

# Telecommunication MLCC - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2024 - 2029)

<https://marketpublishers.com/r/T3F4F0134A6BEN.html>

Date: July 2024

Pages: 247

Price: US\$ 4,750.00 (Single User License)

ID: T3F4F0134A6BEN

## Abstracts

The Telecommunication MLCC Market size is estimated at 1.35 billion USD in 2024, and is expected to reach 3.61 billion USD by 2029, growing at a CAGR of 21.70% during the forecast period (2024-2029).

Different case sizes are fueling the evolution of telecommunication MLCCs

The telecommunication MLCC market is undergoing a profound transformation, driven by technological advancements and the demand for compact yet high-performance electronic components. Within the "by case size" segment, five key categories stand out: 0 201, 0 402, 0 603, 1 005, and 1 210. Each case size plays a pivotal role in shaping the industry's evolution.

The 0 201 case size is central to meeting evolving industry demands. Demonstrating strong growth, this segment generated USD 145.29 million in revenue in 2022. Its compact form factor aligns with the need for space optimization in devices like set-top boxes (STBs), which is crucial for enabling advanced features such as 4K HDR and Dolby Atmos support.

The 0 603 case size represents collaborative progress and technological innovation. Its compact form factor complements strategic collaborations, exemplified by China Telecom and China Unicom's 5G network sharing initiative. Case Size 1 005 accommodates these innovations, allowing personalized services and efficient bandwidth utilization. Partnerships like ADB and KAONMEDIA leverage this case size

to introduce cutting-edge technologies, enhancing device performance.

The 1 210 case size plays a significant role in telecom infrastructure. It enables efficient signal processing, power conversion, and RF circuitry within base stations. Innovations like Ubiik's freeRANTM and Qualcomm's Compact Macro 5G RAN Platform exemplify the demand for high-performance components.

Case sizes of all types in the telecommunication market with compact yet powerful components for advanced STBs to efficiently signal processing in base stations contribute to the industry's progress, offering a balance between size constraints and technological capabilities.

The demand for MLCCs is growing in the global telecommunication infrastructure

The global telecommunication sector is experiencing dynamic growth, driven by the rapid deployment of 5G networks and the increasing demand for high-speed connectivity and advanced communication services.

Asia-Pacific is at the forefront of the telecommunications industry's surge, marked by the widespread adoption of smartphones, data services, and digital content. Countries such as China are pioneering the deployment of 5G technology, with millions of operational 5G base stations. The demand for MLCCs in the region is substantial, driven by the need for efficient communication base stations that can withstand high temperatures and maintain signal integrity. As the region continues to innovate and lead in telecommunications, the demand for MLCCs remains strong.

The United States is a key player in the global telecommunication sector, making significant strides in establishing the national 5G network. With tech giants like AT&T, Verizon, and T-Mobile investing heavily in 5G technology, the demand for MLCCs in communication base stations is on the rise.

Europe has witnessed a surge in mobile applications and services, driving the need for enhanced telecommunications infrastructure. The deployment of 5G networks across countries like the United Kingdom, Germany, France, and Spain has led to an increased demand for base stations. MLCCs are playing a critical role in enabling the advanced functionalities of 5G, such as higher data rates and reduced latency.

Middle East & Africa is undergoing a significant transformation with the rapid deployment of 5G networks. As commercial 5G services are introduced across the region, the demand for MLCCs in the Rest of the World has surged.

## Global Telecommunication MLCC Market Trends

The rising adoption of 5G networks is propelling the MLCC demand

The emergence of 5G technology has brought significant advancements to the telecommunications industry, revolutionizing wireless connectivity with faster speeds. In this context, 5G/mmWave base stations have become crucial components for deploying 5G networks, particularly in urban areas with high data demand. These base stations use mmWave frequencies to transmit and receive wireless signals, enabling the benefits of 5G technology. The integration of MLCCs within 5G/mmWave base stations plays a pivotal role in supporting functionality and presents implications for the telecom MLCC market.

5G/mmWave base stations are designed to deliver ultra-fast and reliable wireless connectivity by leveraging the unique characteristics of mmWave frequencies, ranging from 24 GHz to 100 GHz. The deployment of 5G/mmWave base stations is crucial for achieving the full potential of emerging applications such as autonomous vehicles and IoT.

Upon historical analysis, a clear growth pattern and projections emerge for 5G/mmWave base stations within the telecom MLCC market. The volume of these base stations started from negligible figures in the early years and experienced gradual growth over time. In 2018, the volume reached 0.09 million units, increasing to 0.12 million units in 2019. Despite the challenges posed by the global COVID-19 pandemic, the deployment of 5G/mmWave base stations remained resilient, with a further increase to 0.13 million units in 2020 and 0.22 million units in 2022. The projected figures indicate a continued expansion, with the volume expected to reach 0.5 million units by 2026. This upward trend reflects the growing demand for 5G networks to leverage mmWave frequencies for enhanced wireless performance, particularly in densely populated urban areas.

## Navigating growth in the telecommunications MLCC market

The telecommunication market is witnessing a remarkable surge in 5G fixed wireless access (FWA) connections. It is projected to expand exponentially at a CAGR of 68% from 2020 to 2026. This growth translates to a substantial increase in volume, with 2 million 5G FWA connections in 2020, which is expected to reach 65 million by 2026. This presents a significant opportunity for MLCC manufacturers, as FWA devices heavily rely on MLCCs for efficient performance. FWA devices, including customer premises equipment (CPE), base stations, and network equipment, are driving the demand for MLCCs. As the adoption of 5G FWA continues to grow, the need for these capacitors will be amplified. To meet the specific requirements and performance expectations of 5G FWA devices, ongoing innovation and alignment of production and supply capabilities are paramount for MLCC manufacturers.

It is crucial to recognize the continued significance of 4G and other technologies in the telecommunication market. MLCCs play a vital role in these devices, such as smartphones, routers, and IoT devices, facilitating power management, signal filtering, and noise suppression. As the number of 4G and other technology connections increases, so does the demand for MLCCs in these devices. Nevertheless, the rapid growth of 5G FWA connections presents a compelling market opportunity for MLCC manufacturers. However, it is essential to recognize the continued demand for 4G and other technologies. By addressing the unique needs of both segments through innovation and partnerships, MLCC manufacturers can drive growth and capture the full potential of the telecommunications MLCC market.

## Telecommunication MLCC Industry Overview

The Telecommunication MLCC Market is moderately consolidated, with the top five companies occupying 44.61%. The major players in this market are Murata Manufacturing Co., Ltd, Samsung Electro-Mechanics, Taiyo Yuden Co., Ltd, Walsin Technology Corporation and Yageo Corporation (sorted alphabetically).

Additional Benefits:

The market estimate (ME) sheet in Excel format

3 months of analyst support

## Contents

### **1 EXECUTIVE SUMMARY & KEY FINDINGS**

### **2 REPORT OFFERS**

### **3 INTRODUCTION**

3.1 Study Assumptions & Market Definition

3.2 Scope of the Study?

3.3 Research Methodology

### **4 KEY INDUSTRY TRENDS**

4.1 Base Station Sales

4.1.1 5G/mmWave Base Station

4.1.2 Macro 4G Base Station

4.1.3 Macro-5G/sub6GHz Base Station

4.1.4 Small 4G Base Station

4.1.5 Small 5G Base Station

4.2 Set Top Boxes Sales

4.2.1 Global Set Top Boxes Sales

4.3 Fwa Connections

4.3.1 Global FWA connections

4.4 Regulatory Framework

4.5 Value Chain & Distribution Channel Analysis

### **5 MARKET SEGMENTATION (INCLUDES MARKET SIZE IN VALUE IN USD AND VOLUME, FORECASTS UP TO 2029 AND ANALYSIS OF GROWTH PROSPECTS)**

5.1 Device Type

5.1.1 Base Stations

5.1.2 Set Top Boxes

5.1.3 Others

5.2 Case Size

5.2.1 0

5.2.2 0

5.2.3 0

5.2.4 1

5.2.5 1

5.2.6 Others

5.3 Voltage

5.3.1 50V to 200V

5.3.2 Less than 50V

5.3.3 More than 200V

5.4 Capacitance

5.4.1 10 ?F to 100 ?F

5.4.2 Less than 10 ?F

5.4.3 More than 100 ?F

5.5 Dielectric Type

5.5.1 Class

5.5.2 Class

5.6 Region

5.6.1 Asia-Pacific

5.6.2 Europe

5.6.3 North America

5.6.4 Rest of the World

## **6 COMPETITIVE LANDSCAPE**

6.1 Key Strategic Moves

6.2 Market Share Analysis

6.3 Company Landscape

6.4 Company Profiles

6.4.1 Kyocera AVX Components Corporation (Kyocera Corporation)

6.4.2 Maruwa Co Ltd

6.4.3 Murata Manufacturing Co., Ltd

6.4.4 Nippon Chemi-Con Corporation

6.4.5 Samsung Electro-Mechanics

6.4.6 Samwha Capacitor Group

6.4.7 Taiyo Yuden Co., Ltd

6.4.8 TDK Corporation

6.4.9 Vishay Intertechnology Inc.

6.4.10 Walsin Technology Corporation

6.4.11 W?rth Elektronik GmbH & Co. KG

6.4.12 Yageo Corporation

## **7 KEY STRATEGIC QUESTIONS FOR MLCC CEOS**

## **8 APPENDIX**

### 8.1 Global Overview

#### 8.1.1 Overview

#### 8.1.2 Porter's Five Forces Framework

#### 8.1.3 Global Value Chain Analysis

#### 8.1.4 Market Dynamics (DROs)

### 8.2 Sources & References

### 8.3 List of Tables & Figures

### 8.4 Primary Insights

### 8.5 Data Pack

### 8.6 Glossary of Terms

## I would like to order

Product name: Telecommunication MLCC - Market Share Analysis, Industry Trends & Statistics, Growth Forecasts (2024 - 2029)

Product link: <https://marketpublishers.com/r/T3F4F0134A6BEN.html>

Price: US\$ 4,750.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](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/T3F4F0134A6BEN.html>