

RF Component Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 – 2034

<https://marketpublishers.com/r/R03A2A25E984EN.html>

Date: December 2024

Pages: 194

Price: US\$ 4,850.00 (Single User License)

ID: R03A2A25E984EN

Abstracts

The Global RF Component Market, valued at USD 46.5 billion in 2024, is projected to expand at a CAGR of 14% from 2025 to 2034. As a critical element in modern telecommunications and electronic systems, RF components enable seamless connectivity and efficient communication across various sectors, including telecommunications, automotive, aerospace, and consumer electronics. Their importance is heightened with the growing demand for next-generation wireless technologies.

The proliferation of Internet of Things (IoT) devices is a key factor driving growth in the RF components market. IoT relies on RF components for smooth device-to-device communication, as well as network integration. With the increased adoption of IoT in sectors like healthcare, agriculture, manufacturing, and urban development, the need for low-power, efficient RF modules has surged. These modules support advanced communication protocols such as Zigbee, LoRa, and NB-IoT essential for scalable and cost-effective IoT networks.

Moreover, the convergence of IoT with 5G networks is further propelling the demand for RF components. These high-frequency, low-latency solutions are required to manage the surge in data traffic driven by the rapid expansion of 5G services. Manufacturers are addressing this demand by developing compact, energy-efficient RF components that support advanced signal processing and low energy consumption, thus facilitating the growth of IoT ecosystems globally.

In terms of frequency, the RF component market is categorized into several segments: Up to 1 GHz, 1 GHz to 6 GHz, 6 GHz to 30 GHz, and above 300 GHz. The 1 GHz to 6 GHz range holds the largest share of the market, accounting for approximately 30.7% of

total sales in 2024. This frequency range is pivotal for mobile communications, 5G networks, and Wi-Fi systems, offering an optimal balance between data transmission speed and effective signal propagation for both short and medium-range communications.

The telecommunications industry is expected to remain a major driver of the RF components market. The ongoing global rollout of 5G infrastructure and the increasing demand for broadband services are key factors fueling growth in this sector. As the telecommunications industry continues to evolve, the need for high-performance RF solutions to support reliable connectivity, network expansion, and enhanced data transmission speeds remains crucial.

In North America, the United States is poised to grow at a CAGR of 14.1% in the RF component market. The U.S. leads in technology innovation, with significant investments in 5G, IoT, and autonomous systems, all of which drive the demand for advanced RF solutions. The government's initiatives to enhance spectrum availability, along with the growing need for high-performance RF components in urban areas and defense sectors, are expected to further bolster the market. The country's dominance in consumer electronics also supports the growth of the RF components market, especially in mobile devices and wearables.

Contents

CHAPTER 1 METHODOLOGY & SCOPE

- 1.1 Market scope & definitions
- 1.2 Base estimates & calculations
- 1.3 Forecast calculations
- 1.4 Data sources
 - 1.4.1 Primary
 - 1.4.2 Secondary
 - 1.4.2.1 Paid sources
 - 1.4.2.2 Public sources

CHAPTER 2 EXECUTIVE SUMMARY

- 2.1 Industry synopsis, 2021-2034

CHAPTER 3 INDUSTRY INSIGHTS

- 3.1 Industry ecosystem analysis
 - 3.1.1 Factor affecting the value chain
 - 3.1.2 Profit margin analysis
 - 3.1.3 Disruptions
 - 3.1.4 Future outlook
 - 3.1.5 Manufacturers
 - 3.1.6 Distributors
- 3.2 Supplier landscape
- 3.3 Profit margin analysis
- 3.4 Key news & initiatives
- 3.5 Regulatory landscape
- 3.6 Impact forces
- 3.7 Growth drivers
 - 3.7.1 Expansion of wireless communication networks
 - 3.7.2 Proliferation of IoT (Internet of Things) devices
 - 3.7.3 Rising adoption of front-end modules in telecom
 - 3.7.4 Growing Investment in Satellite Communications
 - 3.7.5 Increasing advancement in Electronic Warfare (EW) technology
- 3.8 Industry pitfalls & challenges
 - 3.8.1 High development and manufacturing costs

- 3.8.2 Interference and signal integrity Issues
- 3.9 Growth potential analysis
- 3.10 Porter's analysis
- 3.11 PESTEL analysis

CHAPTER 4 COMPETITIVE LANDSCAPE, 2023

- 4.1 Introduction
- 4.2 Company market share analysis
- 4.3 Competitive positioning matrix
- 4.4 Strategic outlook matrix

CHAPTER 5 MARKET ESTIMATES & FORECAST, BY COMPONENTS, 2021-2034 (USD MILLION/BILLION & MILLION/BILLION UNITS)

- 5.1 Key trends
- 5.2 Passive components
 - 5.2.1 Filter
 - 5.2.1.1 Low pass filter
 - 5.2.1.2 High pass filter
 - 5.2.1.3 Band pass filter
 - 5.2.2 Surface Acoustic Wave (SAW) filter
 - 5.2.3 Diplexer
 - 5.2.4 Duplexer
 - 5.2.5 RF switch
 - 5.2.6 Attenuator
- 5.3 Active components
 - 5.3.1 Power Amplifier (PA)
 - 5.3.2 Low Noise Amplifier (LNA)
 - 5.3.3 Mixer
 - 5.3.4 Transceiver
 - 5.3.5 Antenna tuner
- 5.4 Processing components
 - 5.4.1 Modem
 - 5.4.2 Baseband processor
 - 5.4.3 Network processor

CHAPTER 6 MARKET ESTIMATES & FORECAST, BY FREQUENCY, 2021-2034 (USD MILLION/BILLION & MILLION/BILLION UNITS)

- 6.1 Key trends
- 6.2 Up to 1 GHz
- 6.3 1 GHz to 6 GHz
- 6.4 6 GHz to 30 GHz
- 6.5 More than 300 GHz

CHAPTER 7 MARKET ESTIMATES & FORECAST, BY APPLICATION, 2021-2034 (USD MILLION/BILLION & MILLION/BILLION UNITS)

- 7.1 Key trends
- 7.2 Navigation
- 7.3 Radio broadcast
- 7.4 TV broadcast
- 7.5 Mobile phone communication
- 7.6 Satellite communication
- 7.7 RADAR
- 7.8 Others

CHAPTER 8 MARKET ESTIMATES & FORECAST, BY END USE INDUSTRY, 2021-2034 (USD MILLION/BILLION & MILLION/BILLION UNITS)

- 8.1 Key trends
- 8.2 Telecommunications
- 8.3 Aerospace & defense
- 8.4 automotive
- 8.5 industrial
- 8.6 Consumer electronics
- 8.7 Others

CHAPTER 9 MARKET ESTIMATES & FORECAST, BY REGION, 2021-2034 (USD MILLION/BILLION & MILLION/BILLION UNITS)

- 9.1 Key trends
- 9.2 North America
 - 9.2.1 U.S.
 - 9.2.2 Canada
- 9.3 Europe
 - 9.3.1 UK

- 9.3.2 Germany
- 9.3.3 France
- 9.3.4 Italy
- 9.3.5 Spain
- 9.3.6 Russia
- 9.4 Asia Pacific
 - 9.4.1 China
 - 9.4.2 India
 - 9.4.3 Japan
 - 9.4.4 South Korea
 - 9.4.5 Australia
 - 9.4.6 Rest of Asia Pacific
- 9.5 Latin America
 - 9.5.1 Brazil
 - 9.5.2 Mexico
 - 9.5.3 Rest of Latin America
- 9.6 MEA
 - 9.6.1 South Africa
 - 9.6.2 Saudi Arabia
 - 9.6.3 UAE
 - 9.6.4 Rest of MEA

CHAPTER 10 COMPANY PROFILES

- 10.1 Analog Devices, Inc
- 10.2 Arror Electronics
- 10.3 Broadcom, Inc.
- 10.4 Fujitsu Limited
- 10.5 IQE plc
- 10.6 Knowles Corporation
- 10.7 MACOM Technology Solutions Holdings, Inc.
- 10.8 Murata Manufacturing Co. Limited
- 10.9 NXP Semiconductors
- 10.10 Qorvo, Inc
- 10.11 Renesas Electronics Corporation
- 10.12 Skyworks Solutions, Inc.
- 10.13 STMicroelectronics
- 10.14 SV Microwave (Amphenol Corporation)
- 10.15 Taiwan Semiconductor Manufacturing Co. Limited

10.16 TDK Corporation

10.17 Texas Instruments, Inc.

10.18 Toshiba Electronics Devices & Storage Corporation

10.19 United Monolithic Semiconductors

I would like to order

Product name: RF Component Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 – 2034

Product link: <https://marketpublishers.com/r/R03A2A25E984EN.html>

Price: US\$ 4,850.00 (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/R03A2A25E984EN.html>