

Embedded Systems: Technologies and Markets

<https://marketpublishers.com/r/E63DEAA77CFEN.html>

Date: July 2020

Pages: 165

Price: US\$ 2,750.00 (Single User License)

ID: E63DEAA77CFEN

Abstracts

REPORT SCOPE:

The embedded systems market is segmented based on component, application and country. Based on components, the embedded system market is primarily categorized into hardware and software. The hardware components considered under the report scope include: processor IP, MPU/MCU (microcontrollers and microprocessors), RAM, flash memory, digital signal processors (DSP), application-specific integrated circuit (ASIC), field processing gate arrays (FPGA), embedded boards and embedded hardware design. The software component of the market has been categorized into operating systems (OS), software development and testing tools, middleware and open-source software and tools.

On the basis of applications, the embedded systems market segmented has been categorized into consumer, communications, enterprise and other.

The report also provides detailed information on embedded systems market across key regions such as North America, Europe, Asia-Pacific and RoW.

The report also includes a chapter describing the major players in the market. It explains the major drivers, competitive landscape, and current trends in the embedded systems market.

The report does not consider chips developed for specialized markets such as set-top boxes. It also excludes IP and electronic design automation (EDA) tools used for hardware development.

REPORT INCLUDES:

54 data tables and 22 additional tables

Descriptive study and in-depth analysis of the global market for embedded system technologies

Analyses of the global market trends, with data corresponding to market size for 2019, estimates for 2020 and projections of compound annual growth rates (CAGRs) through 2025

Discussion of the major growth factors, underlying opportunities and challenges, and technological advancements within the global embedded systems marketplace

Characterization and quantification of global embedded systems market, and breakdown of the embedded hardware/software components market on the basis of component, application, and geographical region

Assessment of viable technology drivers through a holistic review of diverse industry applications for new and existing embedded technologies and IoT solutions

Company competitive landscape featuring leading manufacturers and suppliers of embedded/automation products and solutions; their revenue sales, business segments, market share analysis, and product innovations

Regional dynamics of the embedded systems market covering North America, Europe, Asia-Pacific (APAC) and rest of the world (RoW)

Profile description of major listed embedded automation companies, including Analog Devices, Infineon Technologies, INTEL Corp., Microchip Technology Inc., Texas Instruments Inc., and NXP Semiconductors N.V.

Contents

CHAPTER 1 INTRODUCTION

- Study Goals and Objectives
- Scope of Report
- Reasons for Doing This Study
- Intended Audience
- Research Methodology
- Regional Breakdown
- Analyst's Credentials
- BCC Custom Research
- Related BCC Research Reports

CHAPTER 2 SUMMARY AND HIGHLIGHTS

CHAPTER 3 MARKET OVERVIEW

- History and Definition
- Evolution of Embedded Systems During the Last 10 Years
- Development Cycle of Embedded Systems
- Market Drivers
 - Explosive Growth in Consumer Electronics Demand
 - Growing Internet of Things
 - Growing Connected Car Market
 - Increasing Use of Robots Across Industrial Sectors
- Market Restraints
 - Security Concerns for Embedded Systems
 - Slowdown of the Global Automotive Industry

CHAPTER 4 MARKET BREAKDOWN BY COMPONENT

- Introduction
- Embedded System Hardware
 - Hardware Components of a Typical Embedded System
 - Typical Development Cycle of Embedded Hardware
 - Trends in Embedded Hardware Technology
- Market Size and Forecast
- Embedded System Software

Typical Development Cycle of Embedded Software
Trends in Embedded Software Technology
Market Size and Forecast

CHAPTER 5 MARKET BREAKDOWN BY HARDWARE COMPONENT

Introduction
Processor IP
Types of Processor Architectures
Processor IP Market: Business Models
Market Size and Forecast
Microprocessors and Microcontrollers
MCU Classification by Bit Width
Microprocessor Market Trends
Market Size and Forecast
Digital Signal Processors (DSPs)
Market Size and Forecast
RAM
MRAM
ReRAM
FRAM
NRAM
Market Size and Forecast
Flash Memory
NOR and NAND Flash
Multilevel Cell (MLC) and Single-Level Cell (SLC) NAND
Flash Memory Applications
Market Size and Forecast
Application-Specific Integrated Circuits (ASICs)
Market Size and Forecast
Programmable Logic Devices (PLDs)
CPLDs and FPGAs
Comparison of the ASIC and PLD Design Flow
Market Size and Forecast
Embedded Boards
Brief History of the Board Industry
Popular Form Factors
Embedded Board Market Trends
Market Size and Forecast

CHAPTER 6 MARKET BREAKDOWN BY SOFTWARE COMPONENT

Introduction
Operating System
Common Functions of an OS
OS Market Trends by Application
Market Size and Forecast
Software Development and Testing Tools
Integrated Development Environment (IDE)
Compilers and Linkers
Static Code Analyzers
JTAG Debugging Tools
In-Circuit Emulators (ICE)
Market Size and Forecast
Middleware and Specialized Libraries
Market Size and Forecast
Embedded Linux
Commercial Embedded Linux
Real-Time Linux
Market Size and Forecast

CHAPTER 7 MARKET BREAKDOWN BY APPLICATION SECTOR

Introduction
Consumer
Communications
Enterprise
Industrial
Automotive
Medical
Government
Avionics
Market Size and Forecast
Other Application Sectors

CHAPTER 8 MARKET BREAKDOWN BY REGION

Introduction

North America
United States
Canada
Mexico
Europe
United Kingdom
Germany
France
Rest of Europe
Asia-Pacific
China
India
Japan
South Korea
Rest of Asia-Pacific
Rest of World (RoW)

CHAPTER 9 COMPANY PROFILES

ADVANTECH
ANALOG DEVICES
ARM LTD.
FUJITSU LTD.
INFINEON TECHNOLOGIES
INTEL CORP.
KONTRON AG
MICROCHIP TECHNOLOGY INC.
NXP SEMICONDUCTORS N.V.
RENESAS ELECTRONICS
TEXAS INSTRUMENTS INC.

List Of Tables

LIST OF TABLES

Summary Table: Global Market for Embedded Systems, by Region, Through 2025

Table 1: Global Market for Embedded Systems, by Component, Through 2025

Table 2: Global Market for the Hardware Components of Embedded Systems, by Region, Through 2025

Table 3: Global Market for the Software Components of Embedded Systems, by Region, Through 2025

Table 4: Global Market for the Hardware Components of Embedded Systems, Through 2025

Table 5: Global Market for Processor IP in Embedded Systems, by Region, Through 2025

Table 6: Global Market for Processor IP in Embedded Systems, by Application Sector, Through 2025

Table 7: Global Market for Microprocessors and Microcontrollers in Embedded Systems, by Region, Through 2025

Table 8: Global Market for Microprocessors and Microcontrollers in Embedded Systems, by Application Sector, Through 2025

Table 9: Global Market for DSPs in Embedded Systems, by Region, Through 2025

Table 10: Global Market for DSPs in Embedded Systems, by Application Sector, Through 2025

Table 11: Global Market for RAM in Embedded Systems, by Region, Through 2025

Table 12: Global Market for RAM in Embedded Systems, by Application Sector, Through 2025

Table 13: Global Market for Flash Memory in Embedded Systems, by Region, Through 2025

Table 14: Global Market for Flash Memory in Embedded Systems, by Application Sector, Through 2025

Table 15: Comparison of ASIC, ASSP, and FPGA Technologies

Table 16: Global Market for ASICs in Embedded Systems, by Region, Through 2025

Table 17: Global Market for ASICs in Embedded Systems, by Application Sector, Through 2025

Table 18: Global Market for PLDs in Embedded Systems, by Region, Through 2025

Table 19: Global Market for PLDs in Embedded Systems, by Application Sector, Through 2025

Table 20: Global Market for Embedded Boards in Embedded Systems, by Region, Through 2025

Table 21: Global Market for Embedded Boards in Embedded Systems, by Application Sector, Through 2025

Table 22: Global Market for the Software Components of Embedded Systems, Through 2025

Table 23: Global Market for Operating Systems in Embedded Systems, by Region, Through 2025

Table 24: Global Market for Operating Systems in Embedded Systems, by Application Sector, Through 2025

Table 25: Global Market for Software Development and Testing Tools for Embedded Systems, by Region, Through 2025

Table 26: Global Market for Software Development and Testing Tools for Embedded Systems, by Application Sector, Through 2025

Table 27: Global Market for Middleware and Specialized Libraries in Embedded Systems, by Region, Through 2025

Table 28: Global Market for Middleware and Specialized Libraries in Embedded Systems, by Application Sector, Through 2025

Table 29: Global Market for Linux in Embedded Systems, by Region, Through 2025

Table 30: Global Market for Linux in Embedded Systems, by Application Sector, Through 2025

Table 31: Global Market for Embedded Systems, by Application Sector, Through 2025

Table 32: Global Market for Embedded Systems, by Region, Through 2025

Table 33: North American Market for Embedded Systems, by Component, Through 2025

Table 34: North American Market for the Hardware Components of Embedded Systems, Through 2025

Table 35: North American Market for the Software Components of Embedded Systems, Through 2025

Table 36: North American Market for Embedded Systems, by Country, Through 2025

Table 37: European Market for Embedded Systems, by Component, Through 2025

Table 38: European Market for the Hardware Components of Embedded Systems, Through 2025

Table 39: European Market for the Software Components of Embedded Systems, Through 2025

Table 40: European Market for Embedded Systems, by Country, Through 2025

Table 41: Asia-Pacific Market for Embedded Systems, by Component, Through 2025

Table 42: Asia-Pacific Market for the Hardware Components of Embedded Systems, Through 2025

Table 43: Asia-Pacific Market for the Software Components of Embedded Systems, Through 2025

Table 44: Asia-Pacific Market for Embedded Systems, by Country, Through 2025

Table 45: RoW Market for Embedded Systems, by Component, Through 2025

Table 46: RoW Market for the Hardware Components of Embedded Systems, Through 2025

Table 47: RoW Market for the Software Components of Embedded Systems, Through 2025

Table 48: Advantech: Product Portfolio

Table 49: Advantech: Recent Developments, 2018

Table 50: Analog Devices Inc.: Net Revenue, 2017-2019

Table 51: Analog Devices: Product Portfolio

Table 52: Analog Devices: Recent Developments, 2019

Table 53: ARM Ltd.: Product Portfolio

Table 54: Arm Ltd: Recent Developments, 2020

Table 55: Fujitsu Ltd.: Product Portfolio

Table 56: Infineon Technologies: Net Revenue, 2018 and 2019

Table 57: Infineon Technologies: Product Portfolio

Table 58: Infineon Technologies: Recent Developments, 2020

Table 59: Intel Corp: Net Revenue, 2017-2019

Table 60: Intel Corp.: Product Portfolio

Table 61: Intel Corp.: Recent Developments, 2020

Table 62: Kontron AG: Product Portfolio

Table 63: Kontron AG: Recent Developments, 2020

Table 64: Microchip Technology Inc.: Net Revenue, 2018-2020

Table 65: Microchip Technology Inc: Product Portfolio

Table 66: Microchip Technology Inc.: Recent Developments, 2020

Table 67: NXP Semiconductors N.V.: Net Revenue, 2017-2019

Table 68: NXP Semiconductors N.V.: Product Portfolio

Table 69: NXP Semiconductor N.V.: Recent Developments, 2020

Table 70: Renesas Electronics: Net Revenue, 2018 and 2019

Table 71: Renesas Electronics: Product Portfolio

Table 72: Renesas Electronics: Recent Developments, 2020

Table 73: Texas Instruments Inc.: Net Revenue, 2017-2019

Table 74: Texas Instruments Inc.: Product Portfolio

Table 75: Texas Instruments Inc.: Recent Developments, 2019

List Of Figures

LIST OF FIGURES

Summary Figure: Global Market for Embedded Systems, by Region, 2019-2025

Figure 1: Typical Development Cycle of Embedded Devices

Figure 2: Global Market for Embedded Systems, by Component, 2019-2025

Figure 3: Hardware Components of a Typical Embedded Device

Figure 4: Global Market for the Hardware Components of Embedded Systems, by Region, 2019-2025

Figure 5: Software Stack in a Typical Embedded System

Figure 6: Typical Development Cycle of Embedded Software

Figure 7: Global Market for the Software Components of Embedded Systems, by Region, 2019-2025

Figure 8: Global Market for the Hardware Components of Embedded Systems, 2019-2025

Figure 9: Global Market for Processor IP in Embedded Systems, by Region, 2019-2025

Figure 10: Global Market for Processor IP in Embedded Systems, by Application, 2019-2025

Figure 11: Global Market for Microprocessors and Microcontrollers in Embedded Systems, by Region, 2019-2025

Figure 12: Global Market for Microprocessors and Microcontrollers in Embedded Systems, by Application Sector, 2019-2025

Figure 13: A Typical DSP System

Figure 14: Global Market for DSPs in Embedded Systems, by Region, 2019-2025

Figure 15: Global Market for DSPs in Embedded Systems, by Application Sector, 2019-2025

Figure 16: Global Market for RAM in Embedded Systems, by Region, 2019-2025

Figure 17: Global Market for RAM in Embedded Systems, by Application Sector, 2019-2025

Figure 18: Global Market for Flash Memory in Embedded Systems, by Region, 2019-2025

Figure 19: Global Market for Flash Memory in Embedded Systems, by Application Sector, 2019-2025

Figure 20: Global Market for ASICs in Embedded Systems, by Region, 2019-2025

Figure 21: Global Market for ASICs in Embedded Systems, by Application Sector, 2019-2025

Figure 22: Typical PLD Design Flow

Figure 23: Global Market for PLDs in Embedded Systems, by Region, 2019-2025

Figure 24: Global Market for PLDs in Embedded Systems, by Application Sector, 2019-2025

Figure 25: Global Market for Embedded Boards in Embedded Systems, by Region, 2019-2025

Figure 26: Global Market for Embedded Boards in Embedded Systems, by Application Sector, 2019-2025

Figure 27: Global Market for the Software Components of Embedded Systems, 2019-2025

Figure 28: Global Market for Operating Systems in Embedded Systems, by Region, 2019-2025

Figure 29: Global Market for Operating Systems in Embedded Systems, by Application Sector, 2019-2025

Figure 30: Global Market for Software Development and Testing Tools for Embedded Systems, by Region, 2019-2025

Figure 31: Global Market for Software Development and Testing Tools for Embedded Systems, by Application Sector, 2019-2025

Figure 32: Global Market for Middleware and Specialized Libraries in Embedded Systems, by Region, 2019-2025

Figure 33: Global Market for Middleware and Specialized Libraries in Embedded Systems, by Application Sector, 2019-2025

Figure 34: Global Market for Linux in Embedded Systems, by Region, 2019-2025

Figure 35: Global Market for Linux in Embedded Systems, by Application Sector, 2019-2025

Figure 36: Global Market for Embedded Systems, by Application Sector, 2019-2025

Figure 37: Global Market for Embedded Systems in Consumer Applications, 2019-2025

Figure 38: Global Market for Embedded Systems in Communication Applications, 2019-2025

Figure 39: Global Market for Embedded Systems in Enterprise Applications, 2019-2025

Figure 40: Global Market for Embedded Systems in Other Application Sectors, 2019-2025

Figure 41: Global Market for Embedded Systems, by Region

Figure 42: Global Market Shares of Embedded Systems, by Region, 2019

Figure 43: U.S. Market for Embedded Systems, 2019-2025

Figure 44: Canadian Market for Embedded Systems, 2019-2025

Figure 45: Mexican Market for Embedded Systems, 2019-2025

Figure 46: U.K. Market for Embedded Systems, 2019-2025

Figure 47: German Market for Embedded Systems, 2019-2025

Figure 48: French Market for Embedded Systems, 2019-2025

Figure 49: Rest of Europe Market for Embedded Systems, 2019-2025

- Figure 50: Chinese Market for Embedded Systems, 2019-2025
- Figure 51: Indian Market for Embedded Systems, 2019-2025
- Figure 52: Japanese Market for Embedded Systems, 2019-2025
- Figure 53: South Korean Market for Embedded Systems, 2019-2025
- Figure 54: Rest of Asia-Pacific Market for Embedded Systems, 2019-2025
- Figure 55: Analog Devices Inc.: Sales, by Business Segment, 2019
- Figure 56: Analog Devices Inc.: Regional Sales Shares, 2019
- Figure 57: Infineon Technologies: Sales Shares, by Business Segment, 2019
- Figure 58: Infineon Technologies: Regional Sales Shares, 2019
- Figure 59: Intel Corp.: Sales, by Business Segment, 2019
- Figure 60: Intel Corp.: Regional Sales Shares, 2019
- Figure 61: Microchip Technology Inc.: Sales, by Product Line, 2020
- Figure 62: Microchip Technology Inc.: Regional Sales Shares, 2020
- Figure 63: NXP Semiconductors N.V.: Sales, by End Market, 2019
- Figure 64: NXP Semiconductors N.V.: Regional Sales Shares, 2020
- Figure 65: Renesas Electronics: Sales, by Business Segment, 2019
- Figure 66: Renesas Electronics: Regional Sales Shares, 2020
- Figure 67: Texas Instruments Inc., Sales, by Business Segment, 2019
- Figure 68: Texas Instruments Inc.: Regional Sales Shares, 2020

I would like to order

Product name: Embedded Systems: Technologies and Markets

Product link: <https://marketpublishers.com/r/E63DEAA77CFEN.html>

Price: US\$ 2,750.00 (Single User License / Electronic Delivery)

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

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/E63DEAA77CFEN.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