

Low Temperature Co Fired Ceramic Substrate Market is projected to surpass US\$14.756 billion by 2029 at a CAGR of 7.87%

The low temperature co-fired ceramic substrate market is anticipated to grow at a CAGR of 7.87% from US\$8.68 billion in 2022 to US\$14.756 billion by 2029.



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/EINPresswire.com/ -- According to a new study published by Knowledge Sourcing Intelligence, the [low temperature co-fired ceramic substrate market](#) is projected to grow at a CAGR of 7.87% between 2022 and 2029 to reach US\$14.756 billion by 2029.

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Low-temperature co-fired ceramic substrate is a multilayer glass-ceramic substrate it is used as an alternative to PCB (Printed Circuit Board) and it is used for packaging electronic circuits. Low-temperature co-fired ceramic substrate is used where high functional density and excellent reliability are required in extreme environmental conditions. It is used across various industries like telecommunication, automotive, and defense.

Low-temperature co-fired ceramic substrate is made by combining multiple single layers of glass and ceramic sheets at very high temperatures of around 850-900°C

which leads to the formation of a robust substrate having numerous properties like low thermal expansion coefficient, dielectric properties, and excellent thermal conductivity.

Low-temperature co-fired ceramic substrates have various advantages like easy integration with passive components, low-loss dielectric material, and reliable multilayer capabilities have contributed to the growth of the low-temperature co-fired [ceramic substrate market](#) across the globe.

Automotive, defense, telecommunication, medical, industrial, and aerospace are among the end-use industries that are contributing to the growing demand for co-fired ceramics. Low-

temperature co-fired ceramic substrate is preferred over printed circuit boards due to its improved thermal stability and chemical inactivity.

For instance, in October 2022, Kyocera Corporation announced an On-Board Optics Module that achieves a world-record bandwidth of 512 Gbps. The module is designed to be used in data centers. The module converts electrical signals into optical signals, it is designed to consume less power as compared to traditional alternatives. It is designed to improve the signal-to-noise ratio and also virtually eliminate the signal loss caused by conventional electrical conductors.

Some of the limitations that affect low-temperature co-fired ceramic are shrinkage-related problems it affects low low-temperature co-fired ceramic performance and low thermal conductivity.

Many product launches and developments are taking place in the global low-temperature co-fired ceramic substrate market during the forecast period. For instance, in March 2023, TMY Technology Inc. a leading provider of millimeter-wave solutions collaborated with Celanese, a leading chemical and specialty materials company to showcase an innovative Ultra-Low Size, Weight, and Power (SWaP) Electronically Steered Antenna (ESA) solution featuring Antenna-on-Chip (AoC) technology at Satellite 2023, This new dual-polarization Antenna-on-Chip (AoC) helps in increasing the bandwidth of 22%, stable ± 1 dB gain, and symmetrical radiation, it also provides high-reliability, low-loss, and durable solution due to which the performance increases by 5%-10%.

Asia Pacific region is anticipated to hold the majority share of the global low-temperature co-fired ceramic substrate market because of the increasing demand latest technology devices like laptops, smartphones, and various types of electronic devices.

Increasing technological advancements and investment in research and development in China, Taiwan, India, and Japan are majorly contributing to the growth of the market. China dominates the electronics industry in the Asia Pacific region. High region population and availability of labor at low cost also contributed to the growth of the market.

Access sample report or view details: <https://www.knowledge-sourcing.com/report/global-low-temperature-co-fired-ceramic-substrate-market>

The global low-temperature co-fired ceramic substrate market, based on different types is categorized into- RF system-level packages, optoelectronic packages, array packages, and others. RF system level package consists of multiple material sheets of metal, polymer, and ceramic that are combined into a single homogenous assembly that is used in RF and high-frequency applications.

An optoelectronic package is assembled with passive optical components like micro-lenses or fibers. It is designed to convert electrical energy into light and light into energy with the help of

semiconductors. Some of the common optoelectronics devices are photo-detectors, LEDs, solar cells, and laser diodes.

The global low-temperature co-fired ceramic substrate market, based on different end-users is categorized into- [consumer electronics](#), automotive, aerospace and military, telecommunication, and others. In the automotive sector, co-fired ceramics are widely used because of increasing demand for various types of sensors thus it is anticipated that the automotive segment holds a significant share of the market.

In the consumer electronics industry, co-fired ceramic substrate is used for reducing the size of the devices making them more efficient, and reducing their power consumption.

As a part of the report, the major players operating in the global low-temperature co-fired ceramic substrate market that have been covered are Kyocera Corporation, DowDuPont, Inc., Koa Speer Electronics, Inc., Murata Manufacturing Co., Ltd., Selmic Oy, TDK Corporation, Yokowo Co., Ltd., NGK SPARK PLUG CO., LTD., Adamant Namiki, and Apitech.

The market analytics report segments the low-temperature co-fired ceramic substrate market using the following criteria:

- By Type

- o RF System Level Package
- o Optoelectronic Package
- o Array Package
- o Others

- By End-User

- o Consumer Electronics
- o Automotive
- o Aerospace and Military
- o Telecommunication
- o Others

- By Geography

- o North America

- USA
- Canada
- Mexico

o South America

- Brazil
- Argentina
- Others

o Europe

- Germany
- France
- UK
- Others

o Middle East and Africa

- Saudi Arabia
- Israel
- Others

o Asia Pacific

- China
- Japan
- India
- South Korea
- Indonesia
- Taiwan
- Others

Companies Mentioned:

- Kyocera Corporation
- DowDuPont, Inc.
- Koa Speer Electronics, Inc.
- Murata Manufacturing Co., Ltd.
- Selmic Oy
- TDK Corporation
- Yokowo Co., Ltd.
- NGK SPARK PLUG CO., LTD.
- Adamant Namiki
- Apitech

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