

# **RFID Market by Offering (Tags, Readers, Software & Services), Tag Type (Active, Passive), Wafer Size, Frequency (Low Frequency, High Frequency, Ultra-high Frequency), Form Factor, Material, Application and Region - Global Forecast to 2032**

<https://marketpublishers.com/r/R6B236DA2B6EN.html>

Date: October 2023

Pages: 327

Price: US\$ 4,950.00 (Single User License)

ID: R6B236DA2B6EN

## **Abstracts**

The RFID market is projected to reach USD 40.9 billion by 2032 from USD 15.8 billion in 2023; it is expected to grow at a CAGR of 11.1% from 2023 to 2032.

Increase in hybrid solutions to drive the growth of RFID market

The RFID market is experiencing an increased demand for hybrid solutions, which have been developed to address the limitations of single-technology RFID systems. Hybrid solutions offer a means to not only enable RFID technology deployment in areas with poor coverage but also reduce the need for additional infrastructure by leveraging existing technologies like Wi-Fi or GPS. RFID-based IoT solutions are gaining traction due to various factors propelling their adoption, including the decreasing cost of RFID tags, the widespread use of IP networks, and emerging business opportunities. These solutions facilitate the tracking of physical assets to enhance operational processes and cost-effectiveness across numerous industries and government entities.

The 8 Inch wafer size segment is holds the highest market in 2022

The 8-inch wafer size segment dominated the market share in 2022 as it represents the most widely produced wafers, measuring 8 inches or 200 mm in diameter. Among the market leaders, including Alien Technology, LLC, Impinj, Inc., and NXP Semiconductors, all utilize 8-inch wafers for their chip manufacturing processes. Many industry participants are hesitant to transition to 12-inch wafers due to the substantial

equipment investment required. However, the market for other wafer sizes is anticipated to expand in the coming years, particularly with the expected reduction in the prices of 12-inch wafers. This price decrease is poised to bridge the gap between 8-inch and 12-inch wafers, facilitating a smoother transition for the industry towards the use of 12-inch wafers.

The Ultra-high Frequency segment, of RFID tags market by frequency is expected to grow at highest CAGR during the forecast period

Ultra-high frequency (UHF) tags can be categorized into two types based on their frequency range: passive tags and active tags. UHF passive RFID tags offer the greatest read range and highest reading speed among all passive tags. These tags operate within a frequency range of 860-960 MHz, often referred to as 900 or 915 MHz for simplicity. Typically, UHF passive tags can be read from an average distance of approximately 5-6 meters, with larger UHF passive tags capable of reading over 30 meters under ideal conditions. UHF passive tags find utility in applications that demand a read range exceeding 1 meter, such as asset tracking, asset counting, inventory management, supply chain management, vehicle tagging, and tagging in manufacturing equipment and product components. On the other hand, UHF active tags outperform passive UHF tags in terms of reading range, the number of concurrently connected tags, and continuous monitoring. However, they come at a significantly higher cost compared to passive UHF tags. This cost disparity stands as the primary reason why customers tend to favor passive UHF tags. Some companies offer semi-passive UHF tags that incorporate a battery, thereby extending the read range of passive UHF tags while remaining more cost-effective than active UHF tags. This development is anticipated to drive the RFID market for UHF passive tags.

North America region to hold largest market share in the RFID market in 2022

Factors such as increased adoption in diverse industries, compliance requirements, and the need for real-time data analytics are driving this expansion. RFID technology is being utilized for enhanced supply chain management, inventory control, and asset tracking, making it a valuable tool for businesses. Continuous innovation, a skilled workforce, and advanced infrastructure in North America further bolster the region's position as a center for RFID research and development. This favorable environment creates lucrative prospects for companies in the RFID market, both established players and newcomers. Major players in the market such as Zebra Technologies Corp. (US), Alien Technology, LLC (US), Impinj, Inc. (US), Avery Dennison Corporation (US), Honeywell International Inc. (US), GAO Group (Canada), HID Global Corporation (US),

ORBCOMM Inc. (US), GlobeRanger (US), Mojix (US), Checkpoint Systems, Inc. (US), Identiv, Inc., Inc. (US), Jadak (US) are based in this region.

Breakdown of profiles of primary participants:

By Company Type: Tier 1 = 30%, Tier 2 = 50%, and Tier 3 = 20%

By Designation: C-level Executives = 25%, Directors = 35%, and Others = 40%

By Region: North America = 35%, Europe = 30%, Asia Pacific = 25%, and Rest of the World = 10%

Major players profiled in this report:

The RFID market is dominated by established players such as Zebra Technologies Corp. (US), Alien Technology, LLC (US), CAEN RFID S.r.L. (Italy), Impinj, Inc. (US), Avery Dennison Corporation (US), Honeywell International Inc. (US), NXP Semiconductors (Netherlands), GAO Group (Canada), HID Global Corporation (US), Invengo Information Technology Co., Ltd. (China), Infotek Software & Systems (P) Ltd (i-TEK) (India), Bartronics India Ltd. (India), Bartech Data Systems Pvt. Ltd., ORBCOMM Inc. (US), GlobeRanger (US), Mojix (US), SAG Securitag Assembly Group Co., Ltd. (SAG) (Taiwan), Linxens (France), Checkpoint Systems, Inc. (US), Identiv, Inc., Inc. (US), Confidex (Finland), Datalogic S.p.A. (Italy), Nedap N.V. (Netherlands), Jadak (US).

Research coverage

This report offers detailed insights into the RFID market based on Offering (Tags, Readers, Software & Services), by Tag (Tag Type {Active, Passive}, Wafer Size {8 inches, 12 inches, Other Wafer Sizes}, Frequency {Low Frequency, High Frequency, Ultra-high Frequency}, Form Factor {Label, Key Fob, Band, Card, Implant, Paper Ticket, Other Form Factors}, Material {Paper, Glass, Plastic, Other Materials}), Application (Agriculture, Commercial, Transportation, Healthcare, Food, Apparel, Automotive, Aerospace, Defense, Logistics & Supply Chain, Security & Access Control, Retail, Sports, Animal Tracking, Ticketing), and Region (North America, Europe, Asia Pacific, and Rest of the World)- Global Forecast to 2032

The report also comprehensively reviews market drivers, restraints, opportunities, and

challenges in the RFID market. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

Reasons to buy the report:

The report will help the leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall market and the sub-segments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report also helps stakeholders understand the RFID market's pulse and provides information on key market drivers, restraints, challenges, and opportunities. This report includes statistics pertaining to the RFID market based on offering, tag type, wafer size, frequency, form factor, material, application, and region. Major drivers, restraints, opportunities, and challenges for the RFID market have been provided in detail in this report. The report includes illustrative segmentation, analysis, and forecast for the RFID market based on its segments.

The report provides insights on the following pointers:

Analysis of key drivers (Increasing need for RFID systems in manufacturing units for improving productivity, Availability of cost-effective RFID solutions and high returns on investments, Rising need for improving inventory management, Increasing government initiatives and regulations for safety and security, Increasing use of RFID solutions in healthcare organizations, Increasing adoption of RFID in retail sector, Surge in demand for RFID in electronic toll collection, Growing use of RFID solutions in banking), restraints (High initial cost associated with installation of RFID systems, Concerns regarding data security and privacy, Regulatory and legal challenges), opportunities (Increasing demand for hybrid RFID solutions Rising adoption of RFID tags for IoT and smart manufacturing, Developing regions creating opportunities for RFID market, Reduction in tag costs to create growth opportunities for RFID market) and challenges (Lack of backup for large volumes of data, Technical limitations with RFID integrated systems, Complexities related to RFID systems).

**Product Development/Innovation:** Detailed insights on upcoming technologies, research & development activities, and new product launches in the RFID market

**Market Development:** Comprehensive information about lucrative markets – the report analyses the RFID market across varied regions

**Market Diversification:** Exhaustive information about new products, untapped geographies, recent developments, and investments in the RFID market

**Competitive Assessment:** In-depth assessment of market shares, growth strategies, and product offerings of leading players like Zebra Technologies Corp. (US), Alien Technology, LLC (US), CAEN RFID S.r.L. (Italy), Impinj, Inc. (US), Avery Dennison Corporation (US), Honeywell International Inc. (US), NXP Semiconductors (Netherlands), GAO Group (Canada), HID Global Corporation (US), Invengo Information Technology Co., Ltd. (China), Infotek Software & Systems (P) Ltd (i-TEK) (India), Bartronics India Ltd. (India), Bartech Data Systems Pvt. Ltd., ORBCOMM Inc. (US), GlobeRanger (US), Mojix (US), SAG Securitag Assembly Group Co., Ltd. (SAG) (Taiwan), Linxens (France), Checkpoint Systems, Inc. (US), Identiv, Inc., Inc. (US), Confidex (Finland), Datalogic S.p.A. (Italy), Nedap N.V. (Netherlands), JadaK (US).

## Contents

### 1 INTRODUCTION

#### 1.1 STUDY OBJECTIVES

#### 1.2 MARKET DEFINITION

##### 1.2.1 INCLUSIONS AND EXCLUSIONS

##### 1.2.2 INCLUSIONS AND EXCLUSIONS, BY OFFERING

#### 1.3 STUDY SCOPE

##### 1.3.1 MARKETS COVERED

#### FIGURE 1 RFID MARKET: SEGMENTATION

##### 1.3.2 REGIONAL SCOPE

##### 1.3.3 YEARS CONSIDERED

#### 1.4 CURRENCY CONSIDERED

#### 1.5 UNIT CONSIDERED

#### 1.6 LIMITATIONS

#### 1.7 STAKEHOLDERS

#### 1.8 SUMMARY OF CHANGES

#### 1.9 RECESSION IMPACT

### 2 RESEARCH METHODOLOGY

#### 2.1 RESEARCH DATA

#### FIGURE 2 RFID MARKET: RESEARCH DESIGN

##### 2.1.1 SECONDARY DATA

###### 2.1.1.1 Key data from secondary sources

###### 2.1.1.2 List of key secondary sources

##### 2.1.2 PRIMARY DATA

###### 2.1.2.1 Key data from primary sources

###### 2.1.2.2 List of key interview participants

###### 2.1.2.3 Breakdown of primaries

###### 2.1.2.4 Key industry insights

##### 2.1.3 SECONDARY AND PRIMARY RESEARCH

#### 2.2 MARKET SIZE ESTIMATION

#### FIGURE 3 RFID MARKET: MARKET SIZE ESTIMATION PROCESS FLOW

##### 2.2.1 TOP-DOWN APPROACH

###### 2.2.1.1 Approach to estimate market size by top-down analysis

#### FIGURE 4 MARKET SIZE ESTIMATION METHODOLOGY: TOP-DOWN APPROACH

#### FIGURE 5 MARKET SIZE ESTIMATION METHODOLOGY: APPROACH 1 (SUPPLY

SIDE)—REVENUE GENERATED BY KEY PLAYERS IN RFID MARKET

## 2.2.2 BOTTOM-UP APPROACH

2.2.2.1 Approach to estimate market size by bottom-up analysis

FIGURE 6 MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH

FIGURE 7 MARKET SIZE ESTIMATION METHODOLOGY: APPROACH 2 (SUPPLY SIDE)—ILLUSTRATION OF REVENUE ESTIMATION OF KEY PLAYERS IN RFID MARKET

FIGURE 8 MARKET SIZE ESTIMATION METHODOLOGY: APPROACH 3 (DEMAND SIDE)—BOTTOM-UP ESTIMATION OF RFID MARKET, BY REGION

## 2.3 MARKET SHARE ESTIMATION

## 2.4 MARKET BREAKDOWN AND DATA TRIANGULATION

FIGURE 9 DATA TRIANGULATION

## 2.5 RESEARCH ASSUMPTIONS AND LIMITATIONS

2.5.1 RESEARCH ASSUMPTIONS

2.5.2 RESEARCH LIMITATIONS

## 2.6 RISK ASSESSMENT

TABLE 1 RISK FACTOR ANALYSIS

2.6.1 PARAMETERS CONSIDERED TO UNDERSTAND IMPACT OF RECESSION ON RFID MARKET

# 3 EXECUTIVE SUMMARY

FIGURE 10 TAGS SEGMENT TO HOLD LARGEST SHARE OF RFID MARKET IN 2032

FIGURE 11 PASSIVE TAGS SEGMENT TO DOMINATE RFID TAGS MARKET IN 2032

FIGURE 12 LABEL FORM FACTOR SEGMENT TO ACCOUNT FOR LARGEST SHARE OF RFID TAGS MARKET IN 2023

FIGURE 13 ASIA PACIFIC TO REGISTER HIGHEST CAGR DURING FORECAST PERIOD

# 4 PREMIUM INSIGHTS

## 4.1 MAJOR OPPORTUNITIES FOR PLAYERS IN RFID MARKET

FIGURE 14 ASIA PACIFIC TO EMERGE AS LUCRATIVE GROWTH AVENUE FOR RFID MARKET

## 4.2 RFID TAGS MARKET, BY FREQUENCY

FIGURE 15 ULTRA-HIGH FREQUENCY SEGMENT TO LEAD RFID TAGS MARKET IN 2032

#### 4.3 RFID TAGS MARKET, BY MATERIAL

FIGURE 16 PAPER SEGMENT TO ACCOUNT FOR LARGEST SHARE OF RFID TAGS MARKET IN 2032

#### 4.4 RFID TAGS MARKET IN ASIA PACIFIC, BY APPLICATION AND COUNTRY

FIGURE 17 LOGISTICS AND SUPPLY CHAIN SEGMENT AND CHINA TO HOLD LARGEST SHARES OF RFID TAGS MARKET IN ASIA PACIFIC IN 2032

#### 4.5 RFID TAGS MARKET, BY COUNTRY

FIGURE 18 JAPAN TO WITNESS HIGHEST CAGR IN RFID TAGS MARKET DURING FORECAST PERIOD

### 5 MARKET OVERVIEW

#### 5.1 INTRODUCTION

#### 5.2 HISTORY AND EVOLUTION

#### 5.3 MARKET DYNAMICS

FIGURE 19 RFID MARKET: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES

##### 5.3.1 DRIVERS

5.3.1.1 Increasing need for RFID systems in manufacturing units to improve productivity

5.3.1.2 Availability of cost-efficient RFID solutions and high returns on investments

5.3.1.3 Rising need to improve inventory management

TABLE 2 TYPICAL LOSSES IN DATA CENTERS DURING MANUAL ASSET MANAGEMENT FOR APPROXIMATELY 40 THOUSAND SQ. FT. AREA

5.3.1.4 Increasing government initiatives and regulations for safety and security

5.3.1.5 Growing use of RFID solutions in healthcare organizations

5.3.1.6 Increasing adoption of RFID in retail sector

5.3.1.7 Surging deployment of RFID in electronic toll collection

5.3.1.8 Rising implementation of RFID solutions in banking sector

FIGURE 20 RFID MARKET DRIVERS: IMPACT ANALYSIS

##### 5.3.2 RESTRAINTS

5.3.2.1 High initial cost associated with installation of RFID systems

5.3.2.2 Data security and privacy concerns

5.3.2.3 Regulatory and legal issues pertaining to RFID technology

FIGURE 21 RFID MARKET RESTRAINTS: IMPACT ANALYSIS

##### 5.3.3 OPPORTUNITIES

5.3.3.1 Surging demand for hybrid RFID solutions

5.3.3.2 Rising adoption of RFID tags in IoT and smart manufacturing

5.3.3.3 Developing regions creating opportunities for RFID market players



#### 5.3.3.4 Reducing cost of RFID tags

### FIGURE 22 RFID MARKET OPPORTUNITIES: IMPACT ANALYSIS

#### 5.3.4 CHALLENGES

##### 5.3.4.1 Lack of proper backup infrastructure for large volumes of data

##### 5.3.4.2 Technical limitations with RFID-integrated systems

##### 5.3.4.3 Complexities related to RFID systems

### FIGURE 23 RFID MARKET CHALLENGES: IMPACT ANALYSIS

## 5.4 VALUE CHAIN ANALYSIS

### FIGURE 24 RFID MARKET: VALUE CHAIN ANALYSIS

## 5.5 TRENDS/DISRUPTIONS IMPACTING CUSTOMER BUSINESS

### FIGURE 25 TRENDS/DISRUPTIONS IMPACTING CUSTOMER BUSINESS

## 5.6 ECOSYSTEM MAPPING

### TABLE 3 ROLE OF PARTICIPANTS IN RFID ECOSYSTEM

### FIGURE 26 ECOSYSTEM ANALYSIS

## 5.7 PRICING ANALYSIS

### 5.7.1 COST ANALYSIS

#### 5.7.1.1 Major factors affecting manufacturing cost

#### 5.7.1.2 Manufacturing cost structure analysis

### 5.7.2 AVERAGE SELLING PRICE OF RFID SOLUTIONS PROVIDED BY KEY PLAYERS, BY APPLICATION

### FIGURE 27 AVERAGE SELLING PRICE OF RFID SOLUTIONS PROVIDED BY KEY PLAYERS FOR THREE APPLICATIONS

### TABLE 4 AVERAGE SELLING PRICE OF RFID SOLUTIONS PROVIDED BY KEY PLAYERS FOR THREE APPLICATIONS (USD)

### 5.7.3 AVERAGE SELLING PRICE TREND

### FIGURE 28 ESTIMATED AVERAGE SELLING PRICE TRENDS FOR RFID TAGS AND READERS, 2019–2032

## 5.8 TECHNOLOGY ANALYSIS

### 5.8.1 RFID TECHNOLOGY COMPARISON

### TABLE 5 COMPARISON OF RFID TAGS BASED ON ACTIVE AND PASSIVE FREQUENCIES

#### 5.8.2 RFID IN REAL-TIME LOCATION SYSTEMS (RTLS)

#### 5.8.3 RFID-ENABLED SENSORS

#### 5.8.4 CLOUD-BASED RFID

#### 5.8.5 RFID IN INTERNET OF THINGS (IOT)

#### 5.8.6 INTEGRATION OF RFID WITH BLOCKCHAIN

#### 5.8.7 NEAR-FIELD COMMUNICATION AND RFID HYBRID SOLUTIONS

#### 5.8.8 BATTERY-ASSISTED PASSIVE RFID TECHNOLOGY

#### 5.8.9 MINIATURIZED AND FLEXIBLE RFID TAGS

## 5.9 PORTER'S FIVE FORCES ANALYSIS

TABLE 6 RFID MARKET: PORTER'S FIVE FORCES ANALYSIS

FIGURE 29 RFID MARKET: PORTER'S FIVE FORCES ANALYSIS

5.9.1 THREAT OF NEW ENTRANTS

5.9.2 THREAT OF SUBSTITUTES

5.9.3 BARGAINING POWER OF SUPPLIERS

5.9.4 BARGAINING POWER OF BUYERS

5.9.5 INTENSITY OF COMPETITIVE RIVALRY

## 5.10 KEY STAKEHOLDERS AND BUYING CRITERIA

5.10.1 KEY STAKEHOLDERS IN BUYING PROCESS

FIGURE 30 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE APPLICATIONS

TABLE 7 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP THREE APPLICATIONS (%)

5.10.2 BUYING CRITERIA

FIGURE 31 KEY BUYING CRITERIA FOR TOP THREE APPLICATIONS

TABLE 8 KEY BUYING CRITERIA FOR TOP THREE APPLICATIONS

## 5.11 CASE STUDY ANALYSIS

5.11.1 RFID IN HEALTHCARE

TABLE 9 IMPINJ, INC. FOCUSES ON USE OF RAIN RFID IN HEALTHCARE

5.11.2 RFID IN TRANSPORTATION

TABLE 10 FORZA CASH LOGISTICS USES ZEBRA HANDHELD MOBILE COMPUTERS TO PROVIDE REAL-TIME UPDATES AND REDUCE ERRORS WHILE TRANSPORTING VALUABLES

5.11.3 RFID IN LOGISTICS

TABLE 11 INVENGO EMPOWERED APPAREL BRAND ACHIEVED SMART LOGISTICS AND WAREHOUSING WITH RFID

5.11.4 RFID IN AGRICULTURE

TABLE 12 COOPERATIE HOOGSTRATEN ALLOWS TRACKING STRAWBERRIES FROM FARM TO TABLE WITH RAIN RFID

5.11.5 RFID IN FOOD

TABLE 13 CAESARS ENTERTAINMENT GAINS REAL-TIME VISIBILITY INTO FOOD SAFETY WITH RFID SOLUTION FROM ZEBRA TECHNOLOGIES

5.11.6 RFID IN FOOD & WAREHOUSING

TABLE 14 LUIK NATIE KEEPS FROZEN FOODS ICE-COLD WITH RAIN RFID

5.11.7 RFID IN LAUNDRY

TABLE 15 ELIS IMPROVED WORKFLOWS BY AUTOMATING LAUNDRY TRACKING AND SORTING

5.11.8 RFID IN PUBLIC LIBRARY

TABLE 16 SMART RFID EXPERIENCE OF CHONGQING CITY PUBLIC LIBRARY

5.11.9 RFID IN AUTOMOTIVE

TABLE 17 SHOCKWATCH RFID HELPS AUTOMOTIVE MANUFACTURER TRACK INDIVIDUAL PRODUCT DAMAGE

5.11.10 RFID IN AIRPORT

TABLE 18 BRUSSELS AIRPORT ALLOWS FLYERS TO TRACK LUGGAGE WITH IMPINJ RFID

5.11.11 RFID IN PUBLIC AREAS

TABLE 19 LEADING AUSTRALIAN SKI RESORT IMPROVES GUEST EXPERIENCE USING RFID FROM ZEBRA TECHNOLOGIES

5.12 TRADE ANALYSIS

FIGURE 32 COUNTRY-WISE EXPORT DATA FOR PRODUCTS CLASSIFIED UNDER HS CODE 8523, 2018–2022

TABLE 20 EXPORT SCENARIO FOR HS CODE 8523-COMPLIANT PRODUCTS, BY COUNTRY, 2018–2022 (USD MILLION)

FIGURE 33 COUNTRY-WISE IMPORT DATA FOR PRODUCTS CLASSIFIED UNDER HS CODE 8523, 2018–2022

TABLE 21 IMPORT SCENARIO FOR HS CODE 8523-COMPLIANT PRODUCTS, BY COUNTRY, 2018–2022 (USD MILLION)

5.13 PATENT ANALYSIS

5.13.1 TOP PATENT OWNERS

FIGURE 34 TOP 10 COMPANIES WITH HIGHEST NUMBER OF PATENT APPLICATIONS IN LAST 10 YEARS

5.13.2 PATENT TREND

FIGURE 35 NUMBER OF PATENTS GRANTED PER YEAR FROM 2013 TO 2022

TABLE 22 NUMBER OF PATENTS REGISTERED RELATED TO RFID MARKET IN LAST 10 YEARS

TABLE 23 LIST OF KEY PATENTS IN RFID MARKET, 2020–2023

5.14 KEY CONFERENCES AND EVENTS, 2023–2024

TABLE 24 LIST OF KEY CONFERENCES AND EVENTS IN RFID MARKET

5.15 REGULATORY LANDSCAPE

TABLE 25 RFID MARKET: REGULATORY LANDSCAPE

5.15.1 REGION-WISE REGULATORY ANALYSIS

5.15.2 NORTH AMERICA

TABLE 26 NORTH AMERICA: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

5.15.2.1 US

5.15.2.2 Canada

5.15.3 EUROPE

TABLE 27 EUROPE: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

5.15.4 ASIA PACIFIC

TABLE 28 ASIA PACIFIC: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

5.15.4.1 Indonesia

5.15.4.2 India

5.15.5 ROW

TABLE 29 ROW: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

## **6 RFID MARKET, BY OFFERING**

6.1 INTRODUCTION

FIGURE 36 RFID MARKET, BY OFFERING

TABLE 30 RFID MARKET, BY OFFERING, 2019–2022 (USD MILLION)

FIGURE 37 TAGS SEGMENT TO ACCOUNT FOR LARGEST SHARE OF RFID MARKET IN 2032

TABLE 31 RFID MARKET, BY OFFERING, 2023–2032 (USD MILLION)

6.2 TAGS

6.2.1 RISING USE OF TAGS TO IDENTIFY, TRACK, AND LOCATE ASSETS IN REAL TIME LOCATION TO FUEL MARKET GROWTH

6.3 READERS

6.3.1 GROWING ADOPTION OF RFID READERS IN LOGISTICS AND SUPPLY CHAIN APPLICATIONS TO FOSTER MARKET GROWTH

6.3.2 FIXED READERS

6.3.3 HANDHELD READERS

6.4 SOFTWARE AND SERVICES

6.4.1 INCREASING ADOPTION OF CLOUD-BASED DATA STORAGE SOLUTIONS TO DRIVE MARKET

## **7 RFID MARKET, BY TAG**

7.1 INTRODUCTION

7.2 WAFER SIZE

TABLE 32 RFID TAGS MARKET, BY WAFER SIZE, 2019–2022 (USD MILLION)

FIGURE 38 8 INCHES SEGMENT TO DOMINATE RFID TAGS MARKET IN 2032

TABLE 33 RFID TAGS MARKET, BY WAFER SIZE, 2023–2032 (USD MILLION)

7.3 TAG TYPE

TABLE 34 RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)  
FIGURE 39 PASSIVE RFID TAGS TO EXHIBIT HIGHER CAGR DURING FORECAST PERIOD

TABLE 35 RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 36 RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (BILLION UNITS)

TABLE 37 RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (BILLION UNITS)

#### 7.3.1 PASSIVE TAGS

7.3.1.1 Deployment to transmit information over short distances without requiring external power source to contribute to demand

TABLE 38 PASSIVE: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 39 PASSIVE: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

#### 7.3.2 ACTIVE TAGS

7.3.2.1 Longer read range and ability to monitor assets in real time to drive market

TABLE 40 ACTIVE: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 41 ACTIVE: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

### 7.4 FREQUENCY

TABLE 42 RFID TAGS MARKET, BY FREQUENCY, 2019–2022 (USD MILLION)

FIGURE 40 ULTRA-HIGH FREQUENCY SEGMENT TO DOMINATE RFID TAGS MARKET DURING FORECAST PERIOD

TABLE 43 RFID TAGS MARKET, BY FREQUENCY, 2023–2032 (USD MILLION)

#### 7.4.1 LOW

7.4.1.1 Animal tagging and access control applications to boost demand for low-frequency tags

TABLE 44 LOW: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 45 LOW: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

#### 7.4.2 HIGH

7.4.2.1 Short read range applications to boost demand for high-frequency RFID tags

TABLE 46 HIGH: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 47 HIGH: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

#### 7.4.3 ULTRA-HIGH

7.4.3.1 Implementation of UHF tags in long read range and fast data transfer

applications to drive market

TABLE 48 ULTRA-HIGH: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 49 ULTRA-HIGH: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

#### 7.5 FORM FACTOR

TABLE 50 RFID TAGS MARKET, BY FORM FACTOR, 2019–2022 (USD MILLION)

FIGURE 41 LABEL SEGMENT TO REGISTER HIGHEST CAGR DURING FORECAST PERIOD

TABLE 51 RFID TAGS MARKET, BY FORM FACTOR, 2023–2032 (USD MILLION)

##### 7.5.1 CARD

7.5.1.1 Wide adoption for access control applications in enterprises to foster market growth

TABLE 52 CARD: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 53 CARD: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

##### 7.5.2 IMPLANT

7.5.2.1 Growing use of RFID implants to track livestock to contribute to market growth

TABLE 54 IMPLANT: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 55 IMPLANT: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

##### 7.5.3 KEY FOB

7.5.3.1 Rising adoption of RFID key fobs to ensure quick and accurate inventory management to support market growth

TABLE 56 KEY FOB: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 57 KEY FOB: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

##### 7.5.4 LABEL

7.5.4.1 Increasing use of RFID labels by manufacturers and retailers to improve supply chain visibility to drive market

TABLE 58 LABEL: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 59 LABEL: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

##### 7.5.5 PAPER TICKET

7.5.5.1 Surging employment of RFID paper tickets for effective queue management

and enhanced safety at large gatherings to fuel market growth

TABLE 60 PAPER TICKET: RFID TAGS MARKET, BY APPLICATION, 2019–2022  
(USD MILLION)

TABLE 61 PAPER TICKET: RFID TAGS MARKET, BY APPLICATION, 2023–2032  
(USD MILLION)

#### 7.5.6 BAND

7.5.6.1 Growing deployment of RFID bands in staff monitoring, patient monitoring, or access control applications to drive segmental growth

TABLE 62 BAND: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 63 BAND: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

#### 7.5.7 OTHER FORM FACTORS

TABLE 64 OTHER FORM FACTORS: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 65 OTHER FORM FACTORS: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

#### 7.6 MATERIAL

TABLE 66 RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

FIGURE 42 PAPER SEGMENT TO REGISTER HIGHEST CAGR IN RFID TAGS MARKET DURING FORECAST PERIOD

TABLE 67 RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

##### 7.6.1 PLASTIC

7.6.1.1 Access control, identification, and animal tracking applications to drive market

TABLE 68 PLASTIC: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 69 PLASTIC: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

##### 7.6.2 PAPER

7.6.2.1 Versatile applications in RFID labels, tickets, and bands to fuel segmental growth

TABLE 70 PAPER: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 71 PAPER: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

##### 7.6.3 GLASS

7.6.3.1 Rising adoption of RFID technology in animal welfare and management to support segmental growth

TABLE 72 GLASS: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD

MILLION)

TABLE 73 GLASS: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

#### 7.6.4 OTHER MATERIALS

TABLE 74 OTHER MATERIALS: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 75 OTHER MATERIALS: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

## 8 RFID MARKET, BY APPLICATION

### 8.1 INTRODUCTION

TABLE 76 RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

FIGURE 43 LOGISTICS AND SUPPLY CHAIN SEGMENT TO HOLD LARGEST SHARE OF RFID TAGS MARKET IN 2032

TABLE 77 RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

TABLE 78 RFID MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 79 RFID MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

#### 8.1.1 AGRICULTURE

8.1.1.1 Growing use of RFID tags for cold chain monitoring to drive segment

TABLE 80 AGRICULTURE: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 81 AGRICULTURE: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 82 AGRICULTURE: RFID TAGS MARKET, BY FREQUENCY, 2019–2022 (USD MILLION)

TABLE 83 AGRICULTURE: RFID TAGS MARKET, BY FREQUENCY, 2023–2032 (USD MILLION)

TABLE 84 AGRICULTURE: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022 (USD MILLION)

TABLE 85 AGRICULTURE: RFID TAGS MARKET, BY FORM FACTOR, 2023–2032 (USD MILLION)

TABLE 86 AGRICULTURE: RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

TABLE 87 AGRICULTURE: RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

TABLE 88 AGRICULTURE: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 89 AGRICULTURE: RFID TAGS MARKET, BY REGION, 2023–2032 (USD



MILLION)

### 8.1.2 COMMERCIAL

8.1.2.1 Surging adoption of RFID in asset tracking and inventory management applications to accelerate segmental growth

TABLE 90 COMMERCIAL: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 91 COMMERCIAL: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 92 COMMERCIAL: RFID TAGS MARKET, BY FREQUENCY, 2019–2022 (USD MILLION)

TABLE 93 COMMERCIAL: RFID TAGS MARKET, BY FREQUENCY, 2023–2032 (USD MILLION)

TABLE 94 COMMERCIAL: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022 (USD MILLION)

TABLE 95 COMMERCIAL: RFID TAGS MARKET, BY FORM FACTOR, 2023–2032 (USD MILLION)

TABLE 96 COMMERCIAL: RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

TABLE 97 COMMERCIAL: RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

TABLE 98 COMMERCIAL: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 99 COMMERCIAL: RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

### 8.1.3 TRANSPORTATION

8.1.3.1 Increasing deployment of RFID technology in road tolling and parking management systems to fuel market growth

TABLE 100 TRANSPORTATION: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 101 TRANSPORTATION: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 102 TRANSPORTATION: RFID TAGS MARKET, BY FREQUENCY, 2019–2022 (USD MILLION)

TABLE 103 TRANSPORTATION: RFID TAGS MARKET, BY FREQUENCY, 2023–2032 (USD MILLION)

TABLE 104 TRANSPORTATION: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022 (USD MILLION)

TABLE 105 TRANSPORTATION: RFID TAGS MARKET, BY FORM FACTOR, 2023–2032 (USD MILLION)

TABLE 106 TRANSPORTATION: RFID TAGS MARKET, BY MATERIAL, 2019–2022  
(USD MILLION)

TABLE 107 TRANSPORTATION: RFID TAGS MARKET, BY MATERIAL, 2023–2032  
(USD MILLION)

TABLE 108 TRANSPORTATION: RFID TAGS MARKET, BY REGION, 2019–2022  
(USD MILLION)

TABLE 109 TRANSPORTATION: RFID TAGS MARKET, BY REGION, 2023–2032  
(USD MILLION)

#### 8.1.4 HEALTHCARE

8.1.4.1 Growing adoption of RFID to ensure efficient, secure, and patient-centered care to support segmental growth

TABLE 110 HEALTHCARE: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 111 HEALTHCARE: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 112 HEALTHCARE: RFID TAGS MARKET, BY FREQUENCY, 2019–2022  
(USD MILLION)

TABLE 113 HEALTHCARE: RFID TAGS MARKET, BY FREQUENCY, 2023–2032  
(USD MILLION)

TABLE 114 HEALTHCARE: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022  
(USD MILLION)

TABLE 115 HEALTHCARE: RFID TAGS MARKET, BY FORM FACTOR, 2023–2032  
(USD MILLION)

TABLE 116 HEALTHCARE: RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

TABLE 117 HEALTHCARE: RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

TABLE 118 HEALTHCARE: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 119 HEALTHCARE: RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

#### 8.1.5 APPAREL

8.1.5.1 Major applications such as product tracking, quality control, and inventory check to boost demand for RFID tags

TABLE 120 APPAREL: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 121 APPAREL: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 122 APPAREL: RFID TAGS MARKET, BY FREQUENCY, 2019–2022 (USD

MILLION)

TABLE 123 APPAREL: RFID TAGS MARKET, BY FREQUENCY, 2023–2032 (USD MILLION)

TABLE 124 APPAREL: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022 (USD MILLION)

TABLE 125 APPAREL: RFID TAGS MARKET, BY FORM FACTOR, 2023–2032 (USD MILLION)

TABLE 126 APPAREL: RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

TABLE 127 APPAREL: RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

TABLE 128 APPAREL: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 129 APPAREL: RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

#### 8.1.6 FOOD

8.1.6.1 Increasing focus on food safety to drive adoption of RFID tags

TABLE 130 FOOD: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 131 FOOD: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 132 FOOD: RFID TAGS MARKET, BY FREQUENCY, 2019–2022 (USD MILLION)

TABLE 133 FOOD: RFID TAGS MARKET, BY FREQUENCY, 2023–2032 (USD MILLION)

TABLE 134 FOOD: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022 (USD MILLION)

TABLE 135 FOOD: RFID TAGS MARKET, BY FORM FACTOR, 2023–2032 (USD MILLION)

TABLE 136 FOOD: RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

TABLE 137 FOOD: RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

TABLE 138 FOOD: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 139 FOOD: RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

#### 8.1.7 AUTOMOTIVE

8.1.7.1 Growing use of RFID to track real-time movement of vehicles from assembly line to distribution process to contribute to market growth

TABLE 140 AUTOMOTIVE: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 141 AUTOMOTIVE: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 142 AUTOMOTIVE: RFID TAGS MARKET, BY FREQUENCY, 2019–2022

(USD MILLION)

TABLE 143 AUTOMOTIVE: RFID TAGS MARKET, BY FREQUENCY, 2023–2032

(USD MILLION)

TABLE 144 AUTOMOTIVE: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022

(USD MILLION)

TABLE 145 AUTOMOTIVE: RFID TAGS MARKET, BY FORM FACTOR, 2023–2032

(USD MILLION)

TABLE 146 AUTOMOTIVE: RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

TABLE 147 AUTOMOTIVE: RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

TABLE 148 AUTOMOTIVE: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 149 AUTOMOTIVE: RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

#### 8.1.8 LOGISTICS AND SUPPLY CHAIN

8.1.8.1 Pressing need for real-time supply chain visibility to boost adoption of RFID

TABLE 150 LOGISTICS AND SUPPLY CHAIN: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 151 LOGISTICS AND SUPPLY CHAIN: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 152 LOGISTICS AND SUPPLY CHAIN: RFID TAGS MARKET, BY FREQUENCY, 2019–2022 (USD MILLION)

TABLE 153 LOGISTICS AND SUPPLY CHAIN: RFID TAGS MARKET, BY FREQUENCY, 2023–2032 (USD MILLION)

TABLE 154 LOGISTICS AND SUPPLY CHAIN: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022 (USD MILLION)

TABLE 155 LOGISTICS AND SUPPLY CHAIN: RFID TAGS MARKET, BY FORM FACTOR, 2023–2032 (USD MILLION)

TABLE 156 LOGISTICS AND SUPPLY CHAIN: RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

TABLE 157 LOGISTICS AND SUPPLY CHAIN: RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

TABLE 158 LOGISTICS AND SUPPLY CHAIN: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 159 LOGISTICS AND SUPPLY CHAIN: RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

#### 8.1.9 AEROSPACE

8.1.9.1 Increasing use of RFID in baggage tagging applications to fuel market growth

TABLE 160 AEROSPACE: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 161 AEROSPACE: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 162 AEROSPACE: RFID TAGS MARKET, BY FREQUENCY, 2019–2022 (USD MILLION)

TABLE 163 AEROSPACE: RFID TAGS MARKET, BY FREQUENCY, 2023–2032 (USD MILLION)

TABLE 164 AEROSPACE: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022 (USD MILLION)

TABLE 165 AEROSPACE: RFID TAGS MARKET, BY FORM FACTOR, 2023–2032 (USD MILLION)

TABLE 166 AEROSPACE: RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

TABLE 167 AEROSPACE: RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

TABLE 168 AEROSPACE: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 169 AEROSPACE: RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

#### 8.1.10 DEFENSE

8.1.10.1 Surging utilization in border security and weapon movement tracking applications to support RFID market growth

TABLE 170 DEFENSE: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 171 DEFENSE: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 172 DEFENSE: RFID TAGS MARKET, BY FREQUENCY, 2019–2022 (USD MILLION)

TABLE 173 DEFENSE: RFID TAGS MARKET, BY FREQUENCY, 2023–2032 (USD MILLION)

TABLE 174 DEFENSE: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022 (USD MILLION)

TABLE 175 DEFENSE: RFID TAGS MARKET, BY FORM FACTOR, 2023–2032 (USD MILLION)

TABLE 176 DEFENSE: RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

TABLE 177 DEFENSE: RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

TABLE 178 DEFENSE: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 179 DEFENSE: RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

#### 8.1.11 RETAIL

8.1.11.1 Focus of retail industry on reducing counterfeiting to augment adoption of RFID tags

TABLE 180 RETAIL: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 181 RETAIL: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 182 RETAIL: RFID TAGS MARKET, BY FREQUENCY, 2019–2022 (USD MILLION)

TABLE 183 RETAIL: RFID TAGS MARKET, BY FREQUENCY, 2023–2032 (USD MILLION)

TABLE 184 RETAIL: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022 (USD MILLION)

TABLE 185 RETAIL: RFID TAGS MARKET, BY FORM FACTOR, 2023–2032 (USD MILLION)

TABLE 186 RETAIL: RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

TABLE 187 RETAIL: RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

TABLE 188 RETAIL: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 189 RETAIL: RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

#### 8.1.12 SECURITY AND ACCESS CONTROL

8.1.12.1 Large-scale adoption of RFID cards in physical access control and payment applications to improve market outlook

TABLE 190 SECURITY AND ACCESS CONTROL: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 191 SECURITY AND ACCESS CONTROL: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 192 SECURITY AND ACCESS CONTROL: RFID TAGS MARKET, BY FREQUENCY, 2019–2022 (USD MILLION)

TABLE 193 SECURITY AND ACCESS CONTROL: RFID TAGS MARKET, BY FREQUENCY, 2023–2032 (USD MILLION)

TABLE 194 SECURITY AND ACCESS CONTROL: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022 (USD MILLION)

TABLE 195 SECURITY AND ACCESS CONTROL: RFID TAGS MARKET, BY FORM

FACTOR, 2023–2032 (USD MILLION)

TABLE 196 SECURITY AND ACCESS CONTROL: RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

TABLE 197 SECURITY AND ACCESS CONTROL: RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

TABLE 198 SECURITY AND ACCESS CONTROL: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 199 SECURITY AND ACCESS CONTROL: RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

#### 8.1.13 SPORTS

8.1.13.1 Growing adoption of RFID tags in sports activities to contribute to market growth

TABLE 200 SPORTS: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 201 SPORTS: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 202 SPORTS: RFID TAGS MARKET, BY FREQUENCY, 2019–2022 (USD MILLION)

TABLE 203 SPORTS: RFID TAGS MARKET, BY FREQUENCY, 2023–2032 (USD MILLION)

TABLE 204 SPORTS: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022 (USD MILLION)

TABLE 205 SPORTS: RFID TAGS MARKET, BY FORM FACTOR, 2023–2032 (USD MILLION)

TABLE 206 SPORTS: RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

TABLE 207 SPORTS: RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

TABLE 208 SPORTS: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 209 SPORTS: RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

#### 8.1.14 ANIMAL TRACKING

8.1.14.1 Extensive use of RFID to manage and monitor the health and well-being of animals to accelerate demand

TABLE 210 ANIMAL TRACKING: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 211 ANIMAL TRACKING: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 212 ANIMAL TRACKING: RFID TAGS MARKET, BY FREQUENCY, 2019–2022 (USD MILLION)

TABLE 213 ANIMAL TRACKING: RFID TAGS MARKET, BY FREQUENCY, 2023–2032 (USD MILLION)

TABLE 214 ANIMAL TRACKING: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022 (USD MILLION)

TABLE 215 ANIMAL TRACKING: RFID TAGS MARKET, BY FORM FACTOR, 2023–2032 (USD MILLION)

TABLE 216 ANIMAL TRACKING: RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

TABLE 217 ANIMAL TRACKING: RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

TABLE 218 ANIMAL TRACKING: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 219 ANIMAL TRACKING: RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

#### 8.1.15 TICKETING

8.1.15.1 Increasing use of RFID for cashless payments and access control at public events and transportation hubs to support market growth

TABLE 220 TICKETING: RFID TAGS MARKET, BY TAG TYPE, 2019–2022 (USD MILLION)

TABLE 221 TICKETING: RFID TAGS MARKET, BY TAG TYPE, 2023–2032 (USD MILLION)

TABLE 222 TICKETING: RFID TAGS MARKET, BY FREQUENCY, 2019–2022 (USD MILLION)

TABLE 223 TICKETING: RFID TAGS MARKET, BY FREQUENCY, 2023–2032 (USD MILLION)

TABLE 224 TICKETING: RFID TAGS MARKET, BY FORM FACTOR, 2019–2022 (USD MILLION)

TABLE 225 TICKETING: RFID TAGS MARKET, BY FORM FACTOR, 2023–2032 (USD MILLION)

TABLE 226 TICKETING: RFID TAGS MARKET, BY MATERIAL, 2019–2022 (USD MILLION)

TABLE 227 TICKETING: RFID TAGS MARKET, BY MATERIAL, 2023–2032 (USD MILLION)

TABLE 228 TICKETING: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 229 TICKETING: RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

## 9 RFID MARKET, BY REGION



## 9.1 INTRODUCTION

FIGURE 44 RFID MARKET: REGIONAL SNAPSHOT

TABLE 230 RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

FIGURE 45 RFID TAGS MARKET IN ASIA PACIFIC TO RECORD HIGHEST CAGR FROM 2023 TO 2032

TABLE 231 RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

TABLE 232 RFID MARKET, BY REGION, 2019–2022 (USD MILLION)

TABLE 233 RFID MARKET, BY REGION, 2023–2032 (USD MILLION)

## 9.2 NORTH AMERICA

FIGURE 46 NORTH AMERICA: RFID TAGS MARKET SNAPSHOT

TABLE 234 NORTH AMERICA: RFID TAGS MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 235 NORTH AMERICA: RFID TAGS MARKET, BY COUNTRY, 2023–2032 (USD MILLION)

TABLE 236 NORTH AMERICA: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 237 NORTH AMERICA: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

### 9.2.1 US

9.2.1.1 Presence of numerous RFID vendors to support market growth

### 9.2.2 CANADA

9.2.2.1 Healthcare sector to generate growth opportunities for RFID solution providers

### 9.2.3 MEXICO

9.2.3.1 Focus on reducing industrial accidents to fuel adoption of RFID solutions

### 9.2.4 IMPACT OF RECESSION ON RFID MARKET IN NORTH AMERICA

## 9.3 EUROPE

FIGURE 47 EUROPE: RFID TAGS MARKET SNAPSHOT

TABLE 238 EUROPE: RFID TAGS MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 239 EUROPE: RFID TAGS MARKET, BY COUNTRY, 2023–2032 (USD MILLION)

TABLE 240 EUROPE: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 241 EUROPE: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

### 9.3.1 UK

9.3.1.1 Supportive government regulations to boost demand for RFID tags

### 9.3.2 GERMANY

9.3.2.1 Manufacturing industry to underpin RFID market growth

### 9.3.3 FRANCE

9.3.3.1 High adoption of RFID by aircraft manufacturing companies to support market growth

### 9.3.4 ITALY

9.3.4.1 Need for effective asset management to drive RFID adoption

### 9.3.5 RUSSIA

9.3.5.1 Increasing demand from railway and energy industries to drive RFID market

### 9.3.6 POLAND

9.3.6.1 Logistics applications to propel demand for RFID solutions

### 9.3.7 REST OF EUROPE

### 9.3.8 IMPACT OF RECESSION ON RFID MARKET IN EUROPE

## 9.4 ASIA PACIFIC

### FIGURE 48 ASIA PACIFIC: RFID TAGS MARKET SNAPSHOT

TABLE 242 ASIA PACIFIC: RFID TAGS MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 243 ASIA PACIFIC: RFID TAGS MARKET, BY COUNTRY, 2023–2032 (USD MILLION)

TABLE 244 ASIA PACIFIC: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 245 ASIA PACIFIC: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

### 9.4.1 JAPAN

9.4.1.1 Significant demand from healthcare and retail sectors to support RFID market growth

### 9.4.2 CHINA

9.4.2.1 Rapid automation of manufacturing processes to boost adoption of RFID technology

### 9.4.3 SOUTH KOREA

9.4.3.1 Large-scale adoption of RFID solutions by food and electronics industries to favor market players

### 9.4.4 INDIA

9.4.4.1 Defense and healthcare industries in India to drive market

### 9.4.5 AUSTRALIA AND NEW ZEALAND

9.4.5.1 Healthcare industry to offer growth opportunities for RFID market

### 9.4.6 ASEAN

9.4.6.1 Increasing demand for RFID in healthcare and supply chain applications to support market growth

#### 9.4.7 REST OF ASIA PACIFIC

#### 9.4.8 IMPACT OF RECESSION ON RFID MARKET IN ASIA PACIFIC

### 9.5 ROW

TABLE 246 ROW: RFID TAGS MARKET, BY REGION, 2019–2022 (USD MILLION)

FIGURE 49 ROW: RFID TAGS MARKET SNAPSHOT

TABLE 247 ROW: RFID TAGS MARKET, BY REGION, 2023–2032 (USD MILLION)

TABLE 248 ROW: RFID TAGS MARKET, BY APPLICATION, 2019–2022 (USD MILLION)

TABLE 249 ROW: RFID TAGS MARKET, BY APPLICATION, 2023–2032 (USD MILLION)

#### 9.5.1 SOUTH AMERICA

##### 9.5.1.1 Brazil

9.5.1.1.1 Focus on achieving safety in industrial operations to augment demand for RFID solutions

##### 9.5.1.2 Rest of South America

TABLE 250 SOUTH AMERICA: RFID TAGS MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 251 SOUTH AMERICA: RFID TAGS MARKET, BY COUNTRY, 2023–2032 (USD MILLION)

#### 9.5.2 MIDDLE EAST & AFRICA

##### 9.5.2.1 South Africa

9.5.2.1.1 Retail industry to witness huge demand for RFID

##### 9.5.2.2 Turkey

9.5.2.2.1 Introduction of upgraded tolling systems to improve market outlook

##### 9.5.2.3 Saudi Arabia and UAE

9.5.2.3.1 Healthcare sector to propel demand for RFID

##### 9.5.2.4 Rest of Middle East & Africa

TABLE 252 MIDDLE EAST & AFRICA: RFID TAGS MARKET, BY COUNTRY, 2019–2022 (USD MILLION)

TABLE 253 MIDDLE EAST & AFRICA: RFID TAGS MARKET, BY COUNTRY, 2023–2032 (USD MILLION)

#### 9.5.3 IMPACT OF RECESSION ON RFID MARKET IN ROW

## 10 COMPETITIVE LANDSCAPE

### 10.1 OVERVIEW

### 10.2 STRATEGIES ADOPTED BY KEY PLAYERS

TABLE 254 KEY DEVELOPMENTS UNDERTAKEN BY LEADING PLAYERS IN RFID MARKET FROM 2020 TO 2023

- 10.2.1 PRODUCT PORTFOLIO
- 10.2.2 REGIONAL FOCUS
- 10.2.3 MANUFACTURING FOOTPRINT
- 10.2.4 ORGANIC/INORGANIC GROWTH STRATEGIES
- 10.3 MARKET SHARE ANALYSIS, 2022
- TABLE 255 RFID MARKET: DEGREE OF COMPETITION, 2022
- 10.4 FIVE-YEAR COMPANY REVENUE ANALYSIS, 2018–2022
- FIGURE 50 FIVE-YEAR REVENUE ANALYSIS OF KEY COMPANIES
- 10.5 KEY COMPANY EVALUATION MATRIX, 2022
- FIGURE 51 RFID MARKET (GLOBAL): KEY COMPANY EVALUATION MATRIX, 2022
  - 10.5.1 STARS
  - 10.5.2 EMERGING LEADERS
  - 10.5.3 PERVASIVE PLAYERS
  - 10.5.4 PARTICIPANTS
  - 10.5.5 COMPANY FOOTPRINT
- TABLE 256 OVERALL COMPANY FOOTPRINT
- TABLE 257 COMPANY APPLICATION FOOTPRINT
- TABLE 258 COMPANY REGION FOOTPRINT
- 10.6 STARTUP/SME EVALUATION MATRIX, 2022
- FIGURE 52 RFID MARKET (GLOBAL): STARTUP/SME EVALUATION MATRIX, 2022
  - 10.6.1 PROGRESSIVE COMPANIES
  - 10.6.2 RESPONSIVE COMPANIES
  - 10.6.3 DYNAMIC COMPANIES
  - 10.6.4 STARTING BLOCKS
- TABLE 259 RFID MARKET: LIST OF KEY STARTUPS/SMES
  - 10.6.5 COMPETITIVE BENCHMARKING
- TABLE 260 RFID MARKET: COMPETITIVE BENCHMARKING OF KEY STARTUPS/SMES
- 10.7 COMPETITIVE SCENARIO
  - 10.7.1 PRODUCT LAUNCHES
- TABLE 261 PRODUCT LAUNCHES, JANUARY 2020–SEPTEMBER 2023
  - 10.7.2 DEALS
- TABLE 262 DEALS, JANUARY 2020–SEPTEMBER 2023

## **11 COMPANY PROFILES**

(Business Overview, Products/Solutions/Services Offered, Recent Developments, MnM view (Key strengths/Right to win, Strategic choices made, Weakness/competitive threats)\*)

## 11.1 KEY PLAYERS

### 11.1.1 ZEBRA TECHNOLOGIES CORP.

TABLE 263 ZEBRA TECHNOLOGIES CORP.: COMPANY OVERVIEW

FIGURE 53 ZEBRA TECHNOLOGIES CORP.: COMPANY SNAPSHOT

TABLE 264 ZEBRA TECHNOLOGIES CORP.: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 265 ZEBRA TECHNOLOGIES CORP.: PRODUCT LAUNCHES

### 11.1.2 IMPINJ, INC.

TABLE 266 IMPINJ, INC.: COMPANY OVERVIEW

FIGURE 54 IMPINJ, INC.: COMPANY SNAPSHOT

TABLE 267 IMPINJ, INC.: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 268 IMPINJ, INC.: PRODUCT LAUNCHES

### 11.1.3 HONEYWELL INTERNATIONAL INC.

TABLE 269 HONEYWELL INTERNATIONAL INC.: COMPANY OVERVIEW

FIGURE 55 HONEYWELL INTERNATIONAL INC.: COMPANY SNAPSHOT

TABLE 270 HONEYWELL INTERNATIONAL INC.:

PRODUCTS/SOLUTIONS/SERVICES OFFERED

### 11.1.4 AVERY DENNISON CORPORATION

TABLE 271 AVERY DENNISON CORPORATION: COMPANY OVERVIEW

FIGURE 56 AVERY DENNISON CORPORATION: COMPANY SNAPSHOT

TABLE 272 AVERY DENNISON CORPORATION:

PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 273 AVERY DENNISON CORPORATION: PRODUCT LAUNCHES

TABLE 274 AVERY DENNISON CORPORATION: DEALS

TABLE 275 AVERY DENNISON CORPORATION: OTHERS

### 11.1.5 NXP SEMICONDUCTORS

TABLE 276 NXP SEMICONDUCTORS: COMPANY OVERVIEW

FIGURE 57 NXP SEMICONDUCTORS: COMPANY SNAPSHOT

TABLE 277 NXP SEMICONDUCTORS: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 278 NXP SEMICONDUCTORS: PRODUCT LAUNCHES

TABLE 279 NXP SEMICONDUCTORS: DEALS

### 11.1.6 ALIEN TECHNOLOGY, LLC

TABLE 280 ALIEN TECHNOLOGY, LLC: COMPANY OVERVIEW

TABLE 281 ALIEN TECHNOLOGY, LLC: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 282 ALIEN TECHNOLOGY, LLC: PRODUCT LAUNCHES

### 11.1.7 CAEN RFID S.R.L.

TABLE 283 CAEN RFID S.R.L.: COMPANY OVERVIEW

TABLE 284 CAEN RFID S.R.L.: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 285 CAEN RFID S.R.L.: PRODUCT LAUNCHES

TABLE 286 CAEN RFID: DEALS

11.1.8 GAO GROUP

TABLE 287 GAO GROUP: COMPANY OVERVIEW

TABLE 288 GAO GROUP: PRODUCTS/SOLUTIONS/SERVICES OFFERED

11.1.9 HID GLOBAL CORPORATION

TABLE 289 HID GLOBAL CORPORATION: COMPANY OVERVIEW

TABLE 290 HID GLOBAL CORPORATION: PRODUCTS/SOLUTIONS/SERVICES OFFERED

TABLE 291 HID GLOBAL CORPORATION: PRODUCT LAUNCHES

TABLE 292 HID GLOBAL CORPORATION: DEALS

11.1.10 INVENGO INFORMATION TECHNOLOGY CO., LTD.

TABLE 293 INVENGO INFORMATION TECHNOLOGY CO., LTD.: COMPANY OVERVIEW

TABLE 294 INVENGO INFORMATION TECHNOLOGY CO., LTD.:

PRODUCTS/SOLUTIONS/ SERVICES OFFERED

11.2 OTHER PLAYERS

11.2.1 MOJIX

11.2.2 SAG SECURITAG ASSEMBLY GROUP CO., LTD

11.2.3 LINXENS

11.2.4 CHECKPOINT SYSTEMS, INC.

11.2.5 IDENTIV, INC.

11.2.6 CONFIDEX

11.2.7 DATALOGIC S.P.A.

11.2.8 NEDAP N.V.

11.2.9 JADAK

11.2.10 UNITECH ELECTRONICS CO., LTD.

11.2.11 INFOTEK SOFTWARE & SYSTEMS (P) LTD.

11.2.12 BARTRONICS INDIA LIMITED

11.2.13 BARTECH DATA SYSTEMS PVT. LTD.

11.2.14 GLOBERANGER

11.2.15 ORBCOMM

\*Details on Business Overview, Products/Solutions/Services Offered, Recent Developments, MnM view (Key strengths/Right to win, Strategic choices made, Weakness/competitive threats)\* might not be captured in case of unlisted companies.

## 12 APPENDIX

12.1 DISCUSSION GUIDE

12.2 KNOWLEDGESTORE: MARKETSANDMARKETS' SUBSCRIPTION PORTAL

12.3 CUSTOMIZATION OPTIONS

12.4 RELATED REPORTS

12.5 AUTHOR DETAILS

## I would like to order

Product name: RFID Market by Offering (Tags, Readers, Software & Services), Tag Type (Active, Passive), Wafer Size, Frequency (Low Frequency, High Frequency, Ultra-high Frequency), Form Factor, Material, Application and Region - Global Forecast to 2032

Product link: <https://marketpublishers.com/r/R6B236DA2B6EN.html>

Price: US\$ 4,950.00 (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/R6B236DA2B6EN.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