
- 8.4 EUROPE
  - 8.4.1 GERMANY
  - 8.4.2 THE U.K.
  - **8.4.3 FRANCE**
  - 8.4.4 THE NETHERLANDS
  - 8.4.5 REST OF EUROPE
- 8.5 APAC
  - 8.5.1 JAPAN
  - 8.5.2 SOUTH KOREA
  - 8.5.3 CHINA
  - 8.5.4 INDIA
  - 8.5.5 SOUTH EAST ASIAN COUNTRIES
  - 8.5.6 REST OF APAC
- 8.6 ROW
  - 8.6.1 MIDDLE EAST
  - 8.6.2 AUSTRALIA
  - 8.6.3 OTHERS

### 9 COMPETITIVE LANDSCAPE

### 9.1 INTRODUCTION

9.1.1 MARKET SHARE RANKING ANALYSIS FOR MICROCONTROLLERS



- 9.1.2 MARKET SHARE RANKING ANALYSIS FOR DSP
- 9.1.3 MARKET SHARE RANKING ANALYSIS FOR THE IP CORE CHIP
- 9.1.4 GROWTH STRATEGIES
- 9.2 COMPETITIVE SITUATIONS AND TRENDS
  - 9.2.1 NEW PRODUCT DEVELOPMENTS & LAUNCHES
  - 9.2.2 JOINT VENTURES, COLLABORATIONS, PARTNERSHIPS, & ALLIANCES
  - 9.2.3 MERGERS & ACQUISITIONS
  - **9.2.4 OTHERS**

# 10 COMPANY PROFILES (OVERVIEW, PRODUCTS AND SERVICES, FINANCIALS, STRATEGY & DEVELOPMENT)

- 10.1 ANALOG DEVICES, INC.
- 10.2 FREESCALE SEMICONDUCTOR, INC.
- 10.3 STMICROELECTRONICS N.V.
- 10.4 PANASONIC CORPORATION
- 10.5 INFINEON TECHNOLOGIES AG
- 10.6 RENESAS ELECTRONICS CORPORATION
- 10.7 MAXIM INTEGRATED PRODUCTS, INC.
- 10.8 TEXAS INSTRUMENTS INC.
- 10.9 XILINX, INC.
- 10.10 ALTERA CORPORATION
- 10.11 ARM HOLDINGS PLC
- 10.12 CADENCE DESIGN SYSTEMS
- 10.13 CEVA INC. (Details on Overview, Products and Services, Financials, Strategy & Development might not be Captured in case of Unlisted Companies.)



# **List Of Tables**

### LIST OF TABLES

Table 1 GENERAL ASSUMPTIONS

Table 2 CONSIDERATIONS MADE FOR COMPANY PROFILES AND SWOT ANALYSIS

Table 3 MICROCONTROLLER, DSP, AND IP CORE CHIP MARKET SIZE (VALUE), 2013 – 2020 (\$BILLION)

Table 4 MICROCONTROLLER, DSP, & IP CORE CHIP MARKET: IMPACT ANALYSIS OF MARKET DRIVERS, 2013 – 2020

Table 5 MICROCONTROLLER, DSP, & IP CORE CHIP MARKET: IMPACT ANALYSIS OF MARKET RESTRAINTS, 2013 – 2020

Table 6 MICROCONTROLLER, DSP, & IP CORE CHIP MARKET: IMPACT ANALYSIS OF MARKET OPPORTUNITIES, 2013 – 2020

Table 7 IP CORE CHIP BUSINESS MODELS COMPARISON

Table 8 IMPACT ANALYSIS OF PORTER'S FIVE FORCES IN THE

MICROCONTROLLER, DSP, AND IP CORE CHIP MARKET - 2013

Table 9 MICROCONTROLLER MARKET SIZE (VALUE & VOLUME), & ASP, 2013 – 2020 (\$MILLION), (MILLION UNITS)

Table 10 MICROCONTROLLERS VS. MICROPROCESSORS

Table 11 MICROCONTROLLER MARKET SIZE (VALUE), BY TYPE, 2013-2020, (\$MILLION)

Table 12 MICROCONTROLLER MARKET SIZE (VOLUME), BY TYPE, 2013-2020 (MILLION UNITS)

Table 13 IMPACT ANALYSIS OF DRIVERS: MICROCONTROLLER

Table 14 IMPACT ANALYSIS OF RESTRAINT: MICROCONTROLLER

Table 15 IMPACT ANALYSIS OF OPPORTUNITY: MICROCONTROLLER

Table 16 DSP MARKET SIZE (VALUE & VOLUME), & ASP, 2013 – 2020 (\$MILLION), (MILLION UNITS)

Table 17 DSP MARKET SIZE (VALUE), BY PRODUCT SEGMENT, 2013-2020 (\$MILLION)

Table 18 DSP MARKET SIZE (VOLUME), BY PRODUCT SEGMENT, 2013-2020 (MILLION UNITS)

Table 19 DSP MARKET SIZE (VALUE), BY CORE TYPE, 2013-2020, (\$MILLION) Table 20 DSP MARKET SIZE (VOLUME), BY CORE TYPE, 2013-2020, (MILLION UNITS)

Table 21 IMPACT ANALYSIS OF DRIVERS - DSP

Table 22 TECHNOLOGY AND DATA TRANSFER RATE



Table 23 IMPACT ANALYSIS OF THE RESTRAINT - DSP

Table 24 IMPACT ANALYSIS OF OPPORTUNITIES - DSP

Table 25 IP CORE CHIP MARKET SIZE (VALUE), BY IP NATURE, 2013-2020 (\$MILLION)

Table 26 IP CORE CHIP MARKET SIZE (VALUE), BY CUSTOMIZATION, 2013-2020 (\$MILLION)

Table 27 IMPACT ANALYSIS OF MARKET DRIVERS

Table 28 IMPACT ANALYSIS OF MARKET RESTRAINTS

Table 29 IMPACT ANALYSIS OF MARKET OPPORTUNITIES

Table 30 MICROCONTROLLER MARKET SIZE (VALUE), BY APPLICATION, 2013-2020 (\$MILLION)

Table 31 MICROCONTROLLER MARKET SIZE (VOLUME), BY APPLICATION, 2013-2020 (MILLION UNITS)

Table 32 DSP MARKET SIZE (VALUE), BY APPLICATION, 2013-2020 (\$MILLION) Table 33 DSP MARKET SIZE (VOLUME), BY APPLICATION, 2013-2020, (MILLION UNITS)

Table 34 IP CORE CHIP MARKET SIZE (VALUE), BY APPLICATION, 2013 – 2020, (\$MILLION)

Table 35 MICROCONTROLLER MARKET SIZE (VALUE), BY AUTOMOTIVE & TRANSPORTATION, 2013-2020, (\$MILLION)

Table 36 MICROCONTROLLER MARKET SIZE (VOLUME), BY AUTOMOTIVE & TRANSPORTATION, 2013-2020, (MILLION UNITS)

Table 37 DSP MARKET SIZE (VALUE), BY AUTOMOTIVE & TRANSPORTATION SECTOR, 2013-2020 (\$MILLION)

Table 38 DSP MARKET SIZE (VOLUME), BY AUTOMOTIVE & TRANSPORTATION SECTOR, 2013-2020 (MILLION UNITS)

Table 39 IP CORE CHIP MARKET SIZE (VALUE), BY AUTOMOTIVE & TRANSPORTATION SECTOR, 2013 – 2020, (\$MILLION)

Table 40 AUTOMOTIVE & TRANSPORTATION SECTOR (IP CORE CHIP MARKET SIZE (VALUE)), BY GEOGRAPHY, 2013-2020, (\$MILLION)

Table 41 DSP MARKET SIZE (VALUE), BY COMPUTER SECTOR, 2013-2020 (\$MILLION)

Table 42 DSP MARKET SIZE (VOLUME), BY COMPUTER SECTOR, 2013-2020 (MILLION UNITS)

Table 43 IP CORE CHIP MARKET SIZE (VALUE), BY COMPUTER SECTOR, 2013 – 2020 (\$MILLION)

Table 44 COMPUTER SECTOR (IP CORE CHIP MARKET SIZE (VALUE)), BY GEOGRAPHY, 2013-2020 (\$MILLION)

Table 45 MICROCONTROLLER MARKET SIZE (VALUE), BY CONSUMER



ELECTRONICS, 2013-2020 (\$MILLION)

Table 46 MICROCONTROLLER MARKET SIZE (VOLUME), BY CONSUMER ELECTRONICS, 2013-2020, (MILLION UNITS)

Table 47 DSP MARKET SIZE (VALUE), BY CONSUMER ELECTRONICS SECTOR, 2013-2020 (\$MILLION)

Table 48 DSP MARKET SIZE (VOLUME), BY CONSUMER ELECTRONICS SECTOR, 2013-2020 (MILLION UNITS)

Table 49 IP CORE CHIP MARKET SIZE (VALUE), BY CONSUMER ELECTRONICS SECTOR, 2013 – 2020 (\$MILLION)

Table 50 CONSUMER ELECTRONICS SECTOR (IP CORE CHIP MARKET SIZE (VALUE)), BY GEOGRAPHY, 2013-2020 (\$MILLION)

Table 51 MICROCONTROLLER MARKET SIZE (VALUE), BY COMMUNICATIONS, 2013-2020 (\$MILLION)

Table 52 MICROCONTROLLER MARKET SIZE (VOLUME), BY COMMUNICATIONS, 2013-2020 (MILLION UNITS)

Table 53 DSP MARKET SIZE (VALUE), BY COMMUNICATIONS SECTOR, 2013-2020 (\$MILLION)

Table 54 DSP MARKET SIZE (VOLUME), BY COMMUNICATIONS SECTOR, 2013-2020 (MILLION UNITS)

Table 55 IP CORE CHIP MARKET SIZE (VALUE), BY COMMUNICATIONS SECTOR, 2013 – 2020 (\$MILLION)

Table 56 COMMUNICATIONS SECTOR (IP CORE CHIP MARKET SIZE (VALUE)), BY GEOGRAPHY, 2013-2020 (\$MILLION)

Table 57 MICROCONTROLLER MARKET SIZE (VALUE), INDUSTRIAL, BUILDING, & HOME, 2013-2020 (\$MILLION)

Table 58 MICROCONTROLLER MARKET SIZE (VOLUME), BY INDUSTRIAL, BUILDING, & HOME, 2013-2020 (MILLION UNITS)

Table 59 DSP MARKET SIZE (VALUE), BY INDUSTRIAL SECTOR, 2013-2020 (\$MILLION)

Table 60 DSP MARKET SIZE (VOLUME), BY INDUSTRIAL SECTOR, 2013-2020 (MILLION UNITS)

Table 61 MICROCONTROLLER MARKET SIZE (VALUE), SECURITY, 2013-2020 (\$MILLION)

Table 62 MICROCONTROLLER MARKET SIZE (VOLUME), BY SECURITY, 2013-2020 (MILLION UNITS)

Table 63 MICROCONTROLLER MARKET SIZE (VALUE), BY MEDICAL & HEALTHCARE, 2013-2020, (\$MILLION)

Table 64 MICROCONTROLLER MARKET SIZE (VOLUME), BY MEDICAL & HEALTHCARE, 2013-2020 (MILLION UNITS)



Table 65 DSP MARKET SIZE (VALUE), BY MEDICAL SECTOR, 2013-2020 (\$MILLION)

Table 66 DSP MARKET SIZE (VOLUME), BY MEDICAL SECTOR, 2013-2020 (MILLION UNITS)

Table 67 DSP MARKET SIZE (VALUE), BY MILITARY, DEFENSE, & AEROSPACE SECTOR, 2013-2020 (\$MILLION)

Table 68 DSP MARKET SIZE (VOLUME), BY MILITARY, DEFENSE, & AEROSPACE SECTOR, 2013-2020 (MILLION UNITS)

Table 69 DSP MARKET SIZE (VALUE), BY RF & OTHERS SECTOR, 2013-2020 (\$MILLION)

Table 70 DSP MARKET SIZE (VOLUME), BY RF & OTHERS SECTOR, 2013-2020 (MILLION UNITS)

Table 71 IP CORE CHIP MARKET SIZE (VALUE), BY OTHER APPLICATION SECTOR, 2013 – 2020 (\$MILLION)

Table 72 OTHER APPLICATION SECTOR (IP CORE CHIP MARKET SIZE (VALUE)), BY GEOGRAPHY, 2013-2020 (\$MILLION)

Table 73 MICROCONTROLLER MARKET SIZE (VALUE), BY GEOGRAPHY, 2013-2020 (\$MILLION)

Table 74 DSP MARKET SIZE (VALUE), BY GEOGRAPHY, 2013-2020 (\$MILLION) Table 75 IP CORE CHIP MARKET SIZE (VALUE), BY GEOGRAPHY, 2013-2020, (\$MILLION)

Table 76 MICROCONTROLLER MARKET SIZE (VALUE), BY NORTH AMERICA, 2013-2020 (\$MILLION)

Table 77 DSP MARKET SIZE (VALUE), BY NORTH AMERICA, 2013-2020 (\$MILLION) Table 78 NORTH AMERICA: IP CORE CHIP MARKET SIZE (VALUE), BY COUNTRY, 2013 – 2020 (\$MILLION)

Table 79 NORTH AMERICA: IP CORE CHIP MARKET SIZE (VALUE), BY APPLICATION, 2013 – 2020 (\$MILLION)

Table 80 MICROCONTROLLER MARKET SIZE (VALUE), BY SOUTH AMERICA, 2013-2020 (\$MILLION)

Table 81 MICROCONTROLLER MARKET SIZE (VALUE), BY EUROPE,2013-2020, (\$MILLION)

Table 82 DSP MARKET SIZE (VALUE), BY EUROPE, 2013-2020 (\$MILLION)

Table 83 EUROPE: IP CORE CHIP MARKET SIZE (VALUE), BY COUNTRY, 2013 – 2020 (\$MILLION)

Table 84 EUROPE: IP CORE CHIP MARKET SIZE (VALUE), BY APPLICATION, 2013 – 2020 (\$MILLION)

Table 85 MICROCONTROLLER MARKET SIZE (VALUE), BY APAC, 2013-2020 (\$MILLION)



Table 86 DSP MARKET SIZE (VALUE), BY APAC, 2013-2020 (\$MILLION)

Table 87 APAC: IP CORE CHIP MARKET SIZE (VALUE), BY COUNTRY, 2013 – 2020 (\$MILLION)

Table 88 APAC: IP CORE CHIP MARKET SIZE (VALUE), BY APPLICATION, 2013 – 2020 (\$MILLION)

Table 89 MICROCONTROLLER MARKET SIZE (VALUE), BY ROW, 2013-2020 (\$MILLION)

Table 90 DSP MARKET SIZE (VALUE), BY ROW, 2013-2020 (\$MILLION)

Table 91 ROW: IP CORE CHIP MARKET SIZE (VALUE), BY REGION, 2013 – 2020, (\$MILLION)

Table 92 ROW: IP CORE CHIP MARKET SIZE (VALUE), BY APPLICATION, 2013 – 2020 (\$MILLION)

Table 93 MICROCONTROLLER MARKET RANKING ANALYSIS, 2013

Table 94 DSP MARKET RANKING ANALYSIS, 2013

Table 95 IP CORE CHIP MARKET RANKING ANALYSIS, 2013

Table 96 MCU, DSP, & IP CORE CHIP MARKET: NEW PRODUCT DEVELOPMENTS & LAUNCHES, 2010 – 2014

Table 97 MCU, DSP, & IP CORE CHIP MARKET: JOINT VENTURES,

COLLABORATIONS, PARTNERSHIPS, & ALLIANCES, 2011 – 2014

Table 98 MCU, DSP, & IP CORE CHIP MARKET: MERGERS & ACQUISITIONS, 2009 - 2014

Table 99 MCU, DSP, & IP CORE CHIP MARKET: OTHERS



# **List Of Figures**

## LIST OF FIGURES

Figure 1 MICROCONTROLLER, DSP, AND IP CORE CHIP MARKET SEGMENTATION

Figure 2 RESEARCH METHODOLOGY OF MICROCONTROLLER, DSP, AND IP CORE CHIP MARKET

Figure 3 MICROCONTROLLER, DSP, AND IP CORE CHIP MARKET SIZE ESTIMATION

Figure 4 MICROCONTROLLER, DSP, AND IP CORE CHIP MARKET CRACKDOWN AND DATA TRIANGULATION

Figure 5 EVOLUTION OF MICROCONTROLLER, DSP, AND IP CORE CHIP

Figure 6 INDUSTRY VALUE CHAIN – IP CORE CHIP

Figure 7 IP CORE CHIP CUSTOMER SEGMENTS CHAIN

Figure 8 IP CORE CHIP VENDOR-FOUNDRY-VENDOR RELATIONSHIP

Figure 9 INDUSTRY VALUE CHAIN- MICROCONTROLLER & DSP

Figure 10 PORTER'S FIVE FORCES ANALYSIS FOR THE MICROCONTROLLER, DSP, AND IP CORE CHIP MARKET

Figure 11 DEGREE OF COMPETITION IN THE MICROCONTROLLER, DSP, AND IP CORE CHIP MARKET

Figure 12 BARGAINING POWER OF BUYERS IN THE MICROCONTROLLER, DSP, AND IP CORE CHIP MARKET

Figure 13 BARGAINING POWER OF SUPPLIERS IN THE MICROCONTROLLER, DSP, AND IP CORE CHIP MARKET

Figure 14 THREAT OF SUBSTITUTES IN THE MICROCONTROLLER, DSP, AND IP CORE CHIP MARKET

Figure 15 THREAT OF NEW ENTRANTS IN THE MICROCONTROLLER, DSP, AND IP CORE CHIP MARKET

Figure 16 GENERAL ARCHITECTURE OF A MICROCONTROLLER

Figure 17 MICROCONTROLLER TYPES

Figure 18 DSP ARCHITECTURE

Figure 19 DSP: CLASSIFICATION BY PRODUCT SEGMENT

Figure 20 DSP: CLASSIFICATION BY CORE TYPE

Figure 21 INCREASING MOBILE DATA TRAFFIC (EXABYTES/MONTH)

Figure 22 CLASSIFICATION OF IP-CORE CHIPS

Figure 23 MICROCONTROLLER MARKET, BY APPLICATION

Figure 24 DSP MARKET, BY APPLICATION

Figure 25 IP CORE MARKET, BY APPLICATION



Figure 26 MARKET BY AUTOMOTIVE AND TRANSPORTATION APPLICATION

Figure 27 MARKET BY COMPUTER SECTOR APPLICATION

Figure 28 MARKET BY COMMUNICATION SECTOR APPLICATION

Figure 29 MARKET BY INDUSTRIAL, BUILDING, AND HOME SECTOR APPLICATION

Figure 30 MARKET BY SECURITY SECTOR APPLICATION

Figure 31 MARKET BY MEDICAL AND HEALTHCARE SECTOR APPLICATION

Figure 32 MARKET BY MILITARY, DEFENSE, AND AEROSPACE SECTOR

Figure 33 MARKET BY RF AND OTHERS SECTOR APPLICATION

Figure 34 MCU, DSP, AND IP CORE CHIP - MARKET BY GEOGRAPHY

Figure 35 MARKET BY NORTH AMERICA

Figure 36 MARKET BY SOUTH AMERICA

Figure 37 MARKET BY EUROPE

Figure 38 MARKET BY APAC

Figure 39 MARKET BY REST OF THE WORLD

Figure 40 MCU, DSP, AND IP CORE CHIP MARKET: COMPETITIVE LANDSCAPE

Figure 41 MICROCONTROLLER, DSP, IP CORE CHIP MARKET: KEY GROWTH STRATEGIES

Figure 42 ANALOG DEVICES, INC.: COMPANY SNAPSHOT

Figure 43 ANALOG DEVICES, INC.: PRODUCTS AND SERVICES

Figure 44 ANALOG DEVICES, INC.: PROCESSORS AND DSP

Figure 45 FREESCALE SEMICONDUCTOR, INC.: COMPANY SNAPSHOT

Figure 46 FREESCALE SEMICONDUCTOR, INC.: PRODUCTS AND SERVICES

Figure 47 FREESCALE SEMICONDUCTOR, INC.: MICROCONTROLLERS PRODUCT PORTFOLIO

Figure 48 STMICROELECTRONICS N.V.: COMPANY SNAPSHOT

Figure 49 STMICROELECTRONICS N.V.: PRODUCTS AND SERVICES

Figure 50 STMICROELECTRONICS N.V.: MICROCONTROLLERS

Figure 51 STMICROELECTRONICS N.V.: SWOT ANALYSIS

Figure 52 PANASONIC CORPORATION: COMPANY SNAPSHOT

Figure 53 PANASONIC CORPORATION: PRODUCTS AND SERVICES

Figure 54 INFINEON TECHNOLOGIES AG: COMPANY SNAPSHOT

Figure 55 INFINEON TECHNOLOGIES AG: PRODUCTS AND SERVICES

Figure 56 RENESAS ELECTRONICS CORPORATION: COMPANY SNAPSHOT

Figure 57 RENESAS ELECTRONICS CORPORATION: PRODUCTS AND SERVICES

Figure 58 MAXIM INTEGRATED PRODUCTS, INC.: COMPANY SNAPSHOT

Figure 59 MAXIM INTEGRATED PRODUCTS, INC.: PRODUCTS AND SERVICES

Figure 60 TEXAS INSTRUMENTS INC.: COMPANY SNAPSHOT

Figure 61 TEXAS INSTRUMENTS INC.: PRODUCTS AND SERVICES



Figure 62 TEXAS INSTRUMENTS INC.: SWOT ANALYSIS

Figure 63 XILINX, INC.: COMPANY SNAPSHOT

Figure 64 XILINX INC.: PRODUCTS AND SERVICES

Figure 65 XILINX INC.: SWOT ANALYSIS

Figure 66 ALTERA CORPORATION: COMPANY SNAPSHOT

Figure 67 ALTERA CORPORATION: PRODUCTS AND SERVICES

Figure 68 ARM HOLDINGS PLC: COMPANY SNAPSHOT

Figure 69 ARM HOLDINGS PLC: PRODUCT PORTFOLIO

Figure 70 ARM HOLDINGS: SWOT ANALYSIS

Figure 71 CADENCE DESIGN SYSTEMS: COMPANY SNAPSHOT

Figure 72 CADENCE DESIGN SYSTEMS: PRODUCTS & TECHNOLOGY

Figure 73 CEVA INC.: COMPANY SNAPSHOT

Figure 74 CEVA INC.:PRODUCTS AND SERVICES



# I would like to order

Product name: Microcontrollers, DSP, & IP Core Chip Market by Type, Applications (Automotive &

Transportation, Consumer Electronics, Industrial, Communications, Security, and Medical & Healthcare) and Geography (Americas, Europe, APAC & ROW) - Analysis & Forecast

to 2014 - 2020

Product link: https://marketpublishers.com/r/M84054B806BEN.html

Price: US\$ 5,650.00 (Single User License / Electronic Delivery)

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

Service:

info@marketpublishers.com

# **Payment**

First name:

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <a href="https://marketpublishers.com/r/M84054B806BEN.html">https://marketpublishers.com/r/M84054B806BEN.html</a>

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

Last name:	
Email:	
Company:	
Address:	
City:	
Zip code:	
Country:	
Tel:	
Fax:	
Your message:	
	**All fields are required
	Custumer signature

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



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