

Sapphire Substrates: Market Research Report

https://marketpublishers.com/r/S36920F748DEN.html

Date: January 2015

Pages: 133

Price: US\$ 4,500.00 (Single User License)

ID: S36920F748DEN

Abstracts

This report analyzes the worldwide markets for Sapphire Substrates in US\$ Million by the following End-Use Application Sectors: Light-Emitting Diodes (LEDs), Mobile Phones, and Others. The report provides separate comprehensive analytics for the US, Japan, Europe, China, South Korea, Taiwan, and Rest of World. Annual estimates and forecasts are provided for the period 2013 through 2020. Market data and analytics are derived from primary and secondary research. Company profiles are primarily based on public domain information including company URLs. The report profiles 66 companies including many key and niche players such as -

Crystal Applied Technology Inc.

Crystalwise Technology Inc.

DK Aztec Co. Ltd.

Gavish

Guangdong Saifei Sapphire Technology Co., Ltd.



Contents

I. INTRODUCTION, METHODOLOGY & PRODUCT DEFINITIONS

Study Reliability and Reporting Limitations

Disclaimers

Data Interpretation & Reporting Level

Quantitative Techniques & Analytics

Product Definitions and Scope of Study

Sapphire Substrates

End-Use Application of Sapphire Substrates

LEDs

Mobile Phones

Others

II. EXECUTIVE SUMMARY

1. INDUSTRY OVERVIEW

Sapphire Substrates: A Market Laden with Potential

2007-09 RECESSION & THE ENSUING POST RECESSION ECONOMIC HARDSHIPS THROW THE SPOTLIGHT ON SOS AS A DISRUPTIVE TECHNOLOGY

Review of Major Trends, Drivers & Issues
Growing LTE Deployments Throw the Spotlight on SOS-CMOS Architecture for LTE
Devices

Table 1. Growing Telecom Operator Spending On LTE Infrastructure Drives Upstream Market Opportunities for Silicon-on-Sapphire (SOS) at the Semiconductor Level: Global Breakdown of LTE Infrastructure Spending (US\$ Million) for Years 2015 & 2020 by Geographic Region/Country (includes corresponding Graph/Chart)

Sapphire Substrate in LEDs To Continue Its Dominance

Table 2. Migration to Large Diameter Sapphire Wafers Gains Traction in LED Manufacturing: Global Breakdown (In %) of Sapphire Substrates Used in LEDs by



Diameter Size for Years 2012 and 2020P (includes corresponding Graph/Chart)

Emerging New Uses in LED Lighting Acts as an Indirect Growth Driver

Table 3. Robust 67% Growth of LED in General Lighting Expands Upstream Business Opportunities for Large Diameter Sapphire Wafers in LED Production: Global Breakdown of Sales of LED Bulbs in General Lighting Applications (In US\$ Million) for Years 2015 and 2020 by Geographic Region/Country (includes corresponding Graph/Chart)

Novel Use in Smartphones Fuels Consumption of Sapphire Substrates

Table 4. With Over 36% Growth in Unit Shipments by 2020, the Addressable Market Opportunity for Sapphire Substrates in Smartphone Production Remains Huge: Global Sales of Smartphones (In 000 Units) by Geographic Region for Years 2015 & 2020 (includes corresponding Graph/Chart)

Strong Demand for Wearable Electronics Spurs Growth Opportunities for Sapphire

Table 5. Robust Projected Sales of Smartwatches to Spur Consumption of Sapphire in Watch Display Covers & Screens: Global Sales of Smartwatches (In Million) for Years 2015, 2018 and 2020 (includes corresponding Graph/Chart)

Table 6. The 194% Projected Growth in Dollar Sales of Wearable Electronics by 2020 to Spark a Sapphire Revolution: Global Sales of Wearable Electronics (In US\$ Million) by Application for Years 2015 & 2020 (includes corresponding Graph/Chart)

Technology Developments in Patterned Sapphire Substrates to Double Market Potential Developments in Reclaiming PSS to Drive Down Production Costs Silicon on Sapphire Applications to Benefit from the Robust Growth in RFIC Production

Table 7. Strong Growth of Radio Frequency Microelectromechanical Systems (RF MEMS) Provides a Fertile Environment for the Silicon on Sapphire (SOS) Technology: Breakdown of the Global Market Size of RF MEMS (In US\$ Million) for Years 2010 and 2015 by Key Application Areas (includes corresponding Graph/Chart)



Synthetic Sapphire Finds Use for Hardcore Protection of Missile Systems & Tanks LED-On-Silicon: Does It Pose a Real Threat of Substitution?

GaN-ON-Si Casts a Long Shadow of Threat in Power Electronics Applications

Table 8. Emergence of Novel Gallium Nitride (GaN) Semiconductors Turns On the Competitive Heat for Silicon On Sapphire (SOS): Global Market Size for Gallium Nitride (GaN) Power Electronics (In US\$ Million) for Years 2015, 2020 & 2025 (includes corresponding Graph/Chart)

Wet Wafer-Etching Gains Prominence Over Dry Etching Rubicon Develops Synthetic Sapphire Crystal A Peek into Changing Production Capacity Trends Competition

Table 9. Sapphire Production Capacity of Select Manufacturers (2014): Breakdown of Capacity of Two-Inch Equivalent (TIE) Sapphire Ingot (In 000 Millimetres (Kmm)/Per Month) by Company (includes corresponding Graph/Chart)

Market Outlook

2. PRODUCT OVERVIEW

Sapphire and Sapphire Substrates: An Overview Sapphire Substrates in Various End-Use Applications

LEDs

Mobile Phones

Others

Orientations of Sapphire Substrates

A-Plane Sapphire Substrates

C-Plane Sapphire Substrates

R-Plane Substrates

Attributes of Sapphire

Comparative Study of Various Substrates

3. RECENT INDUSTRY ACTIVITY

Sumitomo Metal Mining Exists Sapphire Substrate Business



Rubicon Showcases Patterned Sapphire Substrates of Large-Diameter

Apple Takes Over LuxVue

Sapphire Technology to Take Over Stake in Sapphire Technology & Applications

GT Advanced Technologies Files for Chapter

STC Announces Plans to Expand Capacity

Rubicon Technology Unveils Large Diameter PSS for LED

GT Advanced Inks Developing and Licensing Agreement with Soitec

GT Advanced Technologies and Apple Ink Sapphire Materials Supply Agreement

Rubicon Technology Unveils Large Diameter Patterned Sapphire Substrates for LED

Sector

STC to Increase Capacity of Sapphire Ingot

4. FOCUS ON SELECT GLOBAL PLAYERS

Crystal Applied Technology Inc. (Taiwan)

Crystalwise Technology Inc. (China)

DK Aztec Co. Ltd. (Korea)

Gavish (US)

Guangdong Saifei Sapphire Technology Co., Ltd. (China)

Guizhou Haotian Optoelectronics Technology Co. Ltd. (China)

Hansol Technics Co. Ltd. (Korea)

Hua Shun Technology Co., Ltd. (Taiwan)

ILJIN Display Co. Ltd. (South Korea)

Jiangsu Jeshine New Material Co., Ltd. (China)

Kyocera Corporation (Japan)

Meller Optics, Inc. (US)

Monocrystal (Russia)

MTI Corporation (US)

Namiki Precision Jewel Co., Ltd (Japan)

NNanjing J-Crystal Photoelectric Technology co., LTD (China)

Phecda Technology Co., Ltd. (Taiwan)

Precision Micro-Optics LLC (US)

Procrystal Technology Co., Ltd. (Taiwan)

Rayotek Scientific, Inc. (US)

Rubicon Technology Inc. (US)

Silian Sapphire Corporation (China)

Sino Nitride Semiconductor Co. Ltd. (China)

SSLM Co., Ltd. (South Korea)

Saint-Gobain Crystals (France)



TDG Holding Co. Ltd. (China)
Tera Xtal Technology Co. Ltd. (Taiwan)
USI Optronics Corporation (Taiwan)
Valley Design Corp. (US)
Zhejiang Crystal-Optech co., Ltd. (China)

5. GLOBAL MARKET PERSPECTIVE

Table 10. World Recent Past, Current and Future Analysis for Sapphire Substrates by Geographic Region - US, Japan, Europe, China, South Korea, Taiwan, and Rest of World Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

Table 11. World 8-Year Perspective for Sapphire Substrates by Geographic Region - Percentage Breakdown of Revenues for US, Japan, Europe, China, South Korea, Taiwan, and Rest of World Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

End-Use Application

Table 12. World Recent Past, Current and Future Analysis for Sapphire Substrates in LEDs by Geographic Region - US, Japan, Europe, China, South Korea, Taiwan, and Rest of World Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

Table 13. World 8-Year Perspective for Sapphire Substrates in LEDs by Geographic Region - Percentage Breakdown of Revenues for US, Japan, Europe, China, South Korea, Taiwan, and Rest of World Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

Table 14. World Recent Past, Current and Future Analysis for Sapphire Substrates in Mobile Phones by Geographic Region - US, Japan, Europe, China, South Korea, Taiwan, and Rest of World Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

Table 15. World 8-Year Perspective for Sapphire Substrates in Mobile Phones by



Geographic Region - Percentage Breakdown of Revenues for US, Japan, Europe, China, South Korea, Taiwan, and Rest of World Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

Table 16. World Recent Past, Current and Future Analysis for Sapphire Substrates in Other End-Use Applications by Geographic Region - US, Japan, Europe, China, South Korea, Taiwan, and Rest of World Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

Table 17. World 8-Year Perspective for Sapphire Substrates in Other End-Use Applications by Geographic Region - Percentage Breakdown of Revenues for US, Japan, Europe, China, South Korea, Taiwan, and Rest of World Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

III. MARKET

1. THE UNITED STATES

A. Market AnalysisRecent Industry ActivityKey PlayersB. Market Analytics

Table 18. US Recent Past, Current and Future Analysis for Sapphire Substrates by End-Use Application - LEDs, Mobile Phones, and Others Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

Table 19. US 8-Year Perspective for Sapphire Substrates by End-Use Application - Percentage Breakdown of Revenues for LEDs, Mobile Phones, and Others Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

2. JAPAN

A. Market Analysis



Table 20. Japanese Sapphire Substrates Market (2014): Percentage Breakdown of Share by Company (includes corresponding Graph/Chart)

Recent Industry Activity Key Players B. Market Analytics

Table 21. Japanese Recent Past, Current and Future Analysis for Sapphire Substrates by End-Use Application - LEDs, Mobile Phones, and Others Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

Table 22. Japanese 8-Year Perspective for Sapphire Substrates by End-Use Application - Percentage Breakdown of Revenues for LEDs, Mobile Phones, and Others Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

3. EUROPE

A. Market AnalysisKey PlayersB. Market Analytics

Table 23. European Recent Past, Current and Future Analysis for Sapphire Substrates by End-Use Application - LEDs, Mobile Phones, and Others Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

Table 24. European 8-Year Perspective for Sapphire Substrates by End-Use Application - Percentage Breakdown of Revenues for LEDs, Mobile Phones, and Others Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

4. CHINA

A. Market Analysis
Outlook
Chinese Sapphire Substrates Market- A Brief Review
Key Players



B. Market Analytics

Table 25. Chinese Recent Past, Current and Future Analysis for Sapphire Substrates by End-Use Application - LEDs, Mobile Phones, and Others Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

Table 26. Chinese 8-Year Perspective for Sapphire Substrates by End-Use Application - Percentage Breakdown of Revenues for LEDs, Mobile Phones, and Others Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

5. SOUTH KOREA

A. Market AnalysisRecent Industry ActivityKey PlayersB. Market Analytics

Table 27. South Korean Recent Past, Current and Future Analysis for Sapphire Substrates by End-Use Application - LEDs, Mobile Phones, and Others Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

Table 28. South Korean 8-Year Perspective for Sapphire Substrates by End-Use Application - Percentage Breakdown of Revenues for LEDs, Mobile Phones, and Others Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

6. TAIWAN

A. Market AnalysisKey PlayersB. Market Analytics

Table 29. Taiwanese Recent Past, Current and Future Analysis for Sapphire Substrates by End-Use Application - LEDs, Mobile Phones, and Others Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2013 through 2020



(includes corresponding Graph/Chart)

Table 30. Taiwanese 8-Year Perspective for Sapphire Substrates by End-Use Application - Percentage Breakdown of Revenues for LEDs, Mobile Phones, and Others Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

7. REST OF WORLD

Market Analysis

Table 31. Rest of World Recent Past, Current and Future Analysis for Sapphire Substrates by End-Use Application - LEDs, Mobile Phones, and Others Markets Independently Analyzed with Annual Revenue Figures in US\$ Million for Years 2013 through 2020 (includes corresponding Graph/Chart)

Table 32. Rest of World 8-Year Perspective for Sapphire Substrates by End-Use Application - Percentage Breakdown of Revenues for LEDs, Mobile Phones, and Others Markets for Years 2013, 2015 and 2020 (includes corresponding Graph/Chart)

IV. COMPETITIVE LANDSCAPE

Total Companies Profiled:

The United States (14)

Japan (5)

Europe (8)

France (1)

Germany (3)

The United Kingdom (2)

Rest of Europe (2)

Asia-Pacific (Excluding Japan) (38)

Middle East (1)



I would like to order

Product name: Sapphire Substrates: Market Research Report

Product link: https://marketpublishers.com/r/S36920F748DEN.html

Price: US\$ 4,500.00 (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/S36920F748DEN.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
	Custumer signature

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

& Conditions at https://marketpublishers.com/docs/terms.html

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms