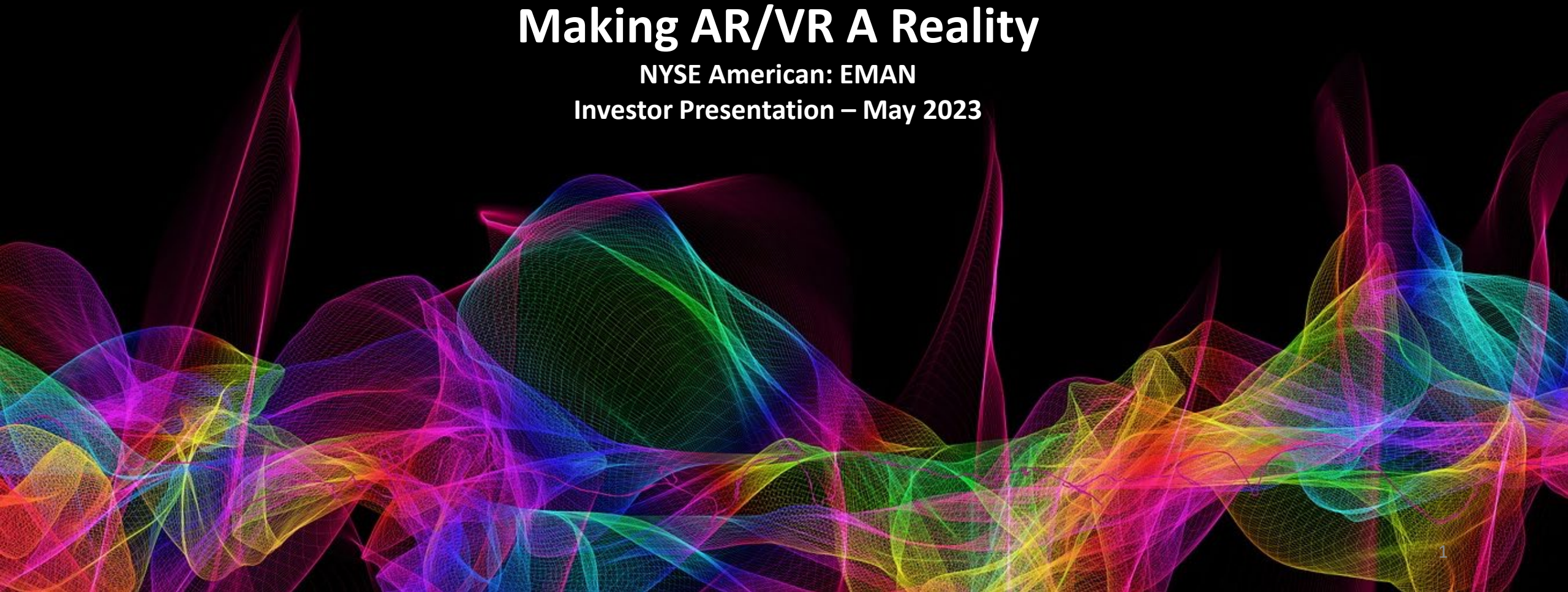




Making AR/VR A Reality

NYSE American: EMAN

Investor Presentation – May 2023

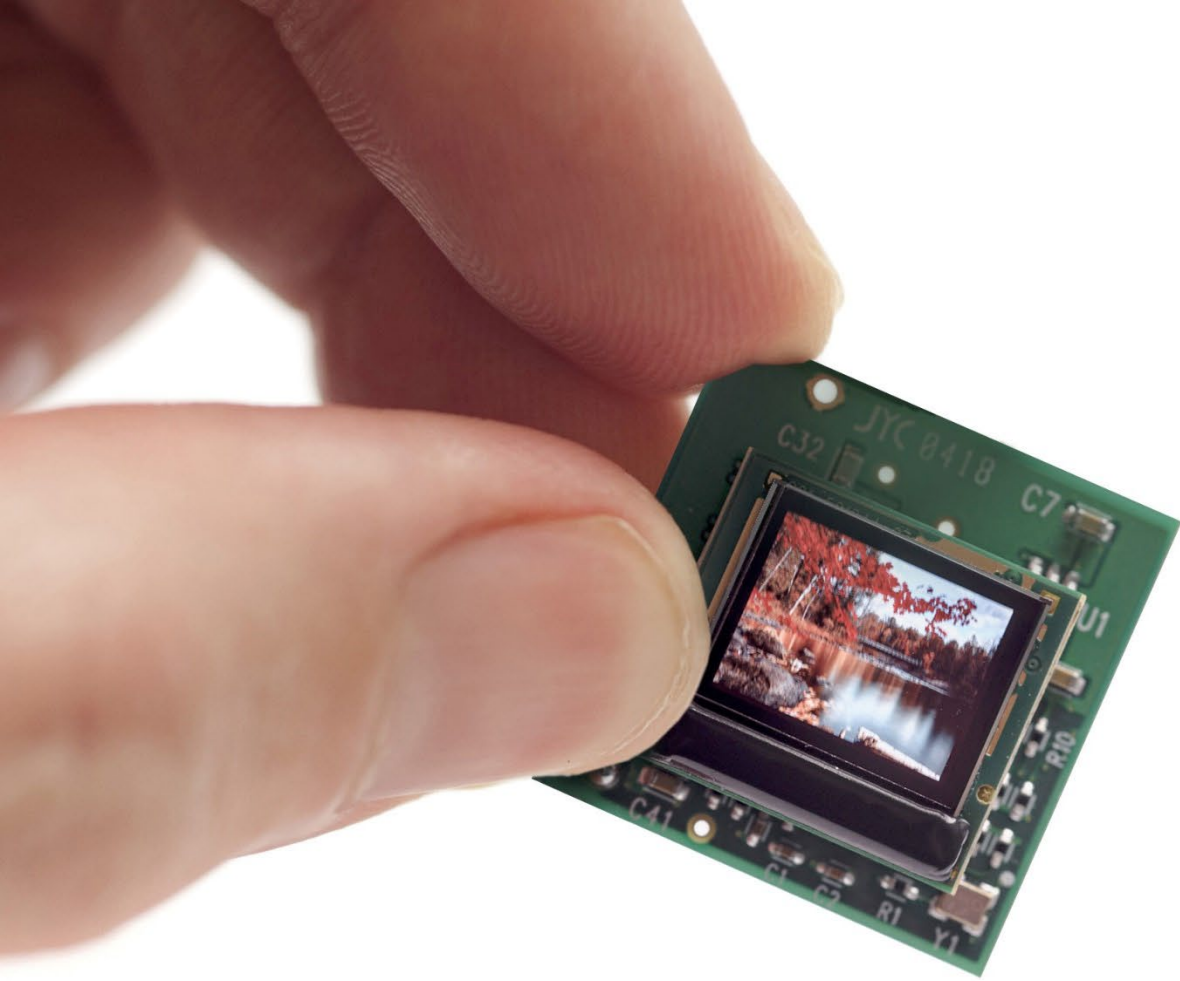


Disclaimer

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 year ended December 31, 2022. All forward-looking statements are qualified by those Risk Factors as well as the Company’s “Statement of Forward-Looking Information” in such 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.

All forward-looking statements by their nature address matters that involve risks and uncertainties, many of which are beyond our control, and are not guarantees of future results, such as statements about the consummation of the proposed transaction and the anticipated benefits thereof. These and other forward-looking statements, including the failure to consummate the proposed transaction or to make or take any filing or other action required to consummate the proposed transaction in a timely matter or at all, are not guarantees of future results and are subject to risks, uncertainties and assumptions that could cause actual results to differ materially from those expressed in any forward-looking statements. Accordingly, there are or will be important factors that could cause actual results to differ materially from those indicated in such statements and, therefore, you should not place undue reliance on any such statements and caution must be exercised in relying on forward-looking statements. Important risk factors that may cause such a difference include, but are not limited to: (i) the ability of the parties to consummate the proposed transaction in a timely manner or at all; (ii) the satisfaction (or waiver) of closing conditions to the consummation of the proposed transaction, including with respect to the approval of the Company’s stockholders; (iii) potential delays in the consummation of the proposed transaction; (iv) the ability of the Company to timely and successfully achieve the anticipated benefits of the proposed transaction; (v) the occurrence of any event, change or other circumstance or condition that could give rise to the termination of the merger agreement; (vi) the impact of the COVID-19 pandemic and the current conflict between the Russian Federation and Ukraine on the Company’s business and general economic conditions; (vii) the Company’s ability to implement its business strategy; (viii) significant transaction costs associated with the proposed transaction; (ix) potential litigation relating to the proposed transaction; (x) the risk that disruptions from the proposed transaction will harm the Company’s business, including current plans and operations; (xi) the ability of the Company to retain and hire key personnel; (xii) potential adverse reactions or changes to business relationships resulting from the announcement or completion of the proposed transaction; (xiii) legislative, regulatory and economic developments affecting the Company’s business; (xiv) general economic and market developments and conditions; (xv) the evolving legal, regulatory and tax regimes under which the Company operates; (xvi) potential business uncertainty, including changes to existing business relationships, during the pendency of the proposed transaction that could affect the Company’s financial performance; (xvii) restrictions during the pendency of the proposed transaction that may impact the Company’s ability to pursue certain business opportunities or strategic transactions; and (xviii) unpredictability and severity of catastrophic events, including, but not limited to, acts of terrorism or outbreak of war or hostilities, as well as the Company’s response to any of the aforementioned factors.

This presentation is the property of, and contains the proprietary and confidential information of the Company and is being provided solely for informational purposes. The projections, estimates and forecasts contained herein have been prepared by the Company in good faith based on assumptions believed by the Company to be reasonable at the time of preparation thereof. Forecasts and estimates regarding the Company’s industry and end markets are based on third party sources the Company believes to be reliable. There can be no assurance however that any particular projection, estimate, forecast or other forward-looking information will prove to be accurate in whole or in part or that any of the information contained herein is reflective of future performance to any degree. No representation or warranty is made with respect to the information included herein.



Vision:

***Enable the visualization
of digital information
and imagery with OLED
technology***

A Pioneering Technology Leader with a Broad IP Portfolio

1

A technology leader with proprietary and patented direct patterning technology (dPd™) for ultrahigh brightness in color, and the sole U.S. manufacturer of OLED microdisplays

2

Uniquely positioned to capitalize on growing addressable markets in military, industrial and consumer applications for high-brightness AR/VR solutions

3

U.S. government funding of approximately \$39 million for manufacturing supports equipment procurement and improvements in growth, innovation and productivity

4

Deep applications expertise and broad IP portfolio that is aligned with diverse customer base and long-term industry trends

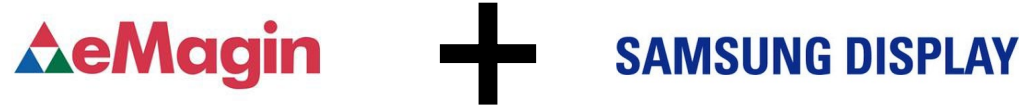
5

Well-established military and aviation market presence benefiting from modernization trends; leverageable platform for high growth opportunities in consumer and commercial end markets

6

Highly experienced management team with industry-leading technical expertise enabling a substantial runway for value creation

eMagin's Definitive Merger Agreement with Samsung Display



1

On May 17, 2023, eMagin entered into a definitive merger agreement with Samsung Display, a subsidiary of Samsung Electronics.

2

Under the terms of the merger agreement, all outstanding shares of eMagin common stock on a fully diluted basis will be acquired for \$2.08 per share in cash, in a transaction valued at approximately \$218 million.

3

The agreement provides a significant premium for shareholders, reflects eMagin's technical achievements to date, and represents a win for customers and employees.

4

By teaming with Samsung Display, eMagin can achieve the full potential of its next-generation microdisplay technology with a partner that can provide the resources and expertise needed to scale production.

Approval and Timing



SAMSUNG DISPLAY



On May 17, 2023, eMagin entered into a definitive merger agreement with Samsung Display, a subsidiary of Samsung Electronics.



A special meeting of shareholders will be announced to vote on the potential transaction.



The transaction is expected to close in the second half of 2023, subject to the approval by eMagin's stockholders, applicable regulatory approvals and other customary closing conditions.



Action Completed



Action To Be Completed

eMagin at a Glance

Headquarters: **Hopewell Junction, NY**
Employees: **100+**

Revenue: **\$6.6M in Q1 2023**

- 97% from Product Sales, 3% Contracts
- 47% U.S., 53% International
- 17 countries served

Market Cap: **\$166 M***
Ticker/Exchange: **EMAN / NYSE American**

Patents: **73 issued, 24 pending**

**Based on closing price on 05/19/23 and approximately 83.1 million shares outstanding.*

The technology leader in OLED Displays



Making AR/VR a reality

**100% U.S. Based
Manufacturing**



Leveraging Our Military Experience to Seize New Opportunities



Establish partnerships for high-volume manufacturing

Develop commercial and consumer electronics customer relationships for AR/VR opportunities

Grow commercial, medical and industrial presence

Expand military and aviation market share

Deepen penetration of leading-edge dPd™ technology

Increase capacity and production yields; expand manufacturing capability

Quarter-To-Date Q1 2023 Update: Surpassing records and Strong Backlog



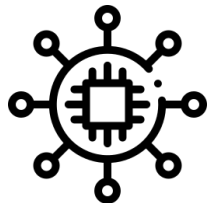
Financials

- Product revenues for the quarter-ended March 31, 2023 totaled \$6.4 million, compared with \$7.0 million in the prior-year period
- Contract revenues for the quarter-ended March 31, 2023 totaled \$0.2 million, compared with \$0.3 million in the prior-year period
- Backlog of open orders of \$16.0 million as of the end of Q1 2023 compared with \$14.8 million as of the end of Q4 2022
- Cash and cash equivalents of \$3.8 million as of March 31, 2023
- Expecting contract revenues to continue with development and scalability of dPd technology for consumer AR/VR



Operating Trends

- Continuing to supply sole-sourced displays under the Enhance Night Vision Goggle-Binocular (ENVG-B) program as it ramps to volume, as well as other key military programs worldwide
- As of the end of the first quarter, the Company has taken delivery of seven pieces of production equipment and received \$32.2 million of the total \$39.1 million in U.S. government funding awarded to eMagin to enhance its manufacturing capabilities as the only U.S. provider of OLED microdisplays
- In July 2022, the Company took possession of additional clean room and expansion space



Advancing Product Development

- Surpassed the previous record of 10,000 candela per square meter (cd/m²) by demonstrating 15,000 cd/m² full-color WUXGA (1920x1200 pixels) prototype display using its dPd™ technology
- Continue to see strong interest in high-brightness XLE and direct patterned technology
- Steady progress on the development efforts for dPd technology and high brightness product roadmap

Serving a Critical Need in U.S. Defense Capabilities

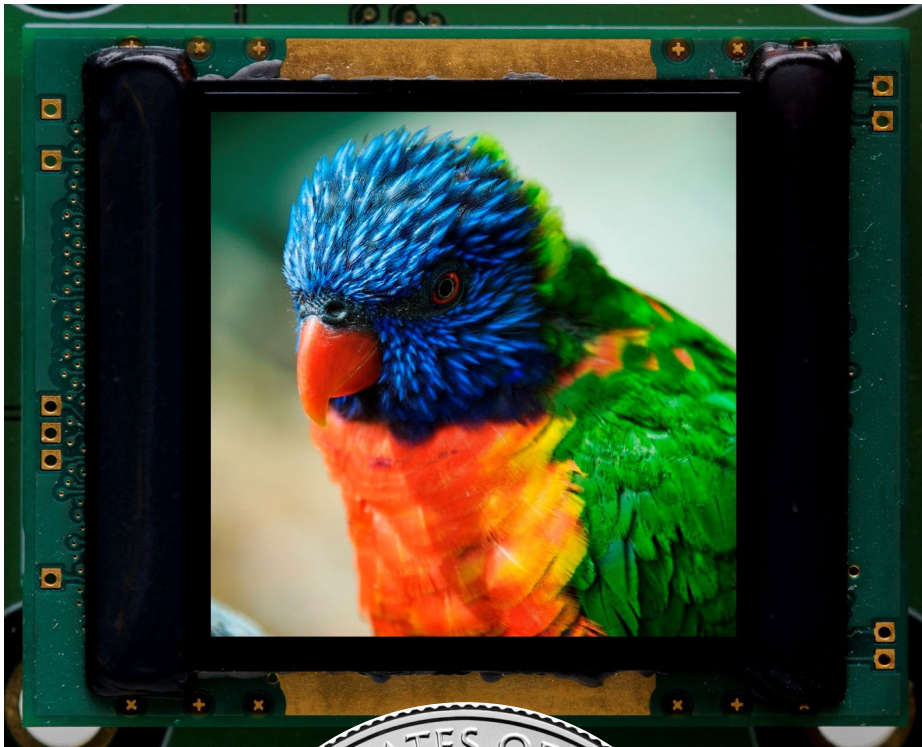


- Recognized by the U.S. Department of Defense (DoD) as only domestic manufacturer of OLED microdisplays and designated as cornerstone of U.S. manufacturing base
- Received \$39.1 million in DoD funding for procurement and installation of capital equipment at the Hopewell Junction facility to enhance manufacturing capabilities and to sustain and enhance U.S. domestic capability for high-resolution, high-brightness OLED microdisplays based on proprietary dPd technology
- Two-year, \$2.5 million development contract from U.S. Army's Program Executive Office for Simulation, Training and Instrumentation ("PEO STRI") awarded in Q2 2022 to secure U.S. source for a high-performance microdisplay that provides high brightness and visual acuity, even in bright daylight conditions. eMagin will design a backplane that will allow for significantly higher luminance of its dPd displays and leverage the full potential of the equipment acquired under the Title III and IBAS funding grants



Our OLED Technology Advantage: Lowest Power, Highest Brightness

- Brightest OLED commercially available – monogreen with peak luminance over 40,000 cd/m²
- Full-color 15,000 cd/m² prototype display demonstrated in 2023
- Very high contrast – greater than 1,000,000:1
- Lower power consumption yields longer battery life
- More compact form factor
- Lightweight solution
- Field tested for reliability and performance
- Nausea-free operation
- Superior performance and a competitive cost at higher volumes



A History of Technical Leadership Through Fundamental Innovations in Microdisplays

- Developed and shipped first full-color Active Matrix OLED in 2001
- Introduced sequentially higher resolution displays:

• VGA	640x480	SXGA120	1280x1024
• SVGA+	852x600	WUXGA	1920x1200
• DSVGA	800x600	2Kx2K	2048x2048
• SXGA096	1280x1024		4Kx4K
- Full-color SXGA OLED microdisplay
- First to develop high brightness monochrome green, now exceed 40,000 cd/m² at maximum luminance
- White with color filter displays, now exceed 3,000 cd/m²
- Demonstrated unique and proprietary full-color direct patterned dPd™ prototype microdisplay exceeding 15,000 cd/m² in 2023

Direct Patterning Full-Color OLED Microdisplays

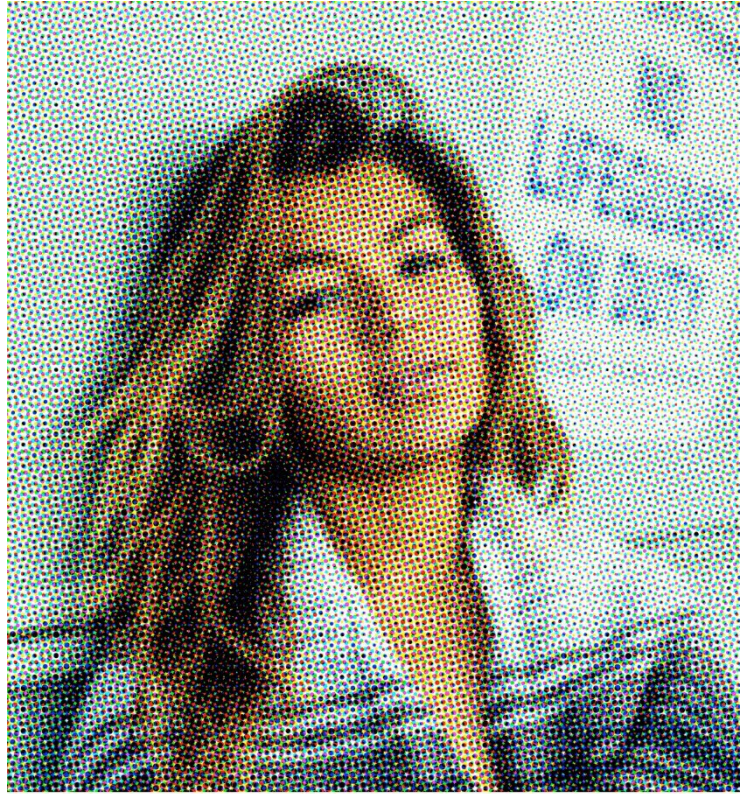
- AR/VR requires high brightness that is satisfied by our dPd technology
- Demonstrated WUXGA prototype with dPd technology – world's first 15,000cd/m² full-color OLED microdisplay
- Patented, full-color dPd technology applicable to any OLED microdisplay
- Ongoing proof-of-concept with tier-one consumer company to develop dPd displays; if successful could lead to a licensing/royalty agreement
- Other advances used on white with color filter, like tandem OLED, can be used to move beyond 15,000 cd/m² peak luminance
- Roadmap to ~ 30,000 cd/m² full color peak luminance
 - Roadmap began with dPd measured at over 10,000 cd/m²
 - 2 year project underway to achieve 20,000 cd/m²
 - New equipment from \$39M grant was designed to produce these higher-luminance displays in production



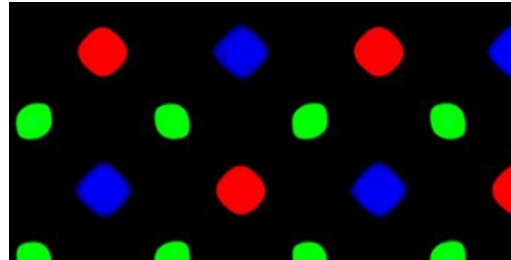
Direct patterning is ahead today and will remain ahead

OLED Provides a Superior AR/VR Experience

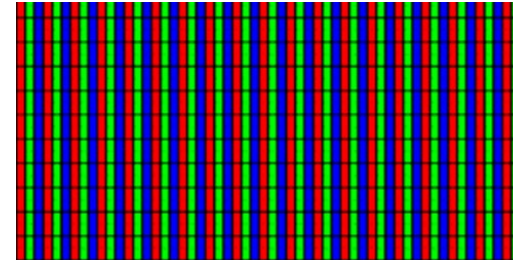
Magnification Highlights eMagin's Superior Fill Factor



OLED Cell Phone Display ~600 ppi



eMagin OLED Microdisplay >2,500 ppi



The Future of AR/VR Powered by dPd

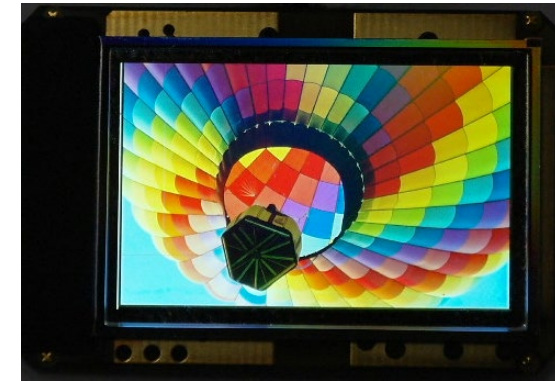


- Conventional OLED microdisplays use white OLED with color filters
 - Color filters absorb ~80% of the useful light; limited brightness and inefficient
- Only eMagin has Direct Patterned microdisplay technology for direct emission of red, green and blue light without color filters
 - Enables significantly higher brightness
 - Higher efficiency, much lower power consumption
- eMagin dPd™ prototype microdisplays have exceeded 15,000 cd/m²

*for illustrative purposes only

eMagin Technology Validation by Others

- Demonstrations attracted consumer companies
 - High brightness displays
 - Prototype 2k x 2k HMD
- First Company
 - Vetted the technology
 - Took a license to dPd technology
- Next 4k design for VR
 - Unique backplane design
 - dPd brightness required
- Technology attracted next company
 - New unique backplane design
 - dPd brightness improved to over 15,000 cd/m²



Deep Application Expertise and Broad IP Portfolio Create Significant Barriers to Entry

Patents

- 73 patents issued and 24 pending
- Includes silicon backplane, OLED architecture, process and packaging
- Key patents include ultra-high brightness directly patterned OLED displays

Know-how

- Includes silicon backplane, OLED architecture, process and packaging
- Back-plane design
- Anode patterning
- Direct patterning of OLED
- Thin film encapsulation
- Packaging methodology

Well-established Military and Aviation Business

Profile

- Predominately sole-source supplier
- Differentiated performance and leader in brightness
 - Visible in bright sunlight
 - High contrast for detail
- First mover in AR/VR for domestic and foreign military applications
- Global market leadership – International and U.S. Army, Air Force, Special Forces, Navy/Marines
- Proven track record of performing in demanding applications and environments
- Long-standing customer relationships and extended program and product lifecycles
- Military microdisplays addressable market expected to increase
- Accelerating activity and program wins in aviation
- Trend away from LCD to OLED for better contrast and brightness

Customers



Products



Enhanced Night
Vision Goggle



Helmet
Display



Laser Range
Finder



Simulation Training
Devices

Commercial and Medical Markets Represent New Growth Opportunities and End-market Diversification

Profile

- Products provide high reliability in stressful environments
- Visualize digital information and imagery
- Successful in supplying to medical imaging devices, veterinary ultrasound viewers, thermal cameras and hunting scopes

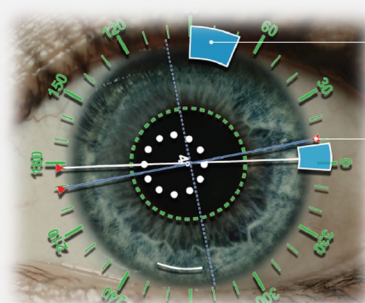
Family of Products



LASIK Surgery



Cataract Surgery



fMRI
Visual System



Veterinary Ultrasound

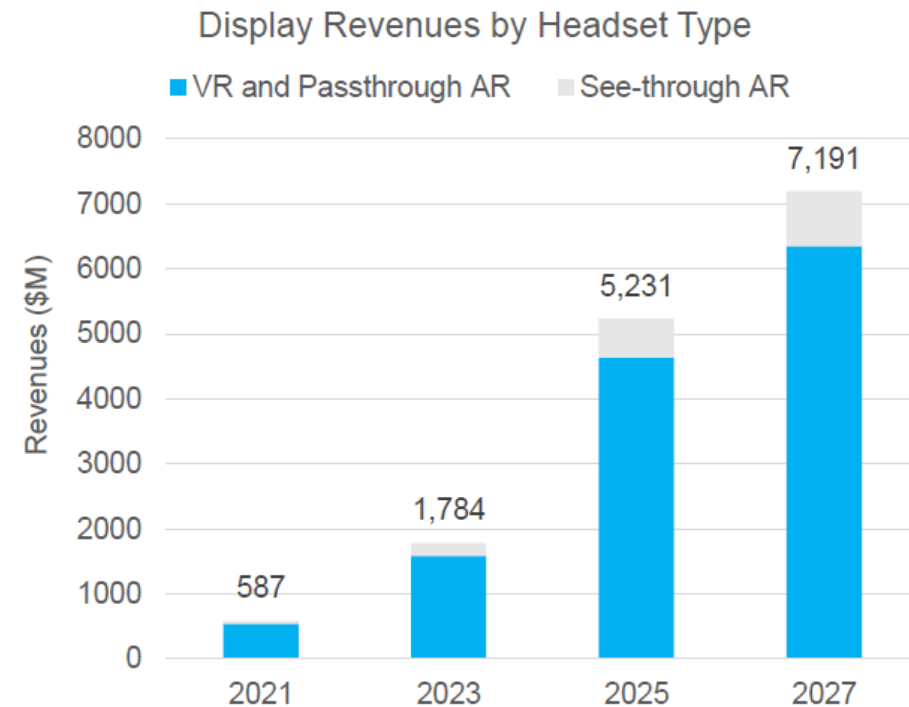
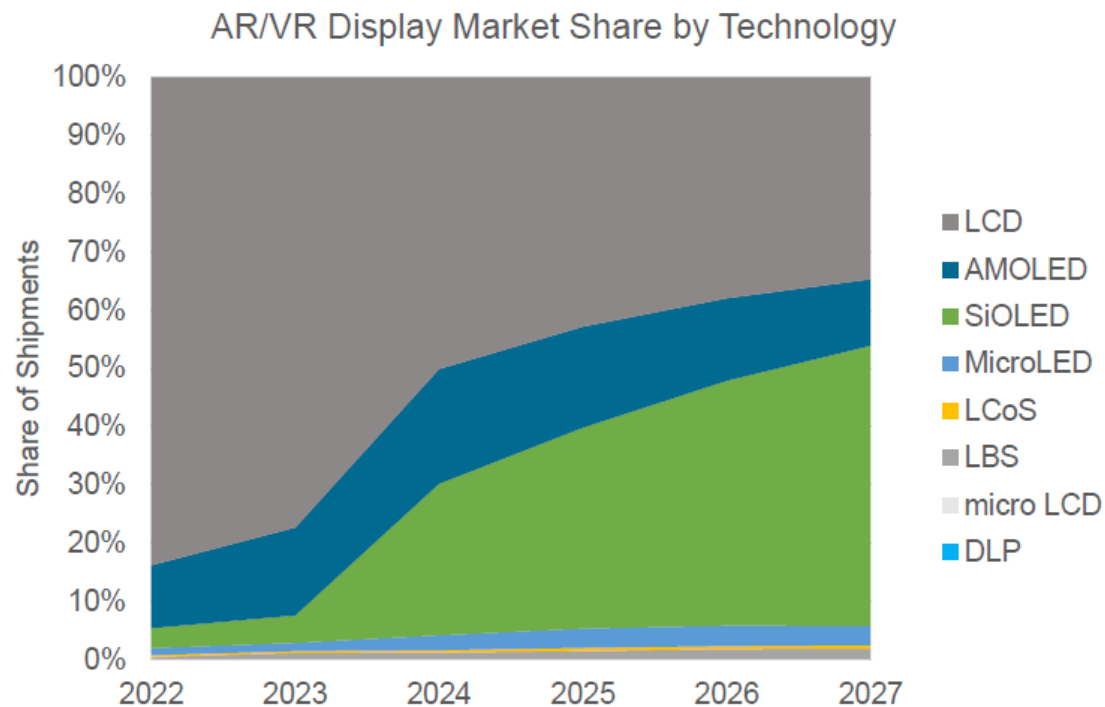


Hunting Scopes

Display Market Share and Revenues

- ▶ OLED on silicon (SiOLED) will capture the largest share of shipments from 2026, with LCD in second place.
- ▶ AMOLED will be back thanks to Sony's PSVR2. The increase in PPI will make this technology attractive again.
- ▶ Revenues for AR/VR displays will grow at a CAGR of 51.8%, from \$0.6B in 2021 to \$7.2B in 2027.

Chart excludes wearable monitor HMDs for Industrial & Medical applications



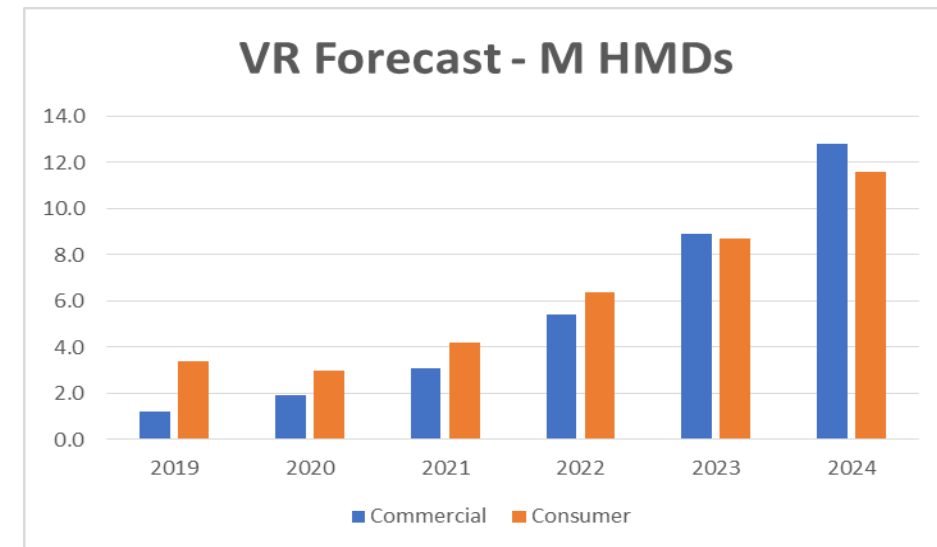
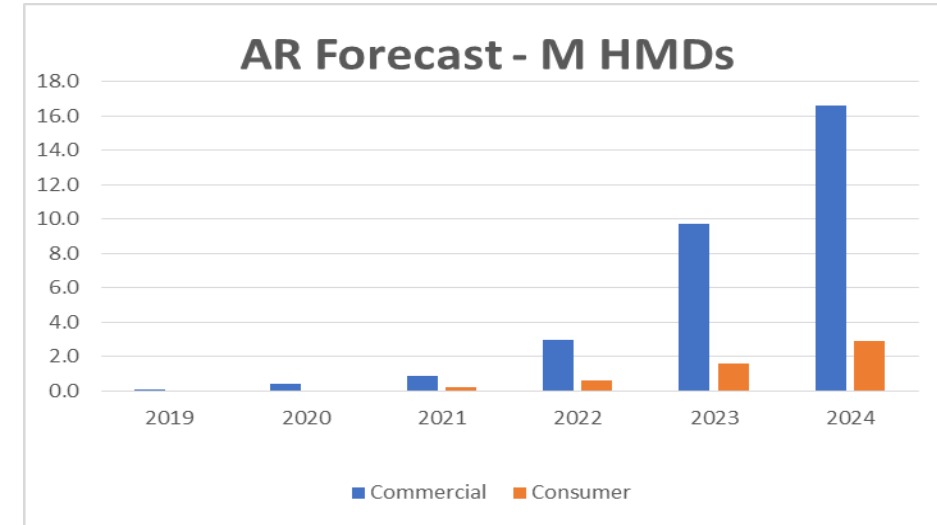
Source: DSCC 2022

AR/VR Market grows to \$7.2B; OLED Microdisplays take the largest share

Well Positioned to Capitalize on Large Commercial and Consumer Opportunities

Profile

- ✓ Augmented reality for
 - Equipment repair
 - Factory automation
 - Service technicians
- ✓ Virtual reality for
 - Vehicle design
 - Training and simulation
 - Consumer gaming and entertainment
- ✓ eMagin is the only company with technology that satisfies the key requirements:
 - High brightness
 - High speed
 - High pixels per inch
 - High resolution



Source: IDC 2020

Our Manufacturing Footprint

Hopewell Junction, NY (Headquarters)

- Houses own equipment for OLED microdisplay fabrication, assembly operations, R&D and product development functions
- eMagin is the only US-based manufacturer of OLED microdisplays
- Approximately \$39 million in DoD awards for procurement and installation of capital equipment to enhance manufacturing and enhance dPd technology

**100% U.S. Based
Manufacturing**



Class 10 Clean Room Operations

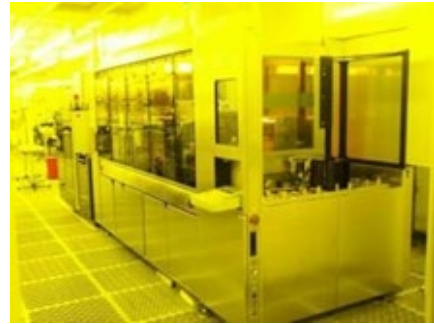


Photo-Lithography



Metal Deposition



OLED Deposition Cluster



In-Line Inspection



GlassLid



Advanced Packaging Capabilities

Experienced Management Team of Recognized Industry Experts

Andrew Sculley <i>CEO</i>	<ul style="list-style-type: none">• More than 20 years experience in OLED technology and manufacturing• Led Kodak OLED Systems• MS Physics Cornell, MBA Carnegie-Mellon
Dr. Amal Ghosh <i>COO</i>	<ul style="list-style-type: none">• Pioneering inventor of disruptive OLED microdisplay technology at eMagin and Kodak• PhD Physics MIT• Past President of the prestigious Society for Information Display (SID)
Mark Koch <i>CFO</i>	<ul style="list-style-type: none">• Previously eMagin's VP of Finance and Corporate Controller• +25 years of financial experience• Certified Public Accountant; BS Manhattan College
Oliver Prache <i>SVP Product Development</i> <i>Interim VP of Operations</i>	<ul style="list-style-type: none">• OLED product commercialization pioneer at Pixtech (France) and OIS Optical Imaging Systems• Diplôme d'Ingénieur from E.N.S.E.R.G. Grenoble France

A Pioneering Technology Leader with a Broad IP Portfolio

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5

Well-established military and aviation market presence benefiting from modernization trends; leverageable platform for high growth opportunities in consumer and commercial end markets

6

Highly experienced management team with industry-leading technical expertise enabling a substantial runway for value creation

Appendices

Consolidated Statement of Operations

eMAGIN CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except share and per share data)
(unaudited)

	Three Months Ended March 31,	
	2023	2022
Revenues:		
Product	\$ 6,368	\$ 7,027
Contract	227	331
Total revenues, net	6,595	7,358
Cost of revenues:		
Product	5,004	4,787
Contract	117	82
Total cost of revenues	5,121	4,869
Gross profit	1,474	2,489
Operating expenses:		
Research and development	1,203	1,484
Selling, general and administrative	2,805	2,170
Total operating expenses	4,008	3,654
Loss from operations	(2,534)	(1,165)
Other (expense) income:		
Change in fair value of common stock warrant liability	—	1,146
Interest expense, net	(207)	(214)
Other income, net	120	96
Total other (expense) income	(87)	1,028
Loss before provision for income taxes	(2,621)	(137)
Income taxes	—	—
Net Loss	\$ (2,621)	\$ (137)
Loss per share, basic and diluted	\$ (0.03)	\$ —
Weighted average number of shares outstanding:		
Basic and diluted	81,993,294	72,835,629

See notes to Condensed Consolidated Financial Statements.

Consolidated Balance Sheet

eMAGIN CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except share data)
(unaudited)

	March 31, 2023	December 31, 2022
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 3,849	\$ 4,346
Restricted cash	303	303
Accounts receivable, net	5,513	7,035
Account receivable-due from government awards	—	501
Unbilled accounts receivable	2,665	2,438
Inventories	8,804	8,709
Prepaid expenses and other current assets	688	594
Total current assets	21,822	23,926
Property, plant and equipment, net	51,171	49,099
Operating lease right - of - use assets	37	53
Intangibles and other assets	27	29
Total assets	\$ 73,057	\$ 73,107
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,199	\$ 2,077
Accrued compensation	1,856	1,662
Revolving credit facility, net	—	1,037
Other accrued expenses	961	659
Deferred revenue	12	12
Operating lease liability - current	38	54
Finance lease liability - current	1,229	1,229
Other current liabilities	471	231
Total current liabilities	5,766	6,961
Other liability - long term	14	14
Deferred income - government awards - long term	31,136	28,729
Finance lease liability - long term	13,545	13,608
Total liabilities	50,461	49,312
Commitments and contingencies (Note 8)		
Shareholders' equity:		
Preferred stock, \$0.001 par value: authorized 10,000,000 shares:		
Series B Convertible Preferred stock, (liquidation preference of \$5,356) stated value \$1,000 per share, \$0.001 par value: 10,000 shares designated and 5,356 issued and outstanding as of March 31, 2023 and 5,356 issued and outstanding as of December 31, 2022.	—	—
Common stock, \$0.001 par value: authorized 200,000,000 shares, issued 82,530,660 shares, outstanding 82,368,594 shares as of March 31, 2023 and issued 81,241,516 shares, outstanding 81,079,450 shares as of December 31, 2022.	82	80
Additional paid-in capital	284,002	282,582
Accumulated deficit	(260,988)	(258,367)
Treasury stock, 162,066 shares as of March 31, 2023 and December 31, 2022.	(500)	(500)
Total shareholders' equity	22,596	23,795
Total liabilities and shareholders' equity	\$ 73,057	\$ 73,107

See notes to Condensed Consolidated Financial Statements.

Adjusted EBITDA

\$ in thousands

	Three Months Ended March 31,	
	2023	2022
Net income (loss)	\$ (2,621)	\$ (137)
Non-cash compensation	256	165
Change in fair value of common stock warrant liability	—	(1,146)
Depreciation and intangibles amortization expense	734	722
Interest expense	207	214
Adjusted EBITDA	\$ (1,424)	\$ (182)