

# Microdisplays: Market Research Report

https://marketpublishers.com/r/MB95FF10885EN.html

Date: January 2015

Pages: 141

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

ID: MB95FF10885EN

# **Abstracts**

This report analyzes the worldwide markets for Microdisplays in US\$ Thousand. The report provides separate comprehensive analytics for the US, Canada, Japan, Europe, Asia-Pacific, and Rest of World. Annual estimates and forecasts are provided for the period 2014 through 2020. Also, a seven-year historic analysis is provided for these markets. 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 23 companies including many key and niche players such as -

eMagin Corporation

Himax Technologies

**HOLOEYE Photonics AG** 

Jasper Display Corporation

Kopin Corporation



# **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
Microdisplays

#### II. EXECUTIVE SUMMARY

#### 1. INDUSTRY OVERVIEW

Microdisplays: Transforming the Display Industry
Competitive Landscape
Competition in OLED Microdisplays Space
Himax Leads the LCoS Microdisplays Market
Himax Technologies – A Leader in AR/VR Market

#### 2. MARKET TRENDS & ISSUES

Surge in Application of OLED Microdisplays
Applications of OLED Microdisplays
OLED Scores over LCoS Microdisplays
OLED Microdisplays Better than LCD Microdisplays Too!
Growing Demand for High Resolution Display Drives LCoS Microdisplays Market
Augmented Reality and Virtual Reality: Attractive Opportunity in Consumer Applications

**Table 1.** Global Consumer Market for Head-Worn Devices (2015 & 2020) (US\$ Billion) (includes corresponding Graph/Chart)

**Table 2.** Global Augmented & Virtual Reality Devices Market (2015 & 2020): Percentage Share Breakdown of Volume Shipments for Virtual Reality Devices and Augmented Reality Devices (includes corresponding Graph/Chart)

Augmented Reality – A Growing Application Market



**Table 3.** Global Smart AR Glasses Shipments for Years 2014 Through 2020 (In Thousands of Units) (includes corresponding Graph/Chart)

Augmented Reality Headsets – Google Glass at the Forefront
Google Glass 2. 0: The Next Generation AR Glass in Development
Sony to Launch First Smart Glass Edition
Apple Too Forays into AR Glasses Market
AR Glasses at the International Space Station
MEMS Microdisplays: Ideal for AR Devices
Anticipated Rise in Demand for HMDs Market to Augur Well for Microdisplays Market
Virtual Reality Headsets for Consumers – Growth Prospects for Microdisplays Market

Opportunity for V/R Headsets in Gaming Market

**Table 4.** Consumer Virtual Reality Headsets for Gaming Market (2015): Percentage Share Breakdown of Unit Sales by Consumer Segment - Hardcore Gamers, Kid & Teens, and Light Gamers (includes corresponding Graph/Chart)

eMagin's IHMD Prototype: The Latest Advancement in V/R Headsets Market Near-to-Eye Displays Market: Prospects in Consumer Market

**Table 5.** Global Near-to-Eye Displays Market (2015): Percentage Share Breakdown of Unit Sales by Type of Display Technology (includes corresponding Graph/Chart)

**Table 6.** Global Near-to-Eye Displays Market (2015): Percentage Share Breakdown of Value Sales by Type of Display Technology (includes corresponding Graph/Chart)

Comeback of Camera Viewfinders Opens New Opportunities
While LCoS Dominates, OLED to Gain in Microdisplays for Electronic Viewfinders

**Table 7.** Global Viewfinder Market (2015): Percentage Share Breakdown of Volume Shipments by Technology (includes corresponding Graph/Chart)

**Table 8.** Global Viewfinder Market (2015): Percentage Share Breakdown of Value Sales by Technology (includes corresponding Graph/Chart)



Adding a New Dimension to Sports

**OLEDs to Transform Pico Projector Market** 

Next Generation Night Vision Systems for Situational Awareness and Surveillance Call for High Resolution Microdisplays

Rising Demand for Night Vision Devices from Military & Industrial Sectors Fosters Microdisplays Market

**Table 9.** Global Night Vision Devices Market (2015): Percentage Share Breakdown of Revenues by Product Category (includes corresponding Graph/Chart)

Ruggedized, High-Performance Microdisplays in Demand for Night Vision Devices Bidirectional Microdisplays Open Possibilities for New Applications Video Glasses: A Promising Area for Microdisplays Microdisplays Positioned to Tap Increased Demand for Pico Projectors Pico Projectors Technology War: LCoS Vs DLP

**Table 10.** Global Pico Projector Market (2015): Percentage Share Breakdown of Value Sales by Technology (includes corresponding Graph/Chart)

Innovative Microdisplay Projectors – The Next Big Thing
Shift towards Digital Cinema Projectors Bodes Well for Microdisplays Market
Microdisplay-based Automotive HUDs to Improve Safety & Comfort in Automobiles
LCoS in HUDs for Premium and Luxury Vehicles Present Potential Opportunities
Potential Opportunities for Virtual Imaging in the Medical Industry
Microdisplays for Effective Digital Image Fusion for Medical Procedures
Application of Google Glass in Healthcare
Microdisplay-based Holographic Displays: An Emerging Market
TruLife Optics Unveils Holographic Waveguide with AR Capability
Increasing Role in Military Training and Simulation
Microdisplays in 3D Optical Metrology Systems
LCoS: Preferred Microdisplay Technology in Spatial Light Modulators
Growing Integration of WSS Components in ROADM Drives Gains
High Manufacturing Cost & Commercialization Delays – Major Restraining Factors

## 3. PRODUCT OVERVIEW

MicroDisplays: An Introduction

Microdisplays: Market Research Report



Difference between Microdisplays and Displays

Types of Microdisplays

LCoS Microdisplays

**OLED Microdisplays** 

OLED Display Vs OLED Microdisplay

**DMD** Microdisplays

LCD Microdisplays

DLP Technology (Digital Light Processing)

Applications of Microdisplays

Microdisplay Projectors

**Projectors** 

Microdisplay Projection Technology Vs Laser Scanning Projection Technology

Comparison of Various Microdisplay & Laser Scanning Projection Technologies

Comparison of Select Microdisplay-based Pico Projectors

Digital Cinema Projector

Story Beam Projector

Near-to-Eye Display

Comparison of Select Microdisplay Products for Near-to-Eye Applications

**Head Mounted Displays** 

Comparison of Display Technologies for HMD

**Electronic Viewfinders** 

Video Glasses

Application Markets of Microdisplays

Consumer Electronics

Industrial

Military & Defense

Medical

## 4. PRODUCT INNOVATIONS/INTRODUCTIONS

Syndiant Launches Wearable LCoS-based Near-Eye Optical Engine

CEA-Leti Showcases micro-LED Arrays for HUDs and HMDs

Forth Dimension Displays Introduces QXGA- 3DM SLM

Kopin Develops NanoJet Process for Microdisplays

Sony to Launch Single-Lens Display Module

eMagin Developing Immersive HMD

Jasper Develops LCoS Microdisplays for Video Home Projector Market

Kopin Unveils Pupil Display Module with Micro LCDs for Smart Eyeglasses

Sony Unveils New nHD OLED Microdisplay for Wearable Devices



eMagin Introduces XGA096 OLED-XL Microdisplay
eMagin to Introduce Color OLED Microdisplays
SA Photonics Unveils Latest HMD
Jasper Launches Microdisplay Backplane for Phase Modulation and Home Theater
Projector Market

#### 5. RECENT INDUSTRY ACTIVITY

Forth Dimension Displays Obtains ISO 13485 Accreditation for LC Microdisplays Kopin Wins Production Order for SXGA Color Displays eMagin Bags Contract to Develop Advanced Backplane Technology for OLED Microdisplays

eMagin Wins Contract to Develop Full Color OLED Microdisplay eMagin Wins Contract to Improve Ultra-High-Brightness Microdisplay Products Kopin Partners with Edmund Optics

Kopin and Olympus to Co-Develop Ultra-Compact Display Modules for Consumer Headsets

#### 6. FOCUS ON SELECT PLAYERS

eMagin Corporation (USA)

Himax Technologies (Taiwan)

**HOLOEYE Photonics AG (Germany)** 

Jasper Display Corporation (Taiwan)

Kopin Corporation (USA)

Forth Dimension Displays (UK)

Liteye Systems, Inc. (USA)

MICROOLED (France)

Microvision, Inc. (USA)

Seiko Epson Corporation (Japan)

Wisechip Semiconductor, Inc. (Taiwan)

Yunnan OLiGHTEK Opto-Electronic Technology Co., Ltd. (China)

#### 7. GLOBAL MARKET PERSPECTIVE

**Table 11.** World Recent Past, Current and Future Analysis for Microdisplays by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific, and Rest of World Markets Independently Analyzed with Annual Revenue Figures in US\$ Thousand for



Years 2014 through 2020 (includes corresponding Graph/Chart)

**Table 12.** World Historic Review for Microdisplays by Geographic Region - US, Canada, Japan, Europe, Asia-Pacific, and Rest of World Markets Independently Analyzed with Annual Revenue Figures in US\$ Thousand for Years 2007 through 2013 (includes corresponding Graph/Chart)

**Table 13.** World 14-Year Perspective for Microdisplays by Geographic Region - Percentage Breakdown of Revenues for US, Canada, Japan, Europe, Asia-Pacific, and Rest of World Markets for Years 2007, 2015 & 2020 (includes corresponding Graph/Chart)

#### III. MARKET

## 1. THE UNITED STATES

A. Market Analysis
Market Overview
Product Launches
Strategic Corporate Developments
Key Players
B. Market Analytics

**Table 14.** US Recent Past, Current and Future Analysis for Microdisplays Market Analyzed with Annual Revenue Figures in US\$ Thousand for Years 2014 through 2020 (includes corresponding Graph/Chart)

**Table 15.** US Historic Review for Microdisplays Market Analyzed with Annual Revenue Figures in US\$ Thousand for Years 2007 through 2013 (includes corresponding Graph/Chart)

#### 2. CANADA

Market Analysis

**Table 16.** Canadian Recent Past, Current and Future Analysis for Microdisplays Market Analyzed with Annual Revenue Figures in US\$ Thousand for Years 2014 through 2020



(includes corresponding Graph/Chart)

**Table 17.** Canadian Historic Review for Microdisplays Market Analyzed with Annual Revenue Figures in US\$ Thousand for Years 2007 through 2013 (includes corresponding Graph/Chart)

#### 3. JAPAN

A. Market Analysis
Outlook
Product Launches
Seiko Epson Corporation – A Key Player
B. Market Analytics

**Table 18.** Japanese Recent Past, Current and Future Analysis for Microdisplays Market Analyzed with Annual Revenue Figures in US\$ Thousand for Years 2014 through 2020 (includes corresponding Graph/Chart)

**Table 19.** Japanese Historic Review for Microdisplays Market Analyzed with Annual Revenue Figures in US\$ Thousand for Years 2007 through 2013 (includes corresponding Graph/Chart)

# 4. EUROPE

A. Market AnalysisOutlookStrategic Corporate DevelopmentsKey PlayersB. Market Analytics

**Table 20.** Europe Recent Past, Current and Future Analysis for Microdisplays by Geographic Region - France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets Independently Analyzed with Annual Revenue Figures in US\$ Thousand for Years 2014 through 2020 (includes corresponding Graph/Chart)

**Table 21.** Europe Historic Review for Microdisplays by Geographic Region - France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets Independently Analyzed



with Annual Revenue Figures in US\$ Thousand for Years 2007 through 2013 (includes corresponding Graph/Chart)

**Table 22.** Europe 14-Year Perspective for Microdisplays by Geographic Region - Percentage Breakdown of Revenues for France, Germany, Italy, UK, Spain, Russia and Rest of Europe Markets for Years 2007, 2015 & 2020 (includes corresponding Graph/Chart)

#### 5. ASIA-PACIFIC

A. Market Analysis
Outlook
Product Launch
Select Players
B. Market Analytics

**Table 23.** Asia-Pacific Recent Past, Current and Future Analysis for Microdisplays by Geographic Region - China and Rest of Asia-Pacific Markets Independently Analyzed with Annual Revenue Figures in US\$ Thousand for Years 2014 through 2020 (includes corresponding Graph/Chart)

**Table 24.** Asia-Pacific Historic Review for Microdisplays by Geographic Region - China and Rest of Asia-Pacific Markets Independently Analyzed with Annual Revenue Figures in US\$ Thousand for Years 2007 through 2013 (includes corresponding Graph/Chart)

**Table 25.** Asia-Pacific 14-year perspective for Microdisplays by Geographic Region - Percentage Breakdown of Revenues for China and Rest of Asia-Pacific Markets for Years 2007, 2015 & 2020 (includes corresponding Graph/Chart)

#### 6. REST OF WORLD

Market Analysis

**Table 26.** Rest of World Recent Past, Current and Future Analysis for Microdisplays Market Analyzed with Annual Revenue Figures in US\$ Thousand for Years 2014 through 2020 (includes corresponding Graph/Chart)



**Table 27.** Rest of World Historic Review for Microdisplays Market Analyzed with Annual Revenue Figures in US\$ Thousand for Years 2007 through 2013 (includes corresponding Graph/Chart)

# IV. COMPETITIVE LANDSCAPE

```
Total Companies Profiled: 23 (including Divisions/Subsidiaries - 26)
The United States (11)
Japan (3)
Europe (5)
France (2)
Germany (2)
The United Kingdom (1)
Asia-Pacific (Excluding Japan) (7)
```



# I would like to order

Product name: Microdisplays: Market Research Report

Product link: https://marketpublishers.com/r/MB95FF10885EN.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 <a href="https://marketpublishers.com/r/MB95FF10885EN.html">https://marketpublishers.com/r/MB95FF10885EN.html</a>

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

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

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