



eMagin Corporation

Making virtual imaging a reality

**Needham Growth Conference
January 11, 2017**

**NYSE MKT: EMAN
www.emagin.com**



Cautionary Forward Looking Statements

Certain statements made by us in this presentation that are not historical facts or that relate to future plans, events or performances are forward-looking statements within the meaning of the federal securities laws. Our actual results may differ materially from those expressed in any forward-looking statement made by us. Forward-looking statements involve a number of risks or uncertainties including, but not limited to, the risks described under the heading “Risk Factors” in the Company’s filings with the Securities and Exchange Commission, including, but not limited to, the Company’s Reports on Form 10-K for the years ended December 31, 2015, respectively, and Form 10-Q for the quarters ended September 30, 2016, respectively. All forward-looking statements are qualified by those Risk Factors as well as the Company’s “Statement of Forward-Looking Information” in those filings. All statements made by us in this presentation are further qualified in all respects by the information disclosed in the Company’s filings with the Securities and Exchange Commission. These statements are only predictions. We are under no duty to update or revise any forward-looking statements to conform such statements to actual results or events, and do not intend to do so.



Company Overview

- **Market leader in OLED Microdisplays**
- **Military, Industrial and Commercial end-markets**
- **High barriers to entry**
 - Strong IP portfolio – 45 patents and applications
 - Technology and manufacturing know-how
- **Penetrating Broad Consumer Market Applications**
 - Gaming, Night Vision, Smart Glasses
 - Strong pipeline of Tier One Partners to help commercialize and scale

Positioned to Capitalize on the Accelerating Growth in Virtual and Augmented Reality Markets



4M pixel Immersive Headset



eMagin Investment Highlights

MARKET LEADER IN OLED MICRODISPLAY TECHNOLOGY SINCE 2001

DOMINANT PLAYER IN OLED MICRODISPLAY SOLUTIONS FOR MILITARY AND AVIATION MARKETS WHERE PERFORMANCE AND RELIABILITY STANDARDS ARE VERY HIGH

STABLE BASE OF MILITARY AND R&D CONTRACT BASED WORK

CAPITALIZING ON THE SEISMIC CHANGE VR AND AR TECHNOLOGIES ARE CREATING IN THE COMPUTING AND GAMING INDUSTRIES

MARKET MOMENTUM FOR NEXT GENERATION VR/AR TECHNOLOGIES IS BUILDING QUICKLY

EXPANDING MANUFACTURING CAPACITY AND OUTSOURCED FABRICATION TO MEET GROWING CONSUMER DEMAND

BROAD AND DEEP TECHNOLOGY PORTFOLIO



eMagin's Strategy to Drive Value

- *Build on our technology leadership*
 - *eMagin's direct patterning brings superior features and capabilities*
 - *Maintain our global dominance in military microdisplay market*
 - *Expand our commercial and industrial presence by further penetrating early adopters*
 - *Pursue growth and market breadth through direct-to-consumer channels*
 - *Deliver operational efficiencies with greater throughput and higher production yields*
- *Establish and build on strategic partnerships with Tier One consumer technology companies and partner with high volume manufacturers*



eMagin's OLED Technology Advantages

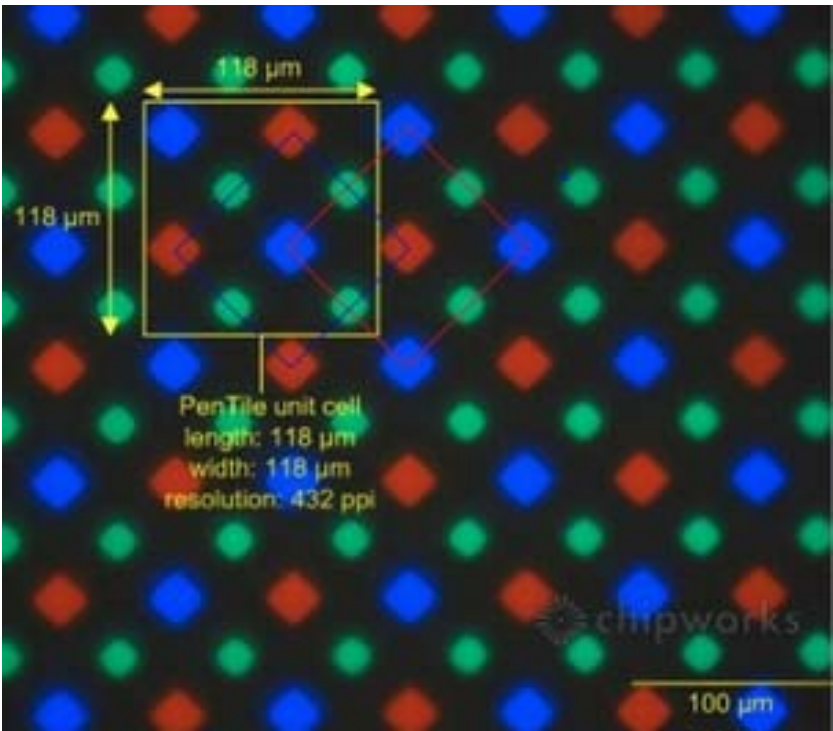
Lowest Power and Highest Brightness

- *Lowest power – longest battery life*
- *Most compact form factor*
- *Lightest weight solution*
- *Field tested for reliability and performance*
- *Nausea-free operation*
- *Clear see-thru capability – no background glow*
- *Brightest OLED – monogreen 24,000 NITS; full color 4,500 NITS demonstrated, 10,000 NITS targeted*

New applications for consumer VR and AR requiring ultra high brightness, ultra high contrast and high resolution color displays will drive explosive growth in the microdisplay market



eMagin Microdisplay Advantage



OLED Cell Phone Display

Images same scale

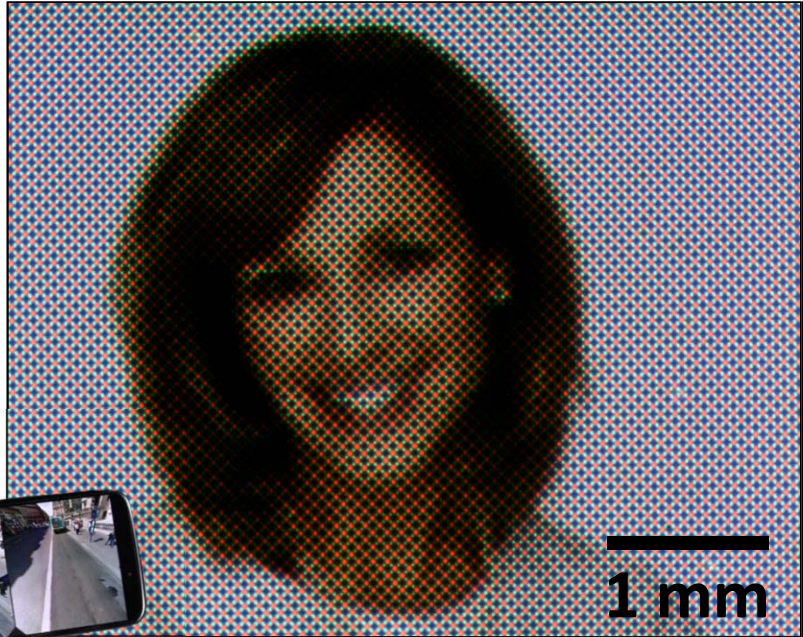


eMagin OLED Microdisplay

eMagin's smaller pixel pitch and higher fill factor provide unparalleled resolution and intensity



OLED Micro-displays Provide Better VR/AR Experience



Magnified Cell Phone Display
~600 ppi

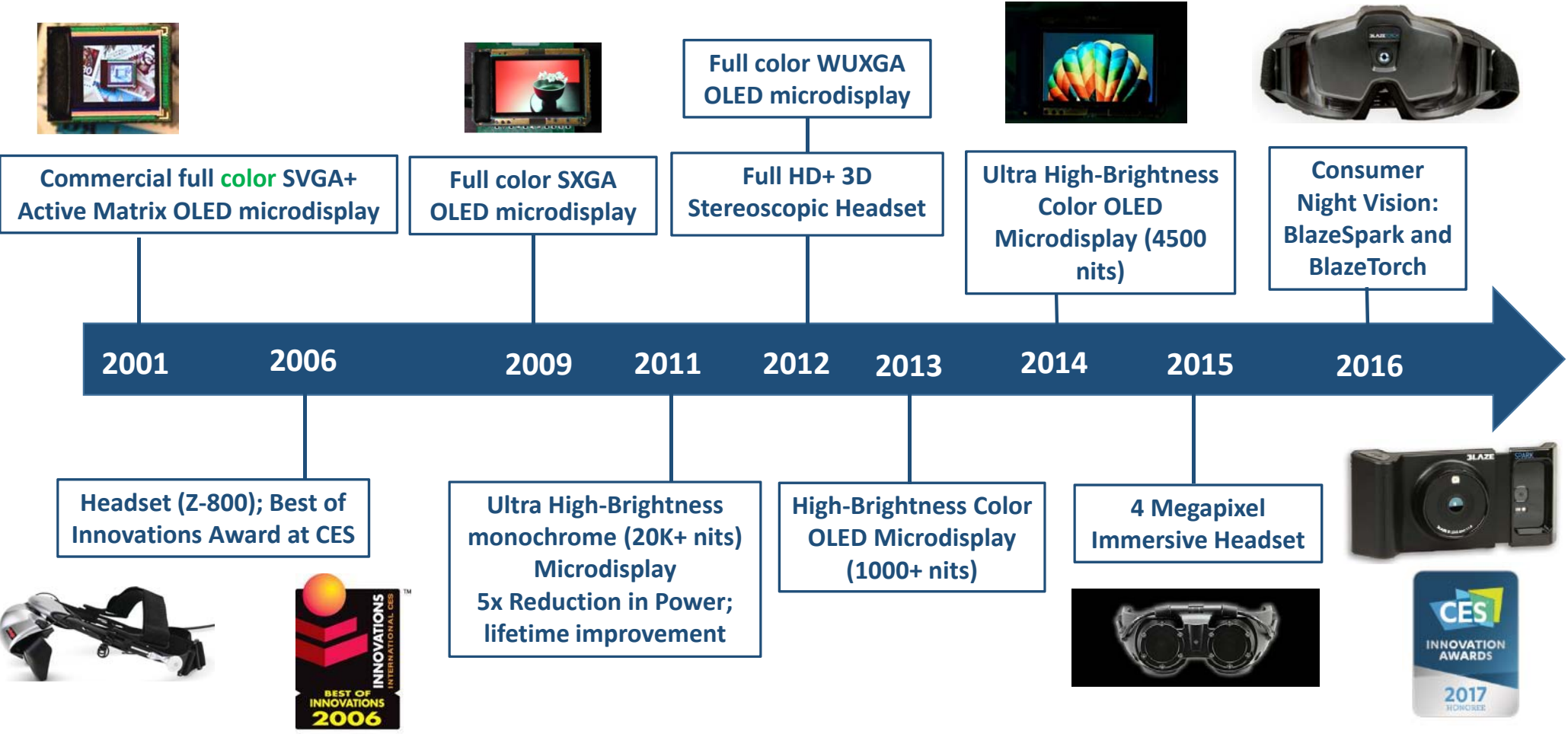


eMagin Microdisplay
>2,500 ppi

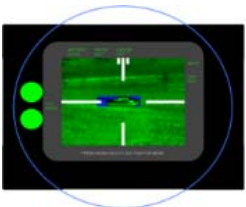




eMagin Microdisplay and Headset Success



eMagin Dominates Military Market



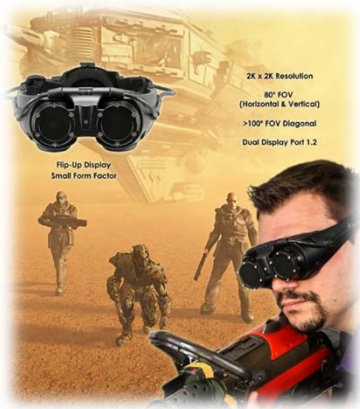
- *Military 1st mover in AR/VR*
- *Longstanding, sticky customer relationships*
 - *Long product lifecycles*
- *Predominately sole-source*
- *US Army, Special Forces, Navy/Marines*
 - *Goggles, thermal weapon sights, binoculars*
- *Worldwide Foreign Military Sales*

Military Provides Development Funding; Reduces Internal Investment



eMagin's Product Roadmap To Success

*Years Ahead of the competition in
Brightness & Power*



● **Military**
• Avionics

Commercial
• Avionics

Consumer

Entertainment
• Gaming & V/R

AR/VR: The Next Generation

OLED technology needed for switching speed (no smear)
Microdisplays needed for size, resolution, and power



Real Environment

Augmented Reality (AR)

Augmented Virtuality (AV)

Virtual Reality (VR)





Consumer Headset Market Exploding



eMagin OLED Microdisplays the Right Answer for All!



VR/AR Funding News – Largest Players Investing

Magic Leap raises \$800 million led by Alibaba; now valued at \$4.5 billion (March 2016)

IMAX creates \$50 million investment fund focused on virtual reality media projects (November 2016)

Osterhout Design Group raises \$58 million for augmented reality smart glasses (December 2016)

Matterport announces \$30M financing from **Qualcomm** Ventures, **AMD** Ventures, and **Lux Capital** (June 2015)

MindMaze company received \$100 million in financing led by **Hinduja Group** (February 2016)

NextVR raises \$80 million from **CITIC Group**, **NetEase** and **CMC Holdings**, now valued at \$887 million (August 2016)

Disney bets on Virtual Reality With \$65 million investment in startup **Jaunt** (September 2015)

Comcast and **Time Warner** invest \$30.5M in **NextVR** (November 2015)

Ads Reality acquired by **Game** valued at \$29 million (May 2016)

Nike is looking at VR technology to help shoppers design custom shoes (July 2015)

Blippar raised GBP 55 million venture funding from lead investor **Khazanah Nasional** (March 2016)

Intel betting \$175M on **Recon's** consumer product offering



Source: NY Times



Consumer Products



BlazeTorch



BlazeSpark

www.blazethenight.com





Consumer Night Vision Market

OPPORTUNITY: \$5 Billion Market

- Night Vision enhances everyday life by extending daytime activities into the night
- Our unique hardware and simple and compelling ecosystem creates new activity while generating new avenues for revenue

MISSION

- Create an explosive new category of digital content fueled by the social experiences of people participating in night time activities
- Create clever solutions to collect and generate content.
- Aggregate and share through a unique portal
- User content generation drivers shareholder value

Source: MarketsandMarkets 2016



Bring On The Night with BlazeSpark!

- Provides night vision capability for smart-phones
- Enhances wildlife, sports, and other activities by providing user experience at night
- Spark Application enables users to broadcast and share content worldwide





Bring On The Night with BlazeTorch!

- Remove the cloak of darkness and discover nature's night side with BlazeTorch
- Put on BlazeTorch and move through the night, hands free
- Record your adventure in HD quality video and upload or share your night adventure with others worldwide





eMagin's Management Team

Andrew Sculley <i>CEO</i>	Over 15 years experience in OLED technology and manufacturing. Led Kodak OLED Systems. MS Physics Cornell, MBA Carnegie-Mellon.
Jeffrey Lucas <i>CFO</i>	CFO of public technology and manufacturing companies. Emphasis on operations improvement and technology commercialization. MBA Harvard, CPA, CFA
Dr. Amal Ghosh PhD <i>SVP Technology</i>	Pioneering inventor of disruptive OLED technology at Kodak. PhD Physics MIT. Past President of the prestigious Society for Information Display (SID).
Olivier Prache <i>SVP Product Development</i>	OLED product commercialization pioneer at Pixtech (France) and OIS Optical Imaging Systems. Diplôme d'Ingénieur from E.N.S.E.R.G. Grenoble France.
Stephen Costello <i>SVP Strategic Partnerships</i>	Sales management and channel development at BAE Systems. Military and commercial business development. MS Marketing Bentley University.
Doug Hughes <i>VP Business Development</i>	Sr. Director, Legislative at Raytheon; Office of the Secretary of the Navy; Commanding Officer, US Navy, Pearl Harbor. MS Naval War College.
Ying Shiau <i>VP Operations</i>	Over 20 years experience in semiconductor manufacturing, engineering, supply chain and QA at Cypress Semiconductor, AMD, and NEC. MS Electrical Engineering Case Western.
Kip Kokinakis <i>President HMD Division</i>	Former CEO of Myvu Corporation and Foxconn's Viewlink. A pioneer in building and designing near eye headsets for consumer and enterprise markets.



Operating Results

(millions)

	2014	2015	YTD Sept 2016
Revenue	\$25.7	\$25.1	\$16.8
Gross Margin %	29%	28%	35%
Operating Expense	\$12.6	\$11.0	\$8.0
Operating Income	\$(5.3)	\$(4.1)	\$(4.6)
EBITDAS	\$(2.9)	\$(1.5)	\$(1.7)



Balance Sheet and Capital Structure (millions)

Balance Sheet (\$)	Dec 31, 2015	Sep 30, 2016
Cash & Equivalents	\$9.3	\$6.9
Total Assets	\$28.1	\$27.8
Total Debt*	none	none
Total Liabilities	\$4.7	\$4.0
Total Shareholders Equity	\$23.4	\$23.8
Capital Structure (shares)		
Basic Shares Outstanding	29.6	31.8
Options	4.2	5.0
Warrants	2.6	2.9
Series B Preferred	7.5	7.5
Fully Diluted Shares Outstanding	43.9	47.2

* Established credit facility in December 2016

\$123M of NOLs as of Sep 30, 2016



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