

Crystal Oscillator Market by Technology (AT Cut, BT Cut, and SC Cut), by Type (Voltage-Controlled Crystal Oscillator, Temperature-Compensated Crystal Oscillator, Oven-Controlled Crystal Oscillator, and Others), by Mounting Scheme (Surface Mount and Thru-Hole), and by Industry Vertical (Electronics, IT & Telecommunication, Military & Defense, Automotive & Transport, and Others) - Global Opportunity Analysis and Industry Forecast, 2014-2022

https://marketpublishers.com/r/C9150452BAAEN.html

Date: January 2017

Pages: 215

Price: US\$ 4,999.00 (Single User License)

ID: C9150452BAAEN

Abstracts

The global crystal oscillator market size is estimated to reach \$3.2 billion by 2022, growing at a CAGR of 5.8% from 2016 to 2022. Crystal oscillator circuit is a resonating device that uses a piezoelectric crystal resonator to produce electric pulses with precise frequency via mechanical vibrations. A piezoelectric material is used in these crystals owing to the advantages of crystal oscillator such as converting mechanical vibrations into electric pulses and vice versa. These advantages have broadened the areas of applications of crystal oscillator. A crystal oscillator is a type of electronic oscillator/frequency oscillator that produces oscillations of a certain frequency. These crystals are utilized in digital devices such as integrated circuits, radio transmitters, and watches to produce clock signals.

One of the several factors that increase the demand for crystal oscillators is the requirement of highly stable frequency oscillators in the telecommunication industry. Furthermore, there is continuous increasing need for more compact telecommunication components with low power consumption and cost efficiency, which is served by intensive R&D activities in the crystal oscillator market. Among all the crystal oscillators, oven-controlled crystal oscillators offer the unmatched frequency stability and are best



suited for telecommunication applications. In addition, the demand for crystal oscillator circuits in portable electronic devices, infotainment system in vehicles, automatic driver assist systems (ADASs) in the automotive industry drive the growth of crystal oscillator market. The wide range of crystal oscillator application includes industries such as electronics, IT & telecommunication, automotive & transport, and aerospace & defense.

Factors that hamper the crystal oscillator market include the invention of si-MEMS oscillators, which are more compact, require lesser power, and have greater efficiency. However, the frequency stability of si-MEMS oscillators is still several times less than crystal oscillators, especially oven-controlled crystal oscillators. Thus, the impact of this factor is expected to diminish slowly as the key players in crystal oscillator market constantly carry out extensive R&D to produce crystals with more compact body size and enhanced frequency stability. In 2015, among all the geographical regions, Asia-Pacific contributed highest share, in terms of revenue, to this market.

MARKET SEGMENTATION

The market is segmented on the basis of technology, type, mounting scheme, industry vertical, and geography.

BY TECHNOLOGY

AT Cut

BT Cut

SC Cut

BY TYPE

Voltage-Controlled Crystal Oscillator

Temperature-Compensated Crystal Oscillator

Oven-Controlled Crystal Oscillator

Other Crystal Oscillators (Simple-Packaged Crystal Oscillator and Frequency-Controlled Crystal Oscillator)



BY MOUNTING SCHEME

Surface Mount

Thru-Hole

BY INDUSTRY VERTICAL

Electronics

IT & Telecommunication

Military & Defense

Automotive & Transport

Others (Healthcare & Industrial)

BY GEOGRAPHY

North America

U.S.

Canada

Mexico

Europe

UK

Germany

France

Rest of Europe



| Asia | Asia-Pacific | |
|-------------------------------|---------------------------------|--|
| | China | |
| | Japan | |
| | Taiwan | |
| | South Korea | |
| | Rest of Asia-Pacific | |
| LAMEA | | |
| | Latin America | |
| | Middle East | |
| | Africa | |
| MARKET PLAYERS IN VALUE CHAIN | | |
| Seik | Seiko Epson Corp. | |
| Niho | n Dempa Kogyo Co., Ltd. | |
| TXC | TXC Corporation | |
| Vec | ron | |
| Rive | r Eletec Corporation | |
| Kyo | cera Crystal Device Corporation | |
| Mura | ata Manufacturing Co., Ltd. | |
| Rak | on Limited | |



Daishinku Corp.

Fox Electronics

Intel Corporation

Qualcomm Technologies, Inc.

Sony Corp

SAMSUNG Electronics Co. Ltd.

Advanced Micro Devices, Inc.



Contents

CHAPTER 1 INTRODUCTION

- 1.1. REPORT DESCRIPTION
- 1.2. KEY BENEFITS
- 1.3. KEY MARKET SEGMENTS
- 1.4. RESEARCH METHODOLOGY
 - 1.4.1. Secondary research
 - 1.4.2. Primary research
 - 1.4.3. Analyst tools and models

CHAPTER 2 EXECUTIVE SUMMARY

2.1. CXO PERSPECTIVE

CHAPTER 3 MARKET OVERVIEW

- 3.1. MARKET DEFINITION AND SCOPE
- 3.2. KEY FINDINGS
 - 3.2.1. Top Impacting Factors
 - 3.2.2. Top winning strategies
 - 3.2.3. Top investment pockets
- 3.3. PORTERS FIVE FORCES ANALYSIS
- 3.4. MARKET SHARE ANALYSIS, 2015
- 3.5. MARKET DYNAMICS
 - 3.5.1. Drivers
 - 3.5.1.1. Increase in number of vehicles across the globe
 - 3.5.1.2. Growth in 3G and 4G LTE Industry
- 3.5.1.3. Increase in demand of tablets, watches, smartphones and other smart wearable devices
 - 3.5.2. Restraint
 - 3.5.2.1. Evolution of enhanced quality oscillators
 - 3.5.2.2. Increase in demand of quartz MEMS
 - 3.5.3. Opportunities
 - 3.5.3.1. Growing trend of Internet of Things (IoT)

CHAPTER 4 GLOBAL CRYSTAL OSCILLATOR MARKET, BY TECHNOLOGY



4.1. OVERVIEW

4.1.1. Market size and forecast

4.2. AT CUT

- 4.2.1. Introduction
- 4.2.2. Key market trends, Growth factors and opportunities
- 4.2.3. Market size and forecast

4.3. SC CUT

- 4.3.1. Introduction
- 4.3.2. Key market trends, Growth factors and opportunities
- 4.3.3. Market size and forecast

4.4. BT CUT

- 4.4.1. Introduction
- 4.4.2. Key market trends, Growth factors and opportunities
- 4.4.3. Market size and forecast

CHAPTER 5 GLOBAL CRYSTAL OSCILLATOR MARKET, BY TYPE

5.1. OVERVIEW

- 5.1.1. Market size and forecast
- 5.1.2. Key Player Positioning
- 5.2. VOLTAGE-CONTROLLED CRYSTAL OSCILLATOR
 - 5.2.1. Introduction
 - 5.2.2. Key market trends, Growth factors and opportunities
 - 5.2.3. Market size and forecast
- 5.3. TEMPERATURE-COMPENSATED CRYSTAL OSCILLATOR
 - 5.3.1. Introduction
 - 5.3.2. Key market trends, Growth factors and opportunities
 - 5.3.3. Market size and forecast
- 5.4. OVEN-CONTROLLED CRYSTAL OSCILLATOR
 - 5.4.1. Introduction
 - 5.4.2. Key market trends, Growth factors and opportunities
 - 5.4.3. Market size and forecast
- 5.5. OTHERS (SIMPLE-PACKAGED CRYSTAL OSCILLATOR AND FREQUENCY-CONTROLLED CRYSTAL OSCILLATOR)
 - 5.5.1. Introduction
 - 5.5.2. Key market trends, Growth factors and opportunities
 - 5.5.3. Market size and forecast

CHAPTER 6 GLOBAL CRYSTAL OSCILLATOR MARKET, BY MOUNTING SCHEME



6.1. OVERVIEW

- 6.1.1. Market size and forecast
- 6.2. SURFACE MOUNT
 - 6.2.1. Introduction
 - 6.2.2. Key market trends, Growth factors and opportunities
 - 6.2.3. Market size and forecast
- 6.3. THRU-HOLE
 - 6.3.1. Introduction
 - 6.3.2. Key market trends, Growth factors and opportunities
 - 6.3.3. Market size and forecast

CHAPTER 7 GLOBAL CRYSTAL OSCILLATOR MARKET, BY INDUSTRY VERTICAL

7.1. OVERVIEW

- 7.1.1. Market size and forecast
- 7.2. ELECTRONICS
 - 7.2.1. Introduction
 - 7.2.2. Key market trends, Growth factors and opportunities
 - 7.2.3. Market size and forecast
- 7.3. IT & TELECOMMUNICATION
 - 7.3.1. Introduction
 - 7.3.2. Key market trends, Growth factors and opportunities
 - 7.3.3. Market size and forecast
- 7.4. AEROSPACE & DEFENSE
 - 7.4.1. Introduction
 - 7.4.2. Key market trends, Growth factors and opportunities
 - 7.4.3. Market size and forecast
- 7.5. AUTOMOTIVE & TRANSPORT
 - 7.5.1. Introduction
 - 7.5.2. Key market trends, Growth factors and opportunities
 - 7.5.3. Market size and forecast
- 7.6. OTHERS (HEALTHCARE AND INDUSTRIAL)
 - 7.6.1. Introduction
 - 7.6.2. Key market trends, Growth factors and opportunities
 - 7.6.3. Market size and forecast

CHAPTER 8 GLOBAL CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY



8.1. OVERVIEW

8.1.1. Market size and forecast

8.2. NORTH AMERICA

- 8.2.1. Introduction
- 8.2.2. Key market trends, Growth factors and opportunities
- 8.2.3. Market size and forecast
- 8.2.4. U.S.
 - 8.2.4.1. Market size and forecast
- 8.2.5. Canada
 - 8.2.5.1. Market size and forecast
- 8.2.6. Mexico
 - 8.2.6.1. Market size and forecast

8.3. EUROPE

- 8.3.1. Introduction
- 8.3.2. Key market trends, Growth factors and opportunities
- 8.3.3. Market size and forecast
- 8.3.4. UK
- 8.3.4.1. Market size and forecast
- 8.3.5. Germany
 - 8.3.5.1. Market size and forecast
- 8.3.6. France
 - 8.3.6.1. Market size and forecast
- 8.3.7. Rest of Europe
 - 8.3.7.1. Market size and forecast

8.4. ASIA-PACIFIC

- 8.4.1. Introduction
- 8.4.2. Key market trends, Growth factors and opportunities
- 8.4.3. Market size and forecast
- 8.4.4. China
 - 8.4.4.1. Market size and forecast
- 8.4.5. Japan
 - 8.4.5.1. Market size and forecast
- 8.4.6. Taiwan
 - 8.4.6.1. Market size and forecast
- 8.4.7. South Korea
 - 8.4.7.1. Market size and forecast
- 8.4.9. Rest of Asia-Pacific
- 8.4.9.1. Market size and forecast



- 8.5. LAMEA
 - 8.5.1. Introduction
 - 8.5.2. Key market trends, Growth factors and opportunities
 - 8.5.3. Market size and forecast
 - 8.5.4. Latin America
 - 8.5.4.1. Market size and forecast
 - 8.5.5. Middle East
 - 8.5.5.1. Market size and forecast
 - 8.5.6. Africa
 - 8.5.6.1. Market size and forecast

CHAPTER 9 RELATED INDUSTRY INSIGHTS

- 9.1. World Photonic Crystals Market Opportunities and Forecasts, 2014 2022
- 9.1.1. Executive summary
- 9.2. Crystallin Silicon PV Market Global Opportunity Analysis and Industry Forecasts,
- 2014 2022
- 9.2.1. Executive summary

CHAPTER 10 COMPANY PROFILES

- 10.1. SEIKO EPSON CORP.
 - 10.1.1. Company overview
 - 10.1.2. Operating business segments
 - 10.1.3. Business performance
 - 10.1.4. Key strategic moves and developments
- 10.2. NIHON DEMPA KOGYO CO., LTD.
 - 10.2.1. Company overview
 - 10.2.2. Operating business segments
 - 10.2.3. Business performance
 - 10.2.4. Key strategic moves and developments
- 10.3. TXC CORPORATION
 - 10.3.1. Company overview
 - 10.3.2. Operating business segments
 - 10.3.3. Business performance
 - 10.3.4. Key strategic moves and developments
- 10.4. VECTRON
 - 10.4.1. Company overview
- 10.4.2. Operating business segments



- 10.4.3. Business performance
- 10.4.4. Key strategic moves and developments

10.5. RIVER ELETEC CROPORATION

- 10.5.1. Company overview
- 10.5.2. Operating business segments
- 10.5.3. Business performance
- 10.5.4. Key strategic moves and developments

10.6. KYOCERA CRYSTAL DEVICE CORPORATION.

- 10.6.1. Company overview
- 10.6.2. Operating business segments
- 10.6.3. Business performance
- 10.6.4. Key strategic moves and developments
- 10.7. MURATA MANUFACTURING CO., LTD.
 - 10.7.1. Company overview
 - 10.7.2. Operating business segments
 - 10.7.3. Business performance
 - 10.7.4. Key strategic moves and developments

10.8. RAKON LIMITED

- 10.8.1. Company overview
- 10.8.2. Operating business segments
- 10.8.3. Business performance
- 10.8.4. Key strategic moves and developments

10.9. DAISHINKU CORP.

- 10.9.1. Company overview
- 10.9.2. Operating business segments
- 10.9.3. Business performance
- 10.9.4. Key strategic moves and developments

10.10. FOX ELECTRONICS

- 10.10.1. Company overview
- 10.10.2. Operating business segments
- 10.10.3. Key strategic moves and developments

Other players in the value chain include

Intel Corporation

Qualcomm Technologies, Inc.

Sony Corp

SAMSUNG Electronics Co. Ltd.

Advanced Micro Devices, Inc.

Profiles of these players are not included. The same will be included on reques



List Of Tables

LIST OF TABLES

TABLE 1. GLOBAL CRYSTAL OSCILLATOR MARKET, BY TECHNOLOGY, 2014-2022 (\$MILLION)

TABLE 2. GLOBAL AT CUT CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 3. GLOBAL SC CUT CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 4. GLOBAL BT CUT CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 5. GLOBAL CRYSTAL OSCILLATOR MARKET, BY TYPE, 2014-2022 (\$MILLION)

TABLE 6. GLOBAL VOLTAGE-CONTROLLED CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 7. GLOBAL TEMPERATURE-COMPENSATED CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 8. GLOBAL OVEN-CONTROLLED CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 9. GLOBAL OTHERS CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 10. GLOBAL CRYSTAL OSCILLATOR MARKET, BY MOUNTING SCHEME, 2014-2022 (\$MILLION)

TABLE 11. GLOBAL SURFACE MOUNT CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 12. GLOBALTHRU-HOLE CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 13. GLOBAL CRYSTAL OSICLLATOR MARKET, BY INDUSTRY VETRICAL, 2014-2022 (\$MILLION)

TABLE 14. GLOBAL ELECTRONICS CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 15. GLOBAL IT & TELECOMMUNICATION CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 16. GLOBAL AEROSPACE & DEFENSE CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 17. GLOBAL AUTOMOTIVE & TRANSPORT CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY, 2014-2022 (\$MILLION)

TABLE 18. GLOBAL OTHERS CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY,



- 2014-2022 (\$MILLION)
- TABLE 19. CRYSTAL OSCILLATOR MARKET, BY GEOGRAPHY, 2014-2022 (\$MILLION)
- TABLE 20. NORTH AMERICA: CRYSTAL OSCILLATOR MARKET, BY TECHNOLOGY, 2014-2022 (\$MILLION)
- TABLE 21. NORTH AMERICA: CRYSTAL OSCILLATOR MARKET, BY TYPE, 2014-2022 (\$MILLION)
- TABLE 22. NORTH AMERICA: CRYSTAL OSCILLATOR MARKET, BY MOUNTING SCHEME, 2014-2022 (\$MILLION)
- TABLE 23. NORTH AMERICA: CRYSTAL OSCILLATOR MARKET, BY INDUSTRY VERTICAL, 2014-2022 (\$MILLION)
- TABLE 24. NORTH AMERICA: CRYSTAL OSCILLATOR MARKET, BY COUNTRY, 2014-2022 (\$MILLION)
- TABLE 25. EUROPE: CRYSTAL OSCILLATOR MARKET, BY TECHNOLOGY, 2014-2022 (\$MILLION)
- TABLE 26. EUROPE: CRYSTAL OSCILLATOR MARKET, BY TYPE, 2014-2022 (\$MILLION)
- TABLE 27. EUROPE: CRYSTAL OSCILLATOR MARKET, BY MOUNTING SCHEME, 2014-2022 (\$MILLION)
- TABLE 28. EUROPE: CRYSTAL OSCILLATOR MARKET, BY INDUSTRY VERTICAL, 2014-2022 (\$MILLION)
- TABLE 29. EUROPE: CRYSTAL OSCILLATOR MARKET, BY COUNTRY, 2014-2022 (\$MILLION)
- TABLE 30. ASIA-PACIFIC: CRYSTAL OSCILLATOR MARKET, BY TECHNOLOGY, 2014-2022 (\$MILLION)
- TABLE 31. ASIA-PACIFIC: CRYSTAL OSCILLATOR MARKET, BY TYPE, 2014-2022 (\$MILLION)
- TABLE 32. ASIA-PACIFIC: CRYSTAL OSCILLATOR MARKET, BY MOUNTING SCHEME, 2014-2022 (\$MILLION)
- TABLE 33. ASIA-PACIFIC: CRYSTAL OSCILLATOR MARKET, BY INDUSTRY VERTICAL, 2014-2022 (\$MILLION)
- TABLE 34. ASIA-PACIFIC: CRYSTAL OSCILLATOR MARKET, BY COUNTRY, 2014-2022 (\$MILLION)
- TABLE 35. LAMEA: CRYSTAL OSCILLATOR MARKET, BY TECHNOLOGY, 2014-2022 (\$MILLION)
- TABLE 36. LAMEA: CRYSTAL OSCILLATOR MARKET, BY TYPE, 2014-2022 (\$MILLION)
- TABLE 37. LAMEA: CRYSTAL OSCILLATOR MARKET, BY MOUNTING SCHEME, 2014-2022 (\$MILLION)



TABLE 38. LAMEA: CRYSTAL OSCILLATOR MARKET, BY INDUSTRY VERTICAL,

2014-2022 (\$MILLION)

TABLE 39. NORTH AMERICA: CRYSTAL OSCILLATOR MARKET, BY COUNTRY,

2014-2022 (\$MILLION)

TABLE 40. SEIKO EPSON CORP.: COMPANY SNAPSHOT

TABLE 41. SEIKO EPSON CORP.: OPERATING SEGMENTS

TABLE 42. NIHON DEMPA KOGYO CO., LTD.: COMPANY SNAPSHOT

TABLE 43. NIHON DEMPA KOGYO CO., LTD.: OPERATING SEGMENTS

TABLE 44. TXC CORPORATION: COMPANY SNAPSHOT

TABLE 45. TXC CORPORATION: OPERATING SEGMENTS

TABLE 46. VECTRON. COMPANY SNAPSHOT

TABLE 47. VECTRON: OPERATING SEGMENTS

TABLE 48. RIVER ELETEC CORPORATION: COMPANY SNAPSHOT

TABLE 49. RIVER ELETEC CORPORATION.: OPERATING SEGMENTS

TABLE 50. KYOCERA CRYSTAL DEVICE CORPORATION: COMPANY SNAPSHOT

TABLE 51. KYOCERA CRYSTAL DEVICE CORPORATION: OPERATING SEGMENTS

TABLE 52. MURATA MANUACTURING CO., LTD.: COMPANY SNAPSHOT

TABLE 53. MURATA MANUFACTURING CO., LTD.: OPERATING SEGMENTS

TABLE 54. RAKON LIMITED: COMPANY SNAPSHOT

TABLE 55. RAKON LIMITED: OPERATING SEGMENTS

TABLE 56. DAISHINKU CORP.: COMPANY SNAPSHOT

TABLE 57. DAISHINKU CORP.: OPERATING SEGMENTS

TABLE 58. FOX ELECTRONICS: COMPANY SNAPSHOT

TABLE 59. FOX ELECTRONICS: OPERATING SEGMENTS



List Of Figures

LIST OF FIGURES

FIGURE 1. SEGMENTATIONS

FIGURE 2. TOP IMPACTING FACTORS

FIGURE 3. TOP WINNING STRATEGIES: PERCENTAGE DISTRIBUTION (2013 - 2016)

FIGURE 4. TOP WINNING STRATEGIES: NATURE AND TYPE

FIGURE 5. TOP INVESTMENT POCKETS IN GLOBAL CRYSTAL OSCILLATOR

MARKET, BY INDUSTRY VERTICAL

FIGURE 6. PORTERS FIVE FORCES ANALYSIS

FIGURE 7. MARKET SHARE ANALYSIS, 2015

FIGURE 8. MAJOR ELECTRONICS USED IN CARS WHERE CRYTSAL

OSCILLATORS IS INSTALLED

FIGURE 9. INCREASE IN NUMBER OF VEHICLES ACROSS THE GLOBE

FIGURE 10. INCREASE IN 4G NETWORK DEPLOYMENT (\$MILLION), 2014-2020

FIGURE 11. GROWTH IN NUMBER OF WEARABLE DEVICES, 2012-2016

FIGURE 12. INCREASE IN NUMBER OF INTERCONNECTED DEVICES (2010-2020)

FIGURE 13. COMPARATIVE REGIONAL MARKET SHARE ANALYSIS OF GLOBAL

AT CUT CRYSTAL OSCILLATOR MARKET, 2015 & 2022 (%)

FIGURE 14. MARKET REVENUE & FORECAST OF GLOBAL AT CUT CRYSTAL OSCILLATOR MARKET, 2014-2022 (\$MILLION)

FIGURE 15. COMPARATIVE REGIONAL MARKET SHARE ANALYSIS OF GLOBAL SC CUT CRYSTAL OSCILLATOR MARKET, 2015 & 2022 (%)

FIGURE 16. MARKET REVENUE & FORECAST OF GLOBAL SC CUT CRYSTAL OSCILLATOR MARKET, 2014-2022 (\$MILLION)

FIGURE 17. COMPARATIVE REGIONAL MARKET SHARE ANALYSIS OF GLOBAL BT CUT CRYSTAL OSCILLATOR MARKET, 2015 & 2022 (%)

FIGURE 18. MARKET REVENUE & FORECAST OF GLOBAL BT CUT CRYSTAL OSCILLATOR MARKET, 2014-2022 (\$MILLION)

FIGURE 19. COMPARATIVE REGIONAL MARKET SHARE ANALYSIS OF GLOBAL VOLTAGE-CONTROLLED CRYSTAL OSCILLATOR MARKET, 2015 & 2022 (%)

FIGURE 20. MARKET REVENUE & FORECAST OF GLOBAL VOLTAGE-

CONTROLLED CRYSTAL OSCILLATOR MARKET, 2014-2022 (\$MILLION)

FIGURE 21. COMPARATIVE REGIONAL MARKET SHARE ANALYSIS OF GLOBAL TEMPERATURE-COMPENSATED CRYSTAL OSCILLATOR MARKET, 2015 & 2022 (%)

FIGURE 22. MARKET REVENUE & FORECAST OF GLOBAL TEMPERATURE-



COMPENSATED CRYSTAL OSCILLATOR MARKET, 2014-2022 (\$MILLION) FIGURE 23. COMPARATIVE REGIONAL MARKET SHARE ANALYSIS OF GLOBAL OVEN-CONTROLLED CRYSTAL OSCILLATOR MARKET, 2015 & 2022 (%) FIGURE 24. MARKET REVENUE & FORECAST OF GLOBAL OVEN-CONTROLLED

FIGURE 24. MARKET REVENUE & FORECAST OF GLOBAL OVEN-CONTROLLED CRYSTAL OSCILLATOR MARKET, 2014-2022 (\$MILLION)

FIGURE 25. COMPARATIVE REGIONAL MARKET SHARE ANALYSIS OF GLOBAL OTHERS CRYSTAL OSCILLATOR MARKET, 2015 & 2022 (%)

FIGURE 26. MARKET REVENUE & FORECAST OF GLOBAL OTHERS CRYSTAL OSCILLATOR MARKET, 2014-2022 (\$MILLION)

FIGURE 27. COMPARATIVE REGIONAL MARKET SHARE ANALYSIS OF GLOBAL SURFCAE MOUNT CRYSTAL OSCILLATOR MARKET, 2015 & 2022 (%)

FIGURE 28. MARKET REVENUE & FORECAST OF GLOBAL SURFACE MOUNT CRYSTAL OSCILLATOR MARKET, 2014-2022 (\$MILLION)

FIGURE 29. COMPARATIVE REGIONAL MARKET SHARE ANALYSIS OF GLOBAL THRU-HOLE CRYSTAL OSCILLATOR MARKET, 2015 & 2022 (%)

FIGURE 30. MARKET REVENUE & FORECAST OF GLOBAL THRU-HOLE CRYSTAL OSCILLATOR MARKET, 2014-2022 (\$MILLION)

FIGURE 31. COMPARATIVE REGIONAL MARKET SHARE ANALYSIS OF GLOBAL ELECTROCNICS CRYSTAL OSCILLATOR MARKET, 2015 & 2022 (%)

FIGURE 32. MARKET REVENUE & FORECAST OF GLOBAL ELECTRONICS CRYSTAL OSCILLATOR MARKET, 2014-2022 (\$MILLION)

FIGURE 33. COMPARATIVE REGIONAL MARKET SHARE ANALYSIS OF GLOBAL IT & TELECOMMUNICATION CRYSTAL OSCILLATOR MARKET, 2015 & 2022 (%) FIGURE 34. MARKET REVENUE & FORECAST OF GLOBAL IT &

TELECOMMUNICATION CRYSTAL OSCILLATOR MARKET, 2014-2022 (\$MILLION)

FIGURE 35. COMPARATIVE REGIONAL MARKET SHARE ANALYSIS OF GLOBAL

AEROSPACE & DEFENSE CRYSTAL OSCILLATOR MARKET, 2015 & 2022 (%)

FIGURE 36. MARKET REVENUE & FORECAST OF GLOBAL AEROSPACE &

DEFENSE CRYSTAL OSCILLATOR MARKET, 2014-2022 (\$MILLION)

FIGURE 37. COMPARATIVE REGIONAL MARKET SHARE ANALYSIS OF GLOBAL AUTOMOTIVE & TRANSPORT CRYSTAL OSCILLATOR MARKET, 2015 & 2022 (%)

FIGURE 38. MARKET REVENUE & FORECAST OF GLOBAL AUTOMOTIVE &

TRANSPORT CRYSTAL OSCILLATOR MARKET, 2014-2022 (\$MILLION)

FIGURE 39. COMPARATIVE REGIONAL MARKET SHARE ANALYSIS OF GLOBAL OTHERS CRYSTAL OSCILLATOR MARKET, 2015 & 2022 (%)

FIGURE 40. MARKET REVENUE & FORECAST OF GLOBAL OTHERS CRYSTAL OSCILLATOR MARKET, 2014-2022 (\$MILLION)

FIGURE 41. U.S.: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022 (\$MILLION)

FIGURE 42. CANADA: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022



(\$MILLION)

FIGURE 43. MEXICO: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022 (\$MILLION)

FIGURE 44. UK: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022 (\$MILLION)

FIGURE 45. GERMANY: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022 (\$MILLION)

FIGURE 46. FRANCE: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022 (\$MILLION)

FIGURE 47. REST OF EUROPE: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022 (\$MILLION)

FIGURE 48. CHINA: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022 (\$MILLION)

FIGURE 49. JAPAN: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022 (\$MILLION)

FIGURE 50. TAIWAN: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022 (\$MILLION)

FIGURE 51. SOUTH KOREA: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022 (\$MILLION)

FIGURE 52. REST OF ASIA-PACIFIC: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022 (\$MILLION)

FIGURE 53. LATIN AMERICA: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022 (\$MILLION)

FIGURE 54. MIDDLE EAST: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022 (\$MILLION)

FIGURE 55. AFRICA: CRYSTAL OSCILLATOR MARKET SIZE, 2014-2022 (\$MILLION)

FIGURE 56. SEIKO EPSON CORP.: COMPANY SNAPSHOT

FIGURE 57. NIHON DEMPA KOGYO CO., LTD.: COMPANY SNAPSHOT

FIGURE 58. TXC CORPORTAION: COMPANY SNAPSHOT

FIGURE 59. VECTRON: COMPANY SNAPSHOT

FIGURE 60. RIVER ELETEC CORPORATION: COMPANY SNAPSHOT

FIGURE 61. KYOCERA CRYSTAL DEVICE CORPORATION: COMPANY SNAPSHOT

FIGURE 62. MURATA MANUFACTURING CO., LTD.: COMPANY SNAPSHOT

FIGURE 63. RAKON LIMITED: COMPANY SNAPSHOT

FIGURE 64. DAISHINKU CORP.: COMPANY SNAPSHOT



I would like to order

Product name: Crystal Oscillator Market by Technology (AT Cut, BT Cut, and SC Cut), by Type (Voltage-

Controlled Crystal Oscillator, Temperature-Compensated Crystal Oscillator, Oven-

Controlled Crystal Oscillator, and Others), by Mounting Scheme (Surface Mount and Thru-Hole), and by Industry Vertical (Electronics, IT & Telecommunication, Military & Defense, Automotive & Transport, and Others) - Global Opportunity Analysis and Industry Forecast,

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