

Pico Projector Market by Technology (DLP, LCOS, LBS), Type (USB, Standalone, Media Player, Embedded), Product Model, Brightness, Application (Aerospace & Defense, Automotive, Business & Education, Consumer, Healthcare) & Geography Forecasts & Analysis (2013–2020)

<https://marketpublishers.com/r/P329CAEB803EN.html>

Date: January 2014

Pages: 318

Price: US\$ 5,650.00 (Single User License)

ID: P329CAEB803EN

Abstracts

Pico projectors are miniature video projectors that can be used in many applications where there is a need for sharing information over the large displays. It can accommodate videos and photos for on-the-go entertainment and also slides and charts for presentations in business or classrooms. They are also known as multimedia display systems. Pico projectors are very small devices and can be easily fitted in the palm of the hand or in a pocket. Pico-projector first came into existence in 2003 but products with this name have recently reached performance levels which have made them attractive to capture the market. Presently majority of Pico projectors can display between 0 and 50 lumens, which might increase up to 300 lumens in the coming years.

The countries such as China, India, UAE and Germany are the major untapped potential markets, where the top players can penetrate in order to capture more market share. Rapid miniaturization of powerful technologies in the past few years helped Pico projectors to improve the image brightness. Technologies which are incorporated in Pico projectors are Digital Light Processing (DLP), Liquid Crystal on Silicon (LCoS), Laser Beam Steering (LBS) and holographic laser projection. But Pico projectors are still not considered for deployment in large rooms because of its low brightness. Within the next five years, it is expected that a large proportion of Smartphones to built-in Pico projector and secondly we can see the Pico projector becoming an important platform for augmentation.

Standalone, media player, USB and embedded are the four types of Pico projectors which are currently available in the market. Standalone, media player, USB Pico projectors has a higher demand than embedded projectors as they can be used with multiple gadgets, whereas embedded Pico projector is limited to the device it is embedded in. Embedded Pico projectors are yet to capture the market.

The market, currently, is within the explosive growth time period, and has been witnessing the steep price erosion. The market will stabilize over a period of time and when the price of Pico projectors drops down. The major driving factors for the Pico projector market which are expected to pay rich dividends in the coming years are MEMs technology, increase in use of embedded and the declining average selling price of Pico projectors.

Contents

1 INTRODUCTION

- 1.1 Key Take-Aways
- 1.2 Report Description
- 1.3 Markets Covered
- 1.4 Stakeholders
- 1.5 Research Methodology
 - 1.5.1 Market Size
 - 1.5.2 Key Data Points Taken From Secondary Sources
 - 1.5.3 Key Data Points Taken From Primary Sources
 - 1.5.4 Assumptions Made For This Report

2 EXECUTIVE SUMMARY

3 COVER STORY – INTERVIEW WITH VP OF BUSINESS DEVELOPMENT, EPICRYSTALS INC.

4 MARKET OVERVIEW

- 4.1 Introduction
- 4.2 Market Definition
- 4.3 History and Evolution of Handheld Projectors
- 4.4 Market Dynamics
 - 4.4.1 Market Drivers
 - 4.4.1.1 High Performance and Low Costs Laser Light Sources Will Revolutionize Compact Projectors
 - 4.4.1.2 Pico Projector Potential is Being Attracted By the Consumers Due To Various Number of Applications
 - 4.4.1.3 the Decline in Average Selling Price is Expected To Decrease Even Further With Increasing in Mass Production of Pico Projectors.
 - 4.4.2 Market Restraints
 - 4.4.2.1 Lack of Adjustable Features Like Manual Focus, Poor Image Quality is A Major Challenge For Wider Adoption of Pico Projectors
 - 4.4.2.2 Stand-Alone Pico Projectors is Not Widely Adopted By the Consumer Due To Less Brightness, High Power and High Cost
 - 4.4.2.3 Laser induced Speckle is A Severe issue in Laser Projectors
 - 4.4.3 Market Opportunities

4.4.3.1 Novel Application Like Wearable Glasses With Much More Advanced Technology Like Micro Projection Will Become the Biggest Market Segment in Future

4.4.3.2 Most Potential Imaging Technology is Mems Scanning Type Technology That offers Smallest Size, Lowest Power Consumption and Most Cost-Effective Projector Engine

4.4.4 Burning Issues

4.4.4.1 The Market is Lacking High Performance and Low Cost Light Sources

4.4.5 Winning Imperatives

4.4.5.1 High Volume Consumer Electronics Products Show the Highest Volume Potential

4.4.6 Value Chain Analysis

4.4.7 Porter's Five Forces Model-Handheld Projector Market

4.4.7.1 Degree of Competition

4.4.7.2 Threat From New Entrants

4.4.7.3 Threat From Substitutes

4.4.7.4 Bargaining Power of Suppliers

4.4.7.5 Bargaining Power of Buyers

5 BY PRODUCT TYPES

5.1 Introduction

5.2 USB Pico Projector

5.2.1 Major Companies offering USB Pico Projector

5.3 Embedded Pico Projector

5.3.1 Major Companies Offering Embedded Pico Projector

5.4 Media Player Pico Projector

5.4.1 Major Companies Offering Media Player Pico Projector

5.5 Stand Alone Pico Projector

5.5.1 Major Companies Offering Stand Alone Pico Projectors

5.6 Comparative Analysis Between Embedded and Stand-Alone Pico Projectors

6 BY TECHNOLOGY

6.1 Introduction

6.2 Digital Light Processing (DLP)

6.2.1 Benefits of DLP Technology

6.2.2 Challenges in DLP Technology

6.2.3 Market Opportunities

6.2.4 Major Companies Using DLP Technology in Pico Projectors

6.3 Liquid-Crystal-On-Silicon (LCOS)

6.3.1 Components Used in A LCOS Pico Projector

6.3.2 Benefits of LCOS Technology

6.3.3 Challenges of LCOS Technology

6.3.4 Market Opportunities

6.3.5 Major Companies Using LCOS Technology

6.4 Laser Beam Steering (LBS)

6.4.1 Benefits of LBS Technology

6.4.2 Challenges of LBS Technology

6.4.3 Market Opportunities

6.5 Holographic Laser Projection

6.5.1 Benefits of Holographic Laser Projection Technology

6.5.2 Market Opportunities

6.6 Comparison Analysis of Technologies Used

6.7 Comparison Analysis of Pico Projector Technologies By Performance

7 BY PRODUCT MODELS

7.1 Introduction

7.2 Ferroelectric LCOS (FLCOS)

7.3 Syndiant's Syl

7.4 DLP Hvga

7.5 Laser Beam Scanning (LBS)

7.6 Color Filter LCOS (Cf-LCOS)

8 BY COMPONENTS

8.1 Introduction

8.2 Lighting Source

8.2.1 Green Laser Diode

8.2.1.1 Major Suppliers of Green Laser Diodes

8.2.2 Red Laser Diodes

8.2.3 Light Emitting Diode (Led)

8.2.3.1 Major Companies Supplying Leds of Handheld Projector

8.2.4 High Brightness Led (Hb-Led)

8.2.4.1 Major Companies in the Manufacturing of Hb- Leds

8.3 Optics

8.3.1 Mems Optical Engines

8.3.1.1 Major Companies Supplying Mems For Handheld Projector

8.4 Others

9 BY BRIGHTNESS

9.1 Introduction

9.2 0-50 Lumens

9.3 50-100 Lumens

9.4 100 Lumens and Above

10 BY APPLICATION

10.1 Introduction

10.2 Automotive

10.3 Aerospace and Defense

10.4 Business and Education

10.5 Healthcare

10.6 Consumer Electronics

10.6.1 Smartphones

10.6.2 Laptops/Notebooks/Tablets

10.6.3 Digital Cameras

10.6.4 Others

10.7 Industrial

10.8 Retail

11 BY GEOGRAPHY

11.1 Introduction

11.2 Americas

11.2.1 North America

11.2.2 South America

11.3 Europe

11.4 the Asia Pacific

11.5 Rest of the World

12 COMPETITIVE LANDSCAPE

12.1 Market Share Analysis

12.1.1 New Product Launches: the Most Preferred Strategic Approach; While Partnerships and Agreements Are On the Rise

12.2 New Product Developments

12.3 Partnerships, Agreements, Collaborations and Strategic Cooperations

12.4 Mergers and Acquisitions

12.5 Others

13 COMPANY PROFILES (OVERVIEW, PRODUCTS & SERVICES, STRATEGIES & INSIGHTS, & DEVELOPMENTS)

13.1 3m Co

13.2 Aaxa Technologies Inc.

13.3 Acer Inc.

13.4 Aiptek International Inc.

13.5 Coretronic Corporation

13.6 Epicrystals Inc

13.7 Greenlight Optics

13.8 Himax Technologies

13.9 Jasper Display Corporation

13.10 Lite-On Technology Corporation

13.11 Luminus Devices

13.12 Maradin Technologies Ltd

13.13 Microvision Inc.

13.14 Mirrorcle Technologies Inc.

13.15 Ondax Inc.

13.16 Optoma Technology Inc

13.17 Opus Microsystems Corporation

13.18 Osram Litch Ag

13.19 Samsung Electronics Co., Ltd.

13.20 Sony Corporation

13.21 St Microelectronics N.V.

13.22 Sumitomo Electric Industries Ltd.

13.23 Syndiant Inc

13.24 Texas Instruments Inc.

13.25 Wowwee Group Limited (Details On Overview, Products & Services, Strategies & Insights, & Developments Might Not Be Captured in Case of Unlisted Companies.)

List Of Tables

LIST OF TABLES

- Table 1 General Assumptions, Terminology and Application Key Notes
- Table 2 Global Market Value, By Product Types, 2013 - 2020 (\$Million)
- Table 3 Market Value, By Geography, 2013 - 2020 (\$Million)
- Table 4 Display Manufacturers and Suppliers: Pico Projectors
- Table 5 Lighting Source Suppliers: Pico Projectors
- Table 6 Battery Suppliers: Pico Projectors
- Table 7 Optical Engine Suppliers: Pico Projector
- Table 8 Technology Providers: Pico Projectors
- Table 9 Manufacturer & Suppliers: Pico Projectors
- Table 10 Handheld Projector Porters Five Forces: Impact Analysis, 2013 – 2020
- Table 11 Handheld Projector Market-Impact Analysis of Degree of Competition
- Table 12 Market-Impact Analysis of Threat From New Entrants
- Table 13 Market-Impact Analysis of Threat From New Substitutes
- Table 14 Market-Impact Analysis of Bargaining Power of Suppliers
- Table 15 Market-Impact Analysis of Bargaining Power of Buyers
- Table 16 Global Market Volume, By Product Type, 2012-2020 (Million Units)
- Table 17 Global Handheld Projector Market Asp, 2012-2020 (\$)
- Table 18 Global USB Pico Projector Market Value, By Application, 2012-2020 (\$Million)
- Table 19 Market Value, By Technology, 2012-2020 (\$Million)
- Table 20 Market Value, By Brightness, 2012-2020 (\$Million)
- Table 21 Global Embedded Pico Projector Market Value, By Application, 2012-2020 (\$Million)
- Table 22 Market Value, By Technology, 2012-2020 (\$Million)
- Table 23 Market Value, By Brightness, 2012-2020 (\$Million)
- Table 24 Global Media Player Pico Projector Market Value, By Application, 2012-2020 (\$Million)
- Table 25 Market Value, By Technology, 2012-2020 (\$Million)
- Table 26 Market Value, By Brightness, 2012-2020 (\$Million)
- Table 27 Global Stand Alone Pico Projector Market Value, By Application, 2012-2020 (\$Million)
- Table 28 Market Value, By Technology, 2012-2020 (\$Million)
- Table 29 Market Value, By Brightness, 2012-2020 (\$ Millions)
- Table 30 Comparative Analysis Between Embedded and Stand-Alone Pico Projectors
- Table 31 Global Market Value, By Technology, 2012 - 2020 (\$Million)
- Table 32 Global DLP Technology Market Value, By Type, 2012-2020 (\$Million)

- Table 33 Global LCOS Technology Market Value, By Type, 2012-2020 (\$Million)
- Table 34 Global LBS Technology Market Value, By Type, 2012-2020 (\$Million)
- Table 35 Global Holographic Laser Projection Technology Market Value, By Type, 2012-2020 (\$Million)
- Table 36 Pico Projector Technologies
- Table 37 Performance Comparison of Pico Projector Technologies
- Table 38 Global Handheld Projector Market Value, By Components, 2012-2020 (\$Million)
- Table 39 Mems Specification: Pico Projector
- Table 40 Global Market Value By Brightness, 2012-2020 (\$Million)
- Table 41 Brightness (0-50 Lumen): Handheld Projector
- Table 42 Brightness (50-100 Lumens)
- Table 43 Brightness (50-100 Lumens)
- Table 44 Global Market Value, By Application, 2012-2020 (\$Million)
- Table 45 Embedded Pico Projector Market Value In Automotive, By Geography, 2012-2020 (\$Million)
- Table 46 Stand-Alone Pico Projector Market Value in Automotive, By Geography, 2012-2020 (\$Million)
- Table 47 Embedded Pico Projector Market Value in Aerospace & Defence, By Geography, 2012-2020 (\$Million)
- Table 48 Stand-Alone Pico Projector Market Value in Aerospace & Defence, By Geography, 2012-2020 (\$Million)
- Table 49 USB Pico Projector Market Value in Business & Education, By Geography, 2012-2020 (\$Million)
- Table 50 Embedded Pico Projector Market Value in Business & Education, By Geography, 2012-2020 (\$Million)
- Table 51 Media Player Pico Projector Market Value in Business & Education, By Geography, 2012-2020 (\$Million)
- Table 52 Stand-Alone Pico Projector Market Value in Business & Education, By Geography, 2012-2020 (\$Million)
- Table 53 USB Pico Projector Market Value in Healthcare, By Geography, 2012-2020 (\$Million)
- Table 54 Embedded Pico Projector Market Value in Healthcare, By Geography, 2012-2020 (\$Million)
- Table 55 Media Player Pico Projector Market Value in Healthcare, By Geography, 2012-2020 (\$Million)
- Table 56 Stand-Alone Pico Projector Market Value in Healthcare, By Geography, 2012-2020 (\$Million)
- Table 57 USB Pico Projector Market Value in Consumer Electronics, By Geography,

2012-2020 (\$Million)

Table 58 Embedded Pico Projector Market Value in Consumer Electronics, By Geography, 2012-2020 (\$Million)

Table 59 Media Player Pico Projector Market Value in Consumer Electronics, By Geography, 2012-2020 (\$Million)

Table 60 Stand-Alone Pico Projector Market Value in Consumer Electronics, By Geography, 2012-2020 (\$Million)

Table 61 USB Pico Projector Market Value in industrial, By Geography, 2012-2020 (\$Million)

Table 62 Embedded Pico Projector Market Value in industrial, By Geography, 2012-2020 (\$Million)

Table 63 Media Player Pico Projector Market Value in industrial, By Geography, 2012-2020 (\$Million)

Table 64 Stand-Alone Pico Projector Market Value in industrial, By Geography, 2012-2020 (\$Million)

Table 65 USB Pico Projector Market Value in Retail, By Geography, 2012-2020 (\$Million)

Table 66 Embedded Pico Projector Market Value in Retail, By Geography, 2012-2020 (\$Million)

Table 67 Media Player Pico Projector Market Value in Retail, By Geography, 2012-2020 (\$Million)

Table 68 Stand-Alone Pico Projector Market Value in Retail, By Geography, 2012-2020 (\$Million)

Table 69 Americas Handheld Projector Market Value, By Type, 2012-2020 (\$Million)

Table 70 Market Value, By Application, 2012-2020 (\$Million)

Table 71 Market Value, By Region, 2012-2020 (\$Million)

Table 72 North America Handheld Projector Market Value, By Country, 2012-2020 (\$Million)

Table 73 South America Handheld Projector Market Value, By Country, 2012-2020 (\$Million)

Table 74 Europe Pico Projector Market Value, By Type, 2012-2020 (\$Million)

Table 75 Handheld Projector Market Value, By Application, 2012-2020 (\$Million)

Table 76 Handheld Projector Market Value, By Country, 2012-2020 (\$Million)

Table 77 APAC Handheld Projector Market Value, By Type, 2012-2020 (\$Million)

Table 78 APAC Market Value, By Application, 2012-2020 (\$Million)

Table 79 APAC Market Value, By Country, 2012-2020 (\$Million)

Table 80 Row: Handheld Projector Market Value, By Type, 2012-2020 (\$Million)

Table 81 Row: Market Value, By Application, 2012-2020 (\$Million)

Table 82 Row: Market Value, By Country, 2012-2020 (\$Million)

Table 83 New Product Launches, 2009 – 2013

Table 84 Partnership, Agreements, Collaborations and Strategic Cooperations, 2009 – 2013

Table 85 Mergers & Acquisitions, 2008 – 2013

Table 86 Other Developments, 2009 – 2013

About

Pico projectors are tiny projectors which are basically battery operated and fit into the user's pocket. These can be easily connected or embedded in handy devices like mobile phone, digital cameras, camcorders, digital photo frames, laptops, mobile TV, portable media players, and portable gaming devices. The two most significant segments of these projectors are stand alone projectors and embedded projectors. Stand alone projectors could be attached to any display device through USB ports; and the 'media player projectors, which have an in- built memory slot. 'Embedded' projectors are Pico projectors embedded within a device such as cell phones and laptops and can project any file or document within this device.

The market, currently, is within the explosive growth time period, and has been witnessing steep price erosion. The market will stabilize over a period of time and when the price of Pico projectors drops down. The report gives insights into:-the different trends in this market, whose segment would drive the growth, and as to how this market would mature in the next seven years. The report tries to demystify this journey of the global Pico projector market.

The four major technologies incorporated in the Pico projectors are Digital Light Processing (DLP), Liquid-Crystal-on-Silicon (LCoS), Laser-Beam-Steering (LBS), and holographic laser projection. DLP and LCoS form the mainstream technologies. This uses a white light source and a filtering technique to create a distinct brightness and color on each pixel. The main components used in Pico projectors are battery, light source (green laser diodes, LEDs, HBLEDs) and optics (optical engine). Pico Projectors market is also classified according to the brightness it provides. The report has classified Pico projectors in the following brightness range: 0-50 Lumens, 50- 100 Lumens, and 100 lumens and above. The majority of Pico projectors manufactured today, lie within the 0-50 lumens range.

The application market of Pico projectors is segregated into consumer electronics, retail, automotive, business and education, aerospace and defence, and others. Geographically, the global Pico projectors market is segmented into four major regions namely the Americas, Europe, Asia Pacific, and the Rest of the World. The report presents a forecast about:-the future growth from 2013 to 2020, market size, company profiles, market share, and the key strategies of the leading players.

I would like to order

Product name: Pico Projector Market by Technology (DLP, LCOS, LBS), Type (USB, Standalone, Media Player, Embedded), Product Model, Brightness, Application (Aerospace & Defense, Automotive, Business & Education, Consumer, Healthcare) & Geography Forecasts & Analysis (2013–2020)

Product link: <https://marketpublishers.com/r/P329CAEB803EN.html>

Price: US\$ 5,650.00 (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/P329CAEB803EN.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