Global and China Multi-layer Ceramic Capacitor (MLCC) Industry Report, 2017-2020

Jan. 2017





#### **STUDY GOAL AND OBJECTIVES**

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

#### **REPORT OBJECTIVES**

- To establish a comprehensive, factual, annually updated and costeffective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- To help company to succeed in a competitive market, and

#### **METHODOLOGY**

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

#### **INFORMATION SOURCES**

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

Copyright 2012 ResearchInChina



# Abstract

The rapid development of consumer electronics and industrial intelligentization has greatly promoted the booming of passive components including multi-layer ceramic capacitor (MLCC). In 2015, China's MLCC market size reached RMB39.54 billion, registering a CAGR of 17.2% during 2010-2015. The figure is expected to rise 13.2% YoY to RMB44.77 billion in 2016. With the further expansion of consumer electronics, automotive electronics, industrial control equipment, modern military and other industries, the demand for MLCC will grow in the future. China's MLCC market size is expected to hit RMB63.5 billion in 2020 and register a CAGR of 9.9% during 2015-2020.

Market demand of MLCC products comes mainly from military products such as aerospace, aviation, ships, weapons and electronic countermeasure, industrial products such as system communication equipment, industrial control equipment, medical electronic equipment, automotive electronics, precision instruments, oil exploration equipment and rail transit, as well as consumer products like notebook computers, digital cameras, mobile phones, video and audio recording devices. In 2015, the market size of MLCC for consumer electronics attained RMB27.241 billion, holding a 68.9% share; followed by that for industrial products reaching RMB8.535 billion with a 21.6% share, and that for military products posting RMB2.632 billion with a 6.7% share.

In terms of product technology, MLCC as a whole moves towards miniaturization, large capacity, high frequency, high pressure and multi-core direction: in the aspect of miniaturization, Murata put 008004 ultra-miniature MLCC into mass production in 2015, Tianli Holdings also started the pre-development of the model in 2016; in point of large capacity, TDK developed new automotive MLCC with rated voltage of 1000V and characteristics of C0G and NP0 for temperature compensation in March 2016, and achieved the industry's highest electrostatic capacity range  $(1nF\sim33nF)$  under the rated voltage.

Copyright 2012ResearchInChina





Copyright 2012ResearchInChina



With respect to competitive landscape, global major MLCC vendors are mainly distributed in Japan (Murata, TDK, Taiyo Yuden and KYOCERA), South Korea (Samsung Electro-Mechanics) and Taiwan (Yageo and Walsin). Murata as the world's largest MLCC maker captured an approximately 40% share of global market in 2015, enjoying eye-catching performance in miniaturization and high capacity and targeting consumer electronics, industrial and military markets; Samsung Electro-Mechanics ranked second worldwide (surpassed TDK in 2009) and gained a 20% market share in 2015, mainly serving Samsung Electronics and targeting consumer electronics market; followed by Taiyo Yuden and TDK, with a respective market share of 13.3% and 8.2% in 2015. In spite of rapid development, Chinese companies like Fenghua Advanced Technology and Torch Electron have relatively weak foundation and poor technologies, now targeting domestic military market but still difficult to pose a threat to Japanese, Korean and Taiwanese peers in the international market.

The report highlights the following:

>Overview of MLCC industry in China, including development history, policies, laws & regulations, market size, production & sales, competition pattern, export situation, trends, etc.;

>Demand situation of major MLCC market segments in China, including market size, prospects, etc. of consumer electronics, industrial products and military areas;

>Upstream electronic ceramics market of MLCC, including the industry's production, demand and competition pattern;

>Analysis on six foreign companies (Murata, Samsung Electro-Mechanics, KYOCERA, Taiyo Yuden, TDK, and Samwha Electric) and six Chinese players (Fenghua Advanced Technology, Tianli Holdings, Walsin, Yageo, Chaozhou Three-circle, and Torch Electron), including profile, financial situation, production & sales, major customers, featured products, R&D, distribution of production bases and technical features.

Copyright 2012ResearchInChina



### The Vertical Portal for China Business Intelligence

## **Table of contents**

1 Overview of MLCC Industry	5 Major Foreign MLCC Vendors	5.3.3 Main Business
1.1 Product Definition	5.1 Murata	5.3.4 Products
1.2 Main Classification of Ceramic Capacitor	5.1.1 Profile	5.3.5 R&D
1.3 Trends of MLCC Products	5.1.2 Operation	5.3.6 Latest Advances
1.4 Industry Supervision and Laws & Regulations	5.1.3 Main Business	5.3.7 Production Bases in China
1.5 Industry Policy	5.1.4 Orders & Inventory	5.3.8 TDK Xiamen Co., Ltd.
	5.1.5 Main Products	5.4 KYOCERA
2 MLCC Market Size	5.1.6 Wuxi Murata Electronics Co., Ltd	5.4.1 Profile
2.1 Overall Market Size	5.1.7 Beijing Murata Electronics Co., Ltd	5.4.2 Operation
2.2 Production & Sales	5.1.8 Capacity Expansion Plan	5.4.3 Main Business
2.3 Capacity	5.1.9 Latest Advances	5.4.4 Main Products
2.4 Competition Pattern	5.2 Samsung Electro-Mechanics	5.4.5 R&D
	5.2.1 Profile	5.4.6 Shanghai KYOCERA Electronics Co., Ltd.
3 Market Segments	5.2.2 Operation	5.4.7 Latest Advances
3.1 Military	5.2.3 Product Structure	5.5 Taiyo Yuden
3.2 Industrial Products	5.2.4 Regional Structure	5.5.1 Profile
3.3 Consumer Goods	5.2.5 Main Products	5.5.2 Operation
3.3.1 Mobile Phone	5.2.6 Dongguan Samsung Electro-Mechanics Co., Ltd.	5.5.3 Main Business
3.3.2 Computer	(DSEM)	5.5.4 Production & Orders
3.3.3 Television	5.2.7 Tianjin Samsung Electro-Mechanics Co., Ltd.	5.5.5 Main Products
	(ISEM)	5.5.6 Strategy for MLCC Development
4 Upstream Materials Market	5.2.8 Samsung Electro-Mechanics Co., Binhai Branch Factory	5.5.7 Dongguan Taiyo Yuden Co., Ltd.
4.1 Introduction to MLCC Ceramic Materials	5 2 9 Samsung Electro-Mechanics Co Suzhou Branch	5.5.8 Latest Advances
4.2 Supply	Factory	5.6 Samwha Electric
4.3 Demand	5.3 TDK	5.6.1 Profile
4.4 Competition Pattern	5.3.1 Profile	5.6.2 Main Products
	5.3.2 Operation	5.6.3 Tianjin Samwha Electric Co., Ltd.



## **Table of contents**

6 Major Chinese MLCC Manufacturers	6.4 Torch Electron
6.1 Fenghua Advanced Technology	6.4.1 Profile
6.1.1 Profile	6 4 2 Operation
6.1.2 Operation	6 4 3 Main Business
6.1.3 Main Business	6 4 4 Gross Margin
6.1.4 Gross Margin	6 4 5 R&D
6.1.5 Production, Sales, and Capacity of Main Products	6.4.6 Main Products
6.1.6 Customers & Suppliers	6.4.7 Production Lines and Capacity
6.1.7 R&D	6.5 Walsin
6.1.8 Guanhua Sheet Type Ceramic Capacitor Branch	6.5.1 Profile
6.1.9 Development Strategy	6.5.2 Operation
6.2 Tianli Holdings Group Limited	6.5.3 Main Business
6.2.1 Profile	6.5.4 Main Products
6.2.2 Operation	6.5.5 Production & Sales
6.2.3 Main Business	6.5.6 Maior Customers and Channels
6.2.4 Gross Margin	6.5.7 Development Strategy
6.2.5 Main Products	6.5.8 Dongguan Walsin Technology Electronics Co., Ltd.
6.2.6 R&D	6.6 Yageo
6.2.7 Production Distribution	6.6.1 Profile
6.3 Chaozhou Three-circle	6.6.2 Operation
6.3.1 Profile	6.6.3 Main Business
6.3.2 Operation	6.6.4 Main Products
6.3.3 Main Business	6.6.5 Production & Sales
6.3.4 Production & Sales	6.6.6 Development Strategy
6.3.5 Main Products	6.6.7 Yaqeo Electronics (China) Co., Ltd.
6.3.6 R&D	



# **Selected Charts**

- Advantages and Applications of Main Capacitors
- Main Production Processes and Technologies of MLCC
- MLCC Industry Chain
- Main Classification of Capacitors
- Size of Mainstream MLCC, 1980-2016
- Global MLCC Market Size, 2011-2020E (USD bn)
- China MLCC Market Size, 2010-2020E (RMB bn)
- Size of China MLCC Market Segments, 2015 (RMB mln)
- China's MLCC Output, 2008-2016 (bn pcs)
- China's MLCC Demand, 2008-2016 (bn pcs)
- Capacity of Global Top 5 MLCC Manufacturers, FY2006-FY2016
- Market Share of Global Major MLCC Manufacturers, 2015 (USD bn)
- MLCC Production Distribution of Foreign Manufacturers in China
- MLCC Capacity and Featured Products of Some Major Companies, 2016
- Main Applications of Military MLCC
- China's Defense Budget Growth Rate, 2011-2016
- China's Military MLCC Market Size, 2010-2020E (RMB mln)
- China's Industrial MLCC Market Size, 2010-2020E (RMB mln)
- China's Consumer Electronics MLCC Market Size, 2010-2015 (RMB mln)
- MLCCs Used by Different Types of Mobile Phone, 2016
- China's Mobile Phone Output by Type, 2010-2020E (mln units)
- China's Demand for MLCC from Mobile Phone (by Product), 2010-2020E (mln pcs)
- China's Computer Output by Type, 2010-2020E (mln units)
- China's Demand for MLCC from Computer, 2010-2020E (bn pcs)
- China's Television Output by Type, 2010-2020E (mln units)



# **Selected Charts**

- China's Demand for MLCC from Television, 2010-2020E (bn pcs)
- Classification and Application of MLCC Electronic Ceramics Materials
- Global MLCC Electronic Ceramics Output, 2009-2016 (kt)
- Global MLCC Electronic Ceramics Output Structure (by Source), 2009-2016
- Global Demand for MLCC Electronic Ceramics, 2007-2016 (t)
- Capacity of Global Major MLCC Electronic Ceramics Manufacturers, 2016
- Basic Information of Murata
- Revenue and Net Income of Murata, FY2012-FY2017E
- Revenue of Murata (by Product), FY2012-FY2017E
- Revenue of Murata (by Region), FY2010-FY2016
- Revenue of Murata (by Application), FY2010-FY2016
- Main Product Orders of Murata, FY2016
- Main Product Inventory of Murata, FY2016
- Main MLCC Product Series of Murata
- Basic Information of Wuxi Murata Electronics
- Basic Information of Beijing Murata Electronics
- Construction Schedule for New Workshop of Fukui Murata MFG.
- Electrical Properties of Automotive AEC-Q200
- Revenue and Net Income of Samsung Electro-Mechanics, 2011-2016 (KRW bn)
- Revenue and Profit Structure (by Product) of Samsung Electro-Mechanics, 2014-2015 (KRW mln)
- Regional Distribution of Samsung Electro-Mechanics' Major Products and Customers
- Revenue and Profit Structure (by Region) of Samsung Electro-Mechanics, 2014-2015 (KRW mln)
- MLCC Product Series of Samsung Electro-Mechanics
- Revenue and Net Income of DSEM, 2011-2015 (KRW bn)
- Revenue and Net Income of TSEM, 2011-2015 (KRW bn)



# **Selected Charts**

- Basic Information of TDK
- Five Core Technologies and 15 Key Businesses of TDK
- Revenue and Net Income of TDK, FY2010-FY2017E (JPY mln)
- Revenue of TDK (by Product), FY2013-FY2017E (JPY bn)
- Revenue of TDK (by Region), FY2011-FY2017E (JPY mln)
- Main Passive Components of TDK
- R&D Expenses to Net Sales Ratio of TDK, FY2007-2016
- Key Technical Indicators for CGA6 and CGA9
- Key Technical Indicators for Resin Electrode Series Products
- Main Passive Components Production Bases of TDK in China
- Basic Information of TDK Xiamen
- Main MLCC Products of TDK Xiamen
- Basic Information of Kyocera
- Key Segments and Products of Kyocera
- Revenue and Net Income of Kyocera, FY2010-FY2017E
- Revenue of Kyocera (by Product), FY2010-FY2017E (JPY bn)
- Revenue of Kyocera (by Region), FY2013-FY2017E (JPY mln)
- MLCC Product Series of Kyocera
- Parameter Indicators of Kyocera's Latest MLCC Product
- R&D Expenditure of Kyocera, FY2009-FY2016 (JPY bn)
- Basic Information of Shanghai Kyocera Electronics
- Parameter Indicators of Kyocera's 0201 / 01005 MLCC
- Basic Information of Taiyo Yuden
- Revenue and Net Income of Taiyo Yuden, FY2009-FY2017E
- Revenue of Taiyo Yuden (by Product), FY2015-FY2017E



# **Selected Charts**

- Revenue of Taiyo Yuden (by Region), FY2015-FY2016E
- Output Value of Taiyo Yuden (by Product), FY2015-FY2016E
- Order Amount of Taiyo Yuden (by Product), FY2015-FY2016E
- Main MLCC Products of Taiyo Yuden
- MLCC Development Strategy Map of Taiyo Yuden
- MLCC Production Bases of Taiyo Yuden
- Basic Information of Taiyo Yuden (Guangdong)
- Main Parameter Indicators of PMK105 BJ474ML and PMC105 BJ474ML
- Main Parameter Indicators of JMK063 BJ104ML
- Main MLCC Products of Samwha Electric
- Basic Information of Tianjin Samwha Electric
- Revenue and Net Income of Fenghua Advanced Technology, 2010-2016 (RMB mln)
- Revenue of Fenghua Advanced Technology (by Product), 2009-2016 (RMB mln)
- Revenue of Fenghua Advanced Technology (by Region), 2009-2016 (RMB mln)
- Gross Margin of Fenghua Advanced Technology (by Product), 2009-2016
- Output, Sales Volume, and Inventory of Fenghua Advanced Technology (by Product), 2012-2015
- Fenghua Advanced Technology's Revenue from Top 5 Customers and % of Total Revenue, 2015
- Fenghua Advanced Technology's Procurement from Top 5 Suppliers and % of Total Procurement, 2015
- R&D Costs and % of Total Revenue of Fenghua Advanced Technology, 2012-2016
- Revenue and Net Income of Tianli Holdings, 2010-2016 (RMB mln)
- Revenue of Tianli Holdings (by Product), 2011-2016 (RMB mln)
- Revenue of Tianli Holdings (by Region), 2011-2015 (RMB mln)
- MLCC Gross Margin of Tianli Holdings, 2008-2016 (%)
- Main MLCC Products of Tianli Holdings
- R&D Costs and % of Total Revenue of Tianli Holdings, 2012-2016



# **Selected Charts**

- Revenue and Net Income of Chaozhou Three-circle, 2011-2016 (RMB mln)
- Revenue Breakdown and Structure of Chaozhou Three-circle (by Product), 2011-2015 (RMB mln)
- Revenue Breakdown and Structure of Chaozhou Three-circle (by Region), 2011-2016 (RMB mln)
- MLCC Capacity, Output and Sales Volume of Chaozhou Three-circle, 2011-2014
- Main MLCC Products of Chaozhou Three-circle
- MLCC Gross Margin of Chaozhou Three-circle, 2011-2016
- R&D Costs and % of Total Revenue of Chaozhou Three-circle, 2011-2015
- Revenue and Net Income of Torch Electron, 2011-2016 (RMB mln)
- Revenue of Torch Electron (by Product), 2011-2015 (RMB mln)
- Revenue of Torch Electron (by Region), 2011-2016(RMB mln)
- Main Products and Consolidated Gross Margin of Torch Electron, 2011-2015
- R&D Costs and % of Total Revenue of Torch Electron, 2011-2016
- Own Business, Proxy Business and Corresponding Customers of Torch Electron
- Main Products of Torch Electron
- Main Capacitor Production Lines of Torch Electron
- Progress of Torch Electron's Main Projects under Construction, 2016
- Revenue and Net Income of Walsin, 2010-2016 (NTD mln)
- Revenue Structure of Walsin (by Product), 2013-2015 (%)
- Revenue Breakdown of Walsin (by Region), 2013-2015 (NTD mln)
- Main MLCC Series of Walsin
- Capacity and Output of Walsin (by Product), 2013-2015 (NTD mln)
- Sales Volume and Value of Walsin (by Product), 2013-2015 (NTD mln)
- Main Customer Categories and % of Total Revenue of Walsin, 2015
- Main Channels and % of Total Revenue of Walsin, 2015
- Basic Information of Dongguan Walsin Technology Electronics



# **Selected Charts**

- Revenue and Net Income of Yageo, 2008-2016 (NTD mln)
- Revenue Structure of Yageo (by Product), 2013-2015 (%)
- Revenue Structure of Yageo (by Region), 2009-2015 (%)
- MLCC Product Series of Yageo
- Capacity and Output of Yageo (by Product), 2013-2015 (mln pcs, NTD mln)
- Sales Volume and Value of Yageo (by Product), 2014-2015 (mln pcs, NTD mln)
- Basic Information of Yageo Electronics (China)



### How to Buy

#### You can place your order in the following alternative ways:

- 1.Order online at www.researchinchina.com
- 2.Fax order sheet to us at fax number:+86 10 82601570
- 3. Email your order to: report@researchinchina.com
- 4. Phone us at +86 10 82600828/ 82601561

Party A:		
Name:		
Address:		
Contact Person:	Tel	
E-mail:	Fax	

-				
Party B:				
Name:	Beijing Waterwood Technologies Co., Ltd (ResearchInChina)			
Address:	Room 502, Block 3, Tower C, Changyuan Tiandi Building, No. 18, Suzhou Street, Haidian District, Beijing, China 100080			
Contact Person:	Liao Yan	Phone:	86-10-82600828	
		_		
E-mail:	report@researchinchina.com	Fax:	86-10-82601570	
Bank details:	Beneficial Name: Beijing Waterwood Technologies Co., Ltd Bank Name: Bank of Communications, Beijing Branch Bank Address: NO.1 jinxiyuan shijicheng,Landianchang,Haidian District,Beijing Bank Account No #: 110060668012015061217 Routing No # : 332906			
	Bank SWIFT Code: COMMCNSHBJG			

Title	Format	Cost
Total		

### Choose type of format

PDF (Single user license)	.2,200	USD
Hard copy	2,400	USD
PDF (Enterprisewide license)	3,500	USD

 ※ Reports will be dispatched immediately once full payment has been received.
Payment may be made by wire transfer or credit card via PayPal.







### About ResearchInChina

ResearchInChina (www.researchinchina.com) is a leading independent provider of China business intelligence. Our research is designed to meet the diverse planning and information needs of businesses, institutions, and professional investors worldwide. Our services are used in a variety of ways, including strategic planning, product and sales forecasting, risk and sensitivity management, and as investment research.

#### **Our Major Activities**

- □ Multi-users market reports
- Database-RICDB
- Custom Research
- Company Search

**RICDB** (<u>http://www.researchinchina.com/data/database.html</u>), is a visible financial data base presented by map and graph covering global and China macroeconomic data, industry data, and company data. It has included nearly 500,000 indices (based on time series), and is continuing to update and increase. The most significant feature of this base is that the vast majority of indices (about 400,000) can be displayed in map.

After purchase of our report, you will be automatically granted to enjoy 2 weeks trial service of RICDB for free.

After trial, you can decide to become our formal member or not. We will try our best to meet your demand. For more information, please find at www.researchinchina.com

For any problems, please contact our service team at: