

Global Smartwatch Crystal and Oscillators Market 2024 by Manufacturers, Regions, Type and Application, Forecast to 2030

<https://marketpublishers.com/r/G4027CE82A92EN.html>

Date: April 2024

Pages: 133

Price: US\$ 3,480.00 (Single User License)

ID: G4027CE82A92EN

Abstracts

Crystal and Oscillators is a basic electronic component that uses the piezoelectric effect, high stability, high quality factor, and low loss of quartz itself to provide standard frequency sources and clock pulse signals. It is the basic support industry for the electronic information industry. Applied to information equipment, mobile terminals, communication and network equipment, automotive electronics, smart home, wearable, smart home products, etc.

This report only covers Smartwatch Crystal and Oscillators

According to our (Global Info Research) latest study, the global Smartwatch Crystal and Oscillators market size was valued at US\$ million in 2023 and is forecast to a readjusted size of USD million by 2030 with a CAGR of %during review period.

This report is a detailed and comprehensive analysis for global Smartwatch Crystal and Oscillators market. Both quantitative and qualitative analyses are presented by manufacturers, by region & country, by Type and by Application. As the market is constantly changing, this report explores the competition, supply and demand trends, as well as key factors that contribute to its changing demands across many markets. Company profiles and product examples of selected competitors, along with market share estimates of some of the selected leaders for the year 2024, are provided.

Key Features:

Global Smartwatch Crystal and Oscillators market size and forecasts, in consumption value (\$ Million), sales quantity (Million Units), and average selling prices (USD/K

Units), 2019-2030

Global Smartwatch Crystal and Oscillators market size and forecasts by region and country, in consumption value (\$ Million), sales quantity (Million Units), and average selling prices (USD/K Units), 2019-2030

Global Smartwatch Crystal and Oscillators market size and forecasts, by Type and by Application, in consumption value (\$ Million), sales quantity (Million Units), and average selling prices (USD/K Units), 2019-2030

Global Smartwatch Crystal and Oscillators market shares of main players, shipments in revenue (\$ Million), sales quantity (Million Units), and ASP (USD/K Units), 2019-2024

The Primary Objectives in This Report Are:

To determine the size of the total market opportunity of global and key countries

To assess the growth potential for Smartwatch Crystal and Oscillators

To forecast future growth in each product and end-use market

To assess competitive factors affecting the marketplace

This report profiles key players in the global Smartwatch Crystal and Oscillators market based on the following parameters - company overview, sales quantity, revenue, price, gross margin, product portfolio, geographical presence, and key developments. Key companies covered as a part of this study include Seiko Epson Corp, TXC Corporation, NDK, KCD, KDS, Microchip, SiTime, TKD Science, Rakon, Murata Manufacturing, etc.

This report also provides key insights about market drivers, restraints, opportunities, new product launches or approvals.

Market Segmentation

Smartwatch Crystal and Oscillators market is split by Type and by Application. For the period 2019-2030, the growth among segments provides accurate calculations and forecasts for consumption value by Type, and by Application in terms of volume and value. This analysis can help you expand your business by targeting qualified niche markets.

Market segment by Type

Crystal Units

Crystal Oscillators

Market segment by Application

Android

iOS

Major players covered

Seiko Epson Corp

TXC Corporation

NDK

KCD

KDS

Microchip

SiTime

TKD Science

Rakon

Murata Manufacturing

Harmony

Hosonic Electronic

Siward Crystal Technology

Micro Crystal

Failong Crystal Technologies

Taitien

River Eletec Corporation

ZheJiang East Crystal

Guoxin Micro

Market segment by region, regional analysis covers

North America (United States, Canada, and Mexico)

Europe (Germany, France, United Kingdom, Russia, Italy, and Rest of Europe)

Asia-Pacific (China, Japan, Korea, India, Southeast Asia, and Australia)

South America (Brazil, Argentina, Colombia, and Rest of South America)

Middle East & Africa (Saudi Arabia, UAE, Egypt, South Africa, and Rest of Middle East & Africa)

The content of the study subjects, includes a total of 15 chapters:

Chapter 1, to describe Smartwatch Crystal and Oscillators product scope, market overview, market estimation caveats and base year.

Chapter 2, to profile the top manufacturers of Smartwatch Crystal and Oscillators, with price, sales quantity, revenue, and global market share of Smartwatch Crystal and Oscillators from 2019 to 2024.

Chapter 3, the Smartwatch Crystal and Oscillators competitive situation, sales quantity, revenue, and global market share of top manufacturers are analyzed emphatically by landscape contrast.

Chapter 4, the Smartwatch Crystal and Oscillators breakdown data are shown at the regional level, to show the sales quantity, consumption value, and growth by regions, from 2019 to 2030.

Chapter 5 and 6, to segment the sales by Type and by Application, with sales market share and growth rate by Type, by Application, from 2019 to 2030.

Chapter 7, 8, 9, 10 and 11, to break the sales data at the country level, with sales quantity, consumption value, and market share for key countries in the world, from 2019 to 2024. and Smartwatch Crystal and Oscillators market forecast, by regions, by Type, and by Application, with sales and revenue, from 2025 to 2030.

Chapter 12, market dynamics, drivers, restraints, trends, and Porters Five Forces analysis.

Chapter 13, the key raw materials and key suppliers, and industry chain of Smartwatch Crystal and Oscillators.

Chapter 14 and 15, to describe Smartwatch Crystal and Oscillators sales channel, distributors, customers, research findings and conclusion.

Contents

1 MARKET OVERVIEW

1.1 Product Overview and Scope

1.2 Market Estimation Caveats and Base Year

1.3 Market Analysis by Type

1.3.1 Overview: Global Smartwatch Crystal and Oscillators Consumption Value by Type: 2019 Versus 2023 Versus 2030

1.3.2 Crystal Units

1.3.3 Crystal Oscillators

1.4 Market Analysis by Application

1.4.1 Overview: Global Smartwatch Crystal and Oscillators Consumption Value by Application: 2019 Versus 2023 Versus 2030

1.4.2 Android

1.4.3 iOS

1.5 Global Smartwatch Crystal and Oscillators Market Size & Forecast

1.5.1 Global Smartwatch Crystal and Oscillators Consumption Value (2019 & 2023 & 2030)

1.5.2 Global Smartwatch Crystal and Oscillators Sales Quantity (2019-2030)

1.5.3 Global Smartwatch Crystal and Oscillators Average Price (2019-2030)

2 MANUFACTURERS PROFILES

2.1 Seiko Epson Corp

2.1.1 Seiko Epson Corp Details

2.1.2 Seiko Epson Corp Major Business

2.1.3 Seiko Epson Corp Smartwatch Crystal and Oscillators Product and Services

2.1.4 Seiko Epson Corp Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.1.5 Seiko Epson Corp Recent Developments/Updates

2.2 TXC Corporation

2.2.1 TXC Corporation Details

2.2.2 TXC Corporation Major Business

2.2.3 TXC Corporation Smartwatch Crystal and Oscillators Product and Services

2.2.4 TXC Corporation Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.2.5 TXC Corporation Recent Developments/Updates

2.3 NDK

- 2.3.1 NDK Details
- 2.3.2 NDK Major Business
- 2.3.3 NDK Smartwatch Crystal and Oscillators Product and Services
- 2.3.4 NDK Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
- 2.3.5 NDK Recent Developments/Updates
- 2.4 KCD
 - 2.4.1 KCD Details
 - 2.4.2 KCD Major Business
 - 2.4.3 KCD Smartwatch Crystal and Oscillators Product and Services
 - 2.4.4 KCD Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.4.5 KCD Recent Developments/Updates
- 2.5 KDS
 - 2.5.1 KDS Details
 - 2.5.2 KDS Major Business
 - 2.5.3 KDS Smartwatch Crystal and Oscillators Product and Services
 - 2.5.4 KDS Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.5.5 KDS Recent Developments/Updates
- 2.6 Microchip
 - 2.6.1 Microchip Details
 - 2.6.2 Microchip Major Business
 - 2.6.3 Microchip Smartwatch Crystal and Oscillators Product and Services
 - 2.6.4 Microchip Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.6.5 Microchip Recent Developments/Updates
- 2.7 SiTime
 - 2.7.1 SiTime Details
 - 2.7.2 SiTime Major Business
 - 2.7.3 SiTime Smartwatch Crystal and Oscillators Product and Services
 - 2.7.4 SiTime Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.7.5 SiTime Recent Developments/Updates
- 2.8 TKD Science
 - 2.8.1 TKD Science Details
 - 2.8.2 TKD Science Major Business
 - 2.8.3 TKD Science Smartwatch Crystal and Oscillators Product and Services
 - 2.8.4 TKD Science Smartwatch Crystal and Oscillators Sales Quantity, Average Price,

Revenue, Gross Margin and Market Share (2019-2024)

2.8.5 TKD Science Recent Developments/Updates

2.9 Rakon

2.9.1 Rakon Details

2.9.2 Rakon Major Business

2.9.3 Rakon Smartwatch Crystal and Oscillators Product and Services

2.9.4 Rakon Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.9.5 Rakon Recent Developments/Updates

2.10 Murata Manufacturing

2.10.1 Murata Manufacturing Details

2.10.2 Murata Manufacturing Major Business

2.10.3 Murata Manufacturing Smartwatch Crystal and Oscillators Product and Services

2.10.4 Murata Manufacturing Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.10.5 Murata Manufacturing Recent Developments/Updates

2.11 Harmony

2.11.1 Harmony Details

2.11.2 Harmony Major Business

2.11.3 Harmony Smartwatch Crystal and Oscillators Product and Services

2.11.4 Harmony Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.11.5 Harmony Recent Developments/Updates

2.12 Hosonic Electronic

2.12.1 Hosonic Electronic Details

2.12.2 Hosonic Electronic Major Business

2.12.3 Hosonic Electronic Smartwatch Crystal and Oscillators Product and Services

2.12.4 Hosonic Electronic Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.12.5 Hosonic Electronic Recent Developments/Updates

2.13 Siward Crystal Technology

2.13.1 Siward Crystal Technology Details

2.13.2 Siward Crystal Technology Major Business

2.13.3 Siward Crystal Technology Smartwatch Crystal and Oscillators Product and Services

2.13.4 Siward Crystal Technology Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)

2.13.5 Siward Crystal Technology Recent Developments/Updates

2.14 Micro Crystal

- 2.14.1 Micro Crystal Details
- 2.14.2 Micro Crystal Major Business
- 2.14.3 Micro Crystal Smartwatch Crystal and Oscillators Product and Services
- 2.14.4 Micro Crystal Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
- 2.14.5 Micro Crystal Recent Developments/Updates
- 2.15 Failong Crystal Technologies
 - 2.15.1 Failong Crystal Technologies Details
 - 2.15.2 Failong Crystal Technologies Major Business
 - 2.15.3 Failong Crystal Technologies Smartwatch Crystal and Oscillators Product and Services
 - 2.15.4 Failong Crystal Technologies Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.15.5 Failong Crystal Technologies Recent Developments/Updates
- 2.16 Taitien
 - 2.16.1 Taitien Details
 - 2.16.2 Taitien Major Business
 - 2.16.3 Taitien Smartwatch Crystal and Oscillators Product and Services
 - 2.16.4 Taitien Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.16.5 Taitien Recent Developments/Updates
- 2.17 River Eletec Corporation
 - 2.17.1 River Eletec Corporation Details
 - 2.17.2 River Eletec Corporation Major Business
 - 2.17.3 River Eletec Corporation Smartwatch Crystal and Oscillators Product and Services
 - 2.17.4 River Eletec Corporation Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.17.5 River Eletec Corporation Recent Developments/Updates
- 2.18 ZheJiang East Crystal
 - 2.18.1 ZheJiang East Crystal Details
 - 2.18.2 ZheJiang East Crystal Major Business
 - 2.18.3 ZheJiang East Crystal Smartwatch Crystal and Oscillators Product and Services
 - 2.18.4 ZheJiang East Crystal Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
 - 2.18.5 ZheJiang East Crystal Recent Developments/Updates
- 2.19 Guoxin Micro
 - 2.19.1 Guoxin Micro Details

- 2.19.2 Guoxin Micro Major Business
- 2.19.3 Guoxin Micro Smartwatch Crystal and Oscillators Product and Services
- 2.19.4 Guoxin Micro Smartwatch Crystal and Oscillators Sales Quantity, Average Price, Revenue, Gross Margin and Market Share (2019-2024)
- 2.19.5 Guoxin Micro Recent Developments/Updates

3 COMPETITIVE ENVIRONMENT: SMARTWATCH CRYSTAL AND OSCILLATORS BY MANUFACTURER

- 3.1 Global Smartwatch Crystal and Oscillators Sales Quantity by Manufacturer (2019-2024)
- 3.2 Global Smartwatch Crystal and Oscillators Revenue by Manufacturer (2019-2024)
- 3.3 Global Smartwatch Crystal and Oscillators Average Price by Manufacturer (2019-2024)
- 3.4 Market Share Analysis (2023)
 - 3.4.1 Producer Shipments of Smartwatch Crystal and Oscillators by Manufacturer Revenue (\$MM) and Market Share (%): 2023
 - 3.4.2 Top 3 Smartwatch Crystal and Oscillators Manufacturer Market Share in 2023
 - 3.4.3 Top 6 Smartwatch Crystal and Oscillators Manufacturer Market Share in 2023
- 3.5 Smartwatch Crystal and Oscillators Market: Overall Company Footprint Analysis
 - 3.5.1 Smartwatch Crystal and Oscillators Market: Region Footprint
 - 3.5.2 Smartwatch Crystal and Oscillators Market: Company Product Type Footprint
 - 3.5.3 Smartwatch Crystal and Oscillators Market: Company Product Application Footprint
- 3.6 New Market Entrants and Barriers to Market Entry
- 3.7 Mergers, Acquisition, Agreements, and Collaborations

4 CONSUMPTION ANALYSIS BY REGION

- 4.1 Global Smartwatch Crystal and Oscillators Market Size by Region
 - 4.1.1 Global Smartwatch Crystal and Oscillators Sales Quantity by Region (2019-2030)
 - 4.1.2 Global Smartwatch Crystal and Oscillators Consumption Value by Region (2019-2030)
 - 4.1.3 Global Smartwatch Crystal and Oscillators Average Price by Region (2019-2030)
- 4.2 North America Smartwatch Crystal and Oscillators Consumption Value (2019-2030)
- 4.3 Europe Smartwatch Crystal and Oscillators Consumption Value (2019-2030)
- 4.4 Asia-Pacific Smartwatch Crystal and Oscillators Consumption Value (2019-2030)
- 4.5 South America Smartwatch Crystal and Oscillators Consumption Value (2019-2030)

4.6 Middle East & Africa Smartwatch Crystal and Oscillators Consumption Value (2019-2030)

5 MARKET SEGMENT BY TYPE

5.1 Global Smartwatch Crystal and Oscillators Sales Quantity by Type (2019-2030)

5.2 Global Smartwatch Crystal and Oscillators Consumption Value by Type (2019-2030)

5.3 Global Smartwatch Crystal and Oscillators Average Price by Type (2019-2030)

6 MARKET SEGMENT BY APPLICATION

6.1 Global Smartwatch Crystal and Oscillators Sales Quantity by Application (2019-2030)

6.2 Global Smartwatch Crystal and Oscillators Consumption Value by Application (2019-2030)

6.3 Global Smartwatch Crystal and Oscillators Average Price by Application (2019-2030)

7 NORTH AMERICA

7.1 North America Smartwatch Crystal and Oscillators Sales Quantity by Type (2019-2030)

7.2 North America Smartwatch Crystal and Oscillators Sales Quantity by Application (2019-2030)

7.3 North America Smartwatch Crystal and Oscillators Market Size by Country

7.3.1 North America Smartwatch Crystal and Oscillators Sales Quantity by Country (2019-2030)

7.3.2 North America Smartwatch Crystal and Oscillators Consumption Value by Country (2019-2030)

7.3.3 United States Market Size and Forecast (2019-2030)

7.3.4 Canada Market Size and Forecast (2019-2030)

7.3.5 Mexico Market Size and Forecast (2019-2030)

8 EUROPE

8.1 Europe Smartwatch Crystal and Oscillators Sales Quantity by Type (2019-2030)

8.2 Europe Smartwatch Crystal and Oscillators Sales Quantity by Application (2019-2030)

8.3 Europe Smartwatch Crystal and Oscillators Market Size by Country

8.3.1 Europe Smartwatch Crystal and Oscillators Sales Quantity by Country (2019-2030)

8.3.2 Europe Smartwatch Crystal and Oscillators Consumption Value by Country (2019-2030)

8.3.3 Germany Market Size and Forecast (2019-2030)

8.3.4 France Market Size and Forecast (2019-2030)

8.3.5 United Kingdom Market Size and Forecast (2019-2030)

8.3.6 Russia Market Size and Forecast (2019-2030)

8.3.7 Italy Market Size and Forecast (2019-2030)

9 ASIA-PACIFIC

9.1 Asia-Pacific Smartwatch Crystal and Oscillators Sales Quantity by Type (2019-2030)

9.2 Asia-Pacific Smartwatch Crystal and Oscillators Sales Quantity by Application (2019-2030)

9.3 Asia-Pacific Smartwatch Crystal and Oscillators Market Size by Region

9.3.1 Asia-Pacific Smartwatch Crystal and Oscillators Sales Quantity by Region (2019-2030)

9.3.2 Asia-Pacific Smartwatch Crystal and Oscillators Consumption Value by Region (2019-2030)

9.3.3 China Market Size and Forecast (2019-2030)

9.3.4 Japan Market Size and Forecast (2019-2030)

9.3.5 South Korea Market Size and Forecast (2019-2030)

9.3.6 India Market Size and Forecast (2019-2030)

9.3.7 Southeast Asia Market Size and Forecast (2019-2030)

9.3.8 Australia Market Size and Forecast (2019-2030)

10 SOUTH AMERICA

10.1 South America Smartwatch Crystal and Oscillators Sales Quantity by Type (2019-2030)

10.2 South America Smartwatch Crystal and Oscillators Sales Quantity by Application (2019-2030)

10.3 South America Smartwatch Crystal and Oscillators Market Size by Country

10.3.1 South America Smartwatch Crystal and Oscillators Sales Quantity by Country (2019-2030)

10.3.2 South America Smartwatch Crystal and Oscillators Consumption Value by Country (2019-2030)

- 10.3.3 Brazil Market Size and Forecast (2019-2030)
- 10.3.4 Argentina Market Size and Forecast (2019-2030)

11 MIDDLE EAST & AFRICA

- 11.1 Middle East & Africa Smartwatch Crystal and Oscillators Sales Quantity by Type (2019-2030)
- 11.2 Middle East & Africa Smartwatch Crystal and Oscillators Sales Quantity by Application (2019-2030)
- 11.3 Middle East & Africa Smartwatch Crystal and Oscillators Market Size by Country
 - 11.3.1 Middle East & Africa Smartwatch Crystal and Oscillators Sales Quantity by Country (2019-2030)
 - 11.3.2 Middle East & Africa Smartwatch Crystal and Oscillators Consumption Value by Country (2019-2030)
 - 11.3.3 Turkey Market Size and Forecast (2019-2030)
 - 11.3.4 Egypt Market Size and Forecast (2019-2030)
 - 11.3.5 Saudi Arabia Market Size and Forecast (2019-2030)
 - 11.3.6 South Africa Market Size and Forecast (2019-2030)

12 MARKET DYNAMICS

- 12.1 Smartwatch Crystal and Oscillators Market Drivers
- 12.2 Smartwatch Crystal and Oscillators Market Restraints
- 12.3 Smartwatch Crystal and Oscillators Trends Analysis
- 12.4 Porters Five Forces Analysis
 - 12.4.1 Threat of New Entrants
 - 12.4.2 Bargaining Power of Suppliers
 - 12.4.3 Bargaining Power of Buyers
 - 12.4.4 Threat of Substitutes
 - 12.4.5 Competitive Rivalry

13 RAW MATERIAL AND INDUSTRY CHAIN

- 13.1 Raw Material of Smartwatch Crystal and Oscillators and Key Manufacturers
- 13.2 Manufacturing Costs Percentage of Smartwatch Crystal and Oscillators
- 13.3 Smartwatch Crystal and Oscillators Production Process
- 13.4 Industry Value Chain Analysis

14 SHIPMENTS BY DISTRIBUTION CHANNEL

14.1 Sales Channel

14.1.1 Direct to End-User

14.1.2 Distributors

14.2 Smartwatch Crystal and Oscillators Typical Distributors

14.3 Smartwatch Crystal and Oscillators Typical Customers

15 RESEARCH FINDINGS AND CONCLUSION

16 APPENDIX

16.1 Methodology

16.2 Research Process and Data Source

16.3 Disclaimer

List Of Tables

LIST OF TABLES

Table 1. Global Smartwatch Crystal and Oscillators Consumption Value by Type, (USD Million), 2019 & 2023 & 2030

Table 2. Global Smartwatch Crystal and Oscillators Consumption Value by Application, (USD Million), 2019 & 2023 & 2030

Table 3. Seiko Epson Corp Basic Information, Manufacturing Base and Competitors

Table 4. Seiko Epson Corp Major Business

Table 5. Seiko Epson Corp Smartwatch Crystal and Oscillators Product and Services

Table 6. Seiko Epson Corp Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 7. Seiko Epson Corp Recent Developments/Updates

Table 8. TXC Corporation Basic Information, Manufacturing Base and Competitors

Table 9. TXC Corporation Major Business

Table 10. TXC Corporation Smartwatch Crystal and Oscillators Product and Services

Table 11. TXC Corporation Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 12. TXC Corporation Recent Developments/Updates

Table 13. NDK Basic Information, Manufacturing Base and Competitors

Table 14. NDK Major Business

Table 15. NDK Smartwatch Crystal and Oscillators Product and Services

Table 16. NDK Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 17. NDK Recent Developments/Updates

Table 18. KCD Basic Information, Manufacturing Base and Competitors

Table 19. KCD Major Business

Table 20. KCD Smartwatch Crystal and Oscillators Product and Services

Table 21. KCD Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 22. KCD Recent Developments/Updates

Table 23. KDS Basic Information, Manufacturing Base and Competitors

Table 24. KDS Major Business

Table 25. KDS Smartwatch Crystal and Oscillators Product and Services

Table 26. KDS Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 27. KDS Recent Developments/Updates

Table 28. Microchip Basic Information, Manufacturing Base and Competitors

Table 29. Microchip Major Business

Table 30. Microchip Smartwatch Crystal and Oscillators Product and Services

Table 31. Microchip Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 32. Microchip Recent Developments/Updates

Table 33. SiTime Basic Information, Manufacturing Base and Competitors

Table 34. SiTime Major Business

Table 35. SiTime Smartwatch Crystal and Oscillators Product and Services

Table 36. SiTime Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 37. SiTime Recent Developments/Updates

Table 38. TKD Science Basic Information, Manufacturing Base and Competitors

Table 39. TKD Science Major Business

Table 40. TKD Science Smartwatch Crystal and Oscillators Product and Services

Table 41. TKD Science Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 42. TKD Science Recent Developments/Updates

Table 43. Rakon Basic Information, Manufacturing Base and Competitors

Table 44. Rakon Major Business

Table 45. Rakon Smartwatch Crystal and Oscillators Product and Services

Table 46. Rakon Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 47. Rakon Recent Developments/Updates

Table 48. Murata Manufacturing Basic Information, Manufacturing Base and Competitors

Table 49. Murata Manufacturing Major Business

Table 50. Murata Manufacturing Smartwatch Crystal and Oscillators Product and Services

Table 51. Murata Manufacturing Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and

Market Share (2019-2024)

Table 52. Murata Manufacturing Recent Developments/Updates

Table 53. Harmony Basic Information, Manufacturing Base and Competitors

Table 54. Harmony Major Business

Table 55. Harmony Smartwatch Crystal and Oscillators Product and Services

Table 56. Harmony Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 57. Harmony Recent Developments/Updates

Table 58. Hosonic Electronic Basic Information, Manufacturing Base and Competitors

Table 59. Hosonic Electronic Major Business

Table 60. Hosonic Electronic Smartwatch Crystal and Oscillators Product and Services

Table 61. Hosonic Electronic Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 62. Hosonic Electronic Recent Developments/Updates

Table 63. Siward Crystal Technology Basic Information, Manufacturing Base and Competitors

Table 64. Siward Crystal Technology Major Business

Table 65. Siward Crystal Technology Smartwatch Crystal and Oscillators Product and Services

Table 66. Siward Crystal Technology Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 67. Siward Crystal Technology Recent Developments/Updates

Table 68. Micro Crystal Basic Information, Manufacturing Base and Competitors

Table 69. Micro Crystal Major Business

Table 70. Micro Crystal Smartwatch Crystal and Oscillators Product and Services

Table 71. Micro Crystal Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 72. Micro Crystal Recent Developments/Updates

Table 73. Failong Crystal Technologies Basic Information, Manufacturing Base and Competitors

Table 74. Failong Crystal Technologies Major Business

Table 75. Failong Crystal Technologies Smartwatch Crystal and Oscillators Product and Services

Table 76. Failong Crystal Technologies Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross

Margin and Market Share (2019-2024)

Table 77. Failong Crystal Technologies Recent Developments/Updates

Table 78. Taitien Basic Information, Manufacturing Base and Competitors

Table 79. Taitien Major Business

Table 80. Taitien Smartwatch Crystal and Oscillators Product and Services

Table 81. Taitien Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 82. Taitien Recent Developments/Updates

Table 83. River Eletec Corporation Basic Information, Manufacturing Base and Competitors

Table 84. River Eletec Corporation Major Business

Table 85. River Eletec Corporation Smartwatch Crystal and Oscillators Product and Services

Table 86. River Eletec Corporation Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 87. River Eletec Corporation Recent Developments/Updates

Table 88. ZheJiang East Crystal Basic Information, Manufacturing Base and Competitors

Table 89. ZheJiang East Crystal Major Business

Table 90. ZheJiang East Crystal Smartwatch Crystal and Oscillators Product and Services

Table 91. ZheJiang East Crystal Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 92. ZheJiang East Crystal Recent Developments/Updates

Table 93. Guoxin Micro Basic Information, Manufacturing Base and Competitors

Table 94. Guoxin Micro Major Business

Table 95. Guoxin Micro Smartwatch Crystal and Oscillators Product and Services

Table 96. Guoxin Micro Smartwatch Crystal and Oscillators Sales Quantity (Million Units), Average Price (USD/K Units), Revenue (USD Million), Gross Margin and Market Share (2019-2024)

Table 97. Guoxin Micro Recent Developments/Updates

Table 98. Global Smartwatch Crystal and Oscillators Sales Quantity by Manufacturer (2019-2024) & (Million Units)

Table 99. Global Smartwatch Crystal and Oscillators Revenue by Manufacturer (2019-2024) & (USD Million)

Table 100. Global Smartwatch Crystal and Oscillators Average Price by Manufacturer

(2019-2024) & (USD/K Units)

Table 101. Market Position of Manufacturers in Smartwatch Crystal and Oscillators, (Tier 1, Tier 2, and Tier 3), Based on Revenue in 2023

Table 102. Head Office and Smartwatch Crystal and Oscillators Production Site of Key Manufacturer

Table 103. Smartwatch Crystal and Oscillators Market: Company Product Type Footprint

Table 104. Smartwatch Crystal and Oscillators Market: Company Product Application Footprint

Table 105. Smartwatch Crystal and Oscillators New Market Entrants and Barriers to Market Entry

Table 106. Smartwatch Crystal and Oscillators Mergers, Acquisition, Agreements, and Collaborations

Table 107. Global Smartwatch Crystal and Oscillators Consumption Value by Region (2019-2023-2030) & (USD Million) & CAGR

Table 108. Global Smartwatch Crystal and Oscillators Sales Quantity by Region (2019-2024) & (Million Units)

Table 109. Global Smartwatch Crystal and Oscillators Sales Quantity by Region (2025-2030) & (Million Units)

Table 110. Global Smartwatch Crystal and Oscillators Consumption Value by Region (2019-2024) & (USD Million)

Table 111. Global Smartwatch Crystal and Oscillators Consumption Value by Region (2025-2030) & (USD Million)

Table 112. Global Smartwatch Crystal and Oscillators Average Price by Region (2019-2024) & (USD/K Units)

Table 113. Global Smartwatch Crystal and Oscillators Average Price by Region (2025-2030) & (USD/K Units)

Table 114. Global Smartwatch Crystal and Oscillators Sales Quantity by Type (2019-2024) & (Million Units)

Table 115. Global Smartwatch Crystal and Oscillators Sales Quantity by Type (2025-2030) & (Million Units)

Table 116. Global Smartwatch Crystal and Oscillators Consumption Value by Type (2019-2024) & (USD Million)

Table 117. Global Smartwatch Crystal and Oscillators Consumption Value by Type (2025-2030) & (USD Million)

Table 118. Global Smartwatch Crystal and Oscillators Average Price by Type (2019-2024) & (USD/K Units)

Table 119. Global Smartwatch Crystal and Oscillators Average Price by Type (2025-2030) & (USD/K Units)

Table 120. Global Smartwatch Crystal and Oscillators Sales Quantity by Application (2019-2024) & (Million Units)

Table 121. Global Smartwatch Crystal and Oscillators Sales Quantity by Application (2025-2030) & (Million Units)

Table 122. Global Smartwatch Crystal and Oscillators Consumption Value by Application (2019-2024) & (USD Million)

Table 123. Global Smartwatch Crystal and Oscillators Consumption Value by Application (2025-2030) & (USD Million)

Table 124. Global Smartwatch Crystal and Oscillators Average Price by Application (2019-2024) & (USD/K Units)

Table 125. Global Smartwatch Crystal and Oscillators Average Price by Application (2025-2030) & (USD/K Units)

Table 126. North America Smartwatch Crystal and Oscillators Sales Quantity by Type (2019-2024) & (Million Units)

Table 127. North America Smartwatch Crystal and Oscillators Sales Quantity by Type (2025-2030) & (Million Units)

Table 128. North America Smartwatch Crystal and Oscillators Sales Quantity by Application (2019-2024) & (Million Units)

Table 129. North America Smartwatch Crystal and Oscillators Sales Quantity by Application (2025-2030) & (Million Units)

Table 130. North America Smartwatch Crystal and Oscillators Sales Quantity by Country (2019-2024) & (Million Units)

Table 131. North America Smartwatch Crystal and Oscillators Sales Quantity by Country (2025-2030) & (Million Units)

Table 132. North America Smartwatch Crystal and Oscillators Consumption Value by Country (2019-2024) & (USD Million)

Table 133. North America Smartwatch Crystal and Oscillators Consumption Value by Country (2025-2030) & (USD Million)

Table 134. Europe Smartwatch Crystal and Oscillators Sales Quantity by Type (2019-2024) & (Million Units)

Table 135. Europe Smartwatch Crystal and Oscillators Sales Quantity by Type (2025-2030) & (Million Units)

Table 136. Europe Smartwatch Crystal and Oscillators Sales Quantity by Application (2019-2024) & (Million Units)

Table 137. Europe Smartwatch Crystal and Oscillators Sales Quantity by Application (2025-2030) & (Million Units)

Table 138. Europe Smartwatch Crystal and Oscillators Sales Quantity by Country (2019-2024) & (Million Units)

Table 139. Europe Smartwatch Crystal and Oscillators Sales Quantity by Country

(2025-2030) & (Million Units)

Table 140. Europe Smartwatch Crystal and Oscillators Consumption Value by Country (2019-2024) & (USD Million)

Table 141. Europe Smartwatch Crystal and Oscillators Consumption Value by Country (2025-2030) & (USD Million)

Table 142. Asia-Pacific Smartwatch Crystal and Oscillators Sales Quantity by Type (2019-2024) & (Million Units)

Table 143. Asia-Pacific Smartwatch Crystal and Oscillators Sales Quantity by Type (2025-2030) & (Million Units)

Table 144. Asia-Pacific Smartwatch Crystal and Oscillators Sales Quantity by Application (2019-2024) & (Million Units)

Table 145. Asia-Pacific Smartwatch Crystal and Oscillators Sales Quantity by Application (2025-2030) & (Million Units)

Table 146. Asia-Pacific Smartwatch Crystal and Oscillators Sales Quantity by Region (2019-2024) & (Million Units)

Table 147. Asia-Pacific Smartwatch Crystal and Oscillators Sales Quantity by Region (2025-2030) & (Million Units)

Table 148. Asia-Pacific Smartwatch Crystal and Oscillators Consumption Value by Region (2019-2024) & (USD Million)

Table 149. Asia-Pacific Smartwatch Crystal and Oscillators Consumption Value by Region (2025-2030) & (USD Million)

Table 150. South America Smartwatch Crystal and Oscillators Sales Quantity by Type (2019-2024) & (Million Units)

Table 151. South America Smartwatch Crystal and Oscillators Sales Quantity by Type (2025-2030) & (Million Units)

Table 152. South America Smartwatch Crystal and Oscillators Sales Quantity by Application (2019-2024) & (Million Units)

Table 153. South America Smartwatch Crystal and Oscillators Sales Quantity by Application (2025-2030) & (Million Units)

Table 154. South America Smartwatch Crystal and Oscillators Sales Quantity by Country (2019-2024) & (Million Units)

Table 155. South America Smartwatch Crystal and Oscillators Sales Quantity by Country (2025-2030) & (Million Units)

Table 156. South America Smartwatch Crystal and Oscillators Consumption Value by Country (2019-2024) & (USD Million)

Table 157. South America Smartwatch Crystal and Oscillators Consumption Value by Country (2025-2030) & (USD Million)

Table 158. Middle East & Africa Smartwatch Crystal and Oscillators Sales Quantity by Type (2019-2024) & (Million Units)

Table 159. Middle East & Africa Smartwatch Crystal and Oscillators Sales Quantity by Type (2025-2030) & (Million Units)

Table 160. Middle East & Africa Smartwatch Crystal and Oscillators Sales Quantity by Application (2019-2024) & (Million Units)

Table 161. Middle East & Africa Smartwatch Crystal and Oscillators Sales Quantity by Application (2025-2030) & (Million Units)

Table 162. Middle East & Africa Smartwatch Crystal and Oscillators Sales Quantity by Country (2019-2024) & (Million Units)

Table 163. Middle East & Africa Smartwatch Crystal and Oscillators Sales Quantity by Country (2025-2030) & (Million Units)

Table 164. Middle East & Africa Smartwatch Crystal and Oscillators Consumption Value by Country (2019-2024) & (USD Million)

Table 165. Middle East & Africa Smartwatch Crystal and Oscillators Consumption Value by Country (2025-2030) & (USD Million)

Table 166. Smartwatch Crystal and Oscillators Raw Material

Table 167. Key Manufacturers of Smartwatch Crystal and Oscillators Raw Materials

Table 168. Smartwatch Crystal and Oscillators Typical Distributors

Table 169. Smartwatch Crystal and Oscillators Typical Customers

List Of Figures

LIST OF FIGURES

Figure 1. Smartwatch Crystal and Oscillators Picture

Figure 2. Global Smartwatch Crystal and Oscillators Revenue by Type, (USD Million), 2019 & 2023 & 2030

Figure 3. Global Smartwatch Crystal and Oscillators Revenue Market Share by Type in 2023

Figure 4. Crystal Units Examples

Figure 5. Crystal Oscillators Examples

Figure 6. Global Smartwatch Crystal and Oscillators Consumption Value by Application, (USD Million), 2019 & 2023 & 2030

Figure 7. Global Smartwatch Crystal and Oscillators Revenue Market Share by Application in 2023

Figure 8. Android Examples

Figure 9. iOS Examples

Figure 10. Global Smartwatch Crystal and Oscillators Consumption Value, (USD Million): 2019 & 2023 & 2030

Figure 11. Global Smartwatch Crystal and Oscillators Consumption Value and Forecast (2019-2030) & (USD Million)

Figure 12. Global Smartwatch Crystal and Oscillators Sales Quantity (2019-2030) & (Million Units)

Figure 13. Global Smartwatch Crystal and Oscillators Price (2019-2030) & (USD/K Units)

Figure 14. Global Smartwatch Crystal and Oscillators Sales Quantity Market Share by Manufacturer in 2023

Figure 15. Global Smartwatch Crystal and Oscillators Revenue Market Share by Manufacturer in 2023

Figure 16. Producer Shipments of Smartwatch Crystal and Oscillators by Manufacturer Sales (\$MM) and Market Share (%): 2023

Figure 17. Top 3 Smartwatch Crystal and Oscillators Manufacturer (Revenue) Market Share in 2023

Figure 18. Top 6 Smartwatch Crystal and Oscillators Manufacturer (Revenue) Market Share in 2023

Figure 19. Global Smartwatch Crystal and Oscillators Sales Quantity Market Share by Region (2019-2030)

Figure 20. Global Smartwatch Crystal and Oscillators Consumption Value Market Share by Region (2019-2030)

Figure 21. North America Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 22. Europe Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 23. Asia-Pacific Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 24. South America Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 25. Middle East & Africa Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 26. Global Smartwatch Crystal and Oscillators Sales Quantity Market Share by Type (2019-2030)

Figure 27. Global Smartwatch Crystal and Oscillators Consumption Value Market Share by Type (2019-2030)

Figure 28. Global Smartwatch Crystal and Oscillators Average Price by Type (2019-2030) & (USD/K Units)

Figure 29. Global Smartwatch Crystal and Oscillators Sales Quantity Market Share by Application (2019-2030)

Figure 30. Global Smartwatch Crystal and Oscillators Revenue Market Share by Application (2019-2030)

Figure 31. Global Smartwatch Crystal and Oscillators Average Price by Application (2019-2030) & (USD/K Units)

Figure 32. North America Smartwatch Crystal and Oscillators Sales Quantity Market Share by Type (2019-2030)

Figure 33. North America Smartwatch Crystal and Oscillators Sales Quantity Market Share by Application (2019-2030)

Figure 34. North America Smartwatch Crystal and Oscillators Sales Quantity Market Share by Country (2019-2030)

Figure 35. North America Smartwatch Crystal and Oscillators Consumption Value Market Share by Country (2019-2030)

Figure 36. United States Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 37. Canada Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 38. Mexico Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 39. Europe Smartwatch Crystal and Oscillators Sales Quantity Market Share by Type (2019-2030)

Figure 40. Europe Smartwatch Crystal and Oscillators Sales Quantity Market Share by

Application (2019-2030)

Figure 41. Europe Smartwatch Crystal and Oscillators Sales Quantity Market Share by Country (2019-2030)

Figure 42. Europe Smartwatch Crystal and Oscillators Consumption Value Market Share by Country (2019-2030)

Figure 43. Germany Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 44. France Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 45. United Kingdom Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 46. Russia Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 47. Italy Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 48. Asia-Pacific Smartwatch Crystal and Oscillators Sales Quantity Market Share by Type (2019-2030)

Figure 49. Asia-Pacific Smartwatch Crystal and Oscillators Sales Quantity Market Share by Application (2019-2030)

Figure 50. Asia-Pacific Smartwatch Crystal and Oscillators Sales Quantity Market Share by Region (2019-2030)

Figure 51. Asia-Pacific Smartwatch Crystal and Oscillators Consumption Value Market Share by Region (2019-2030)

Figure 52. China Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 53. Japan Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 54. South Korea Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 55. India Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 56. Southeast Asia Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 57. Australia Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 58. South America Smartwatch Crystal and Oscillators Sales Quantity Market Share by Type (2019-2030)

Figure 59. South America Smartwatch Crystal and Oscillators Sales Quantity Market Share by Application (2019-2030)

Figure 60. South America Smartwatch Crystal and Oscillators Sales Quantity Market Share by Country (2019-2030)

Figure 61. South America Smartwatch Crystal and Oscillators Consumption Value Market Share by Country (2019-2030)

Figure 62. Brazil Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 63. Argentina Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 64. Middle East & Africa Smartwatch Crystal and Oscillators Sales Quantity Market Share by Type (2019-2030)

Figure 65. Middle East & Africa Smartwatch Crystal and Oscillators Sales Quantity Market Share by Application (2019-2030)

Figure 66. Middle East & Africa Smartwatch Crystal and Oscillators Sales Quantity Market Share by Country (2019-2030)

Figure 67. Middle East & Africa Smartwatch Crystal and Oscillators Consumption Value Market Share by Country (2019-2030)

Figure 68. Turkey Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 69. Egypt Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 70. Saudi Arabia Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 71. South Africa Smartwatch Crystal and Oscillators Consumption Value (2019-2030) & (USD Million)

Figure 72. Smartwatch Crystal and Oscillators Market Drivers

Figure 73. Smartwatch Crystal and Oscillators Market Restraints

Figure 74. Smartwatch Crystal and Oscillators Market Trends

Figure 75. Porters Five Forces Analysis

Figure 76. Manufacturing Cost Structure Analysis of Smartwatch Crystal and Oscillators in 2023

Figure 77. Manufacturing Process Analysis of Smartwatch Crystal and Oscillators

Figure 78. Smartwatch Crystal and Oscillators Industrial Chain

Figure 79. Sales Channel: Direct to End-User vs Distributors

Figure 80. Direct Channel Pros & Cons

Figure 81. Indirect Channel Pros & Cons

Figure 82. Methodology

Figure 83. Research Process and Data Source

I would like to order

Product name: Global Smartwatch Crystal and Oscillators Market 2024 by Manufacturers, Regions, Type and Application, Forecast to 2030

Product link: <https://marketpublishers.com/r/G4027CE82A92EN.html>

Price: US\$ 3,480.00 (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/G4027CE82A92EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970

