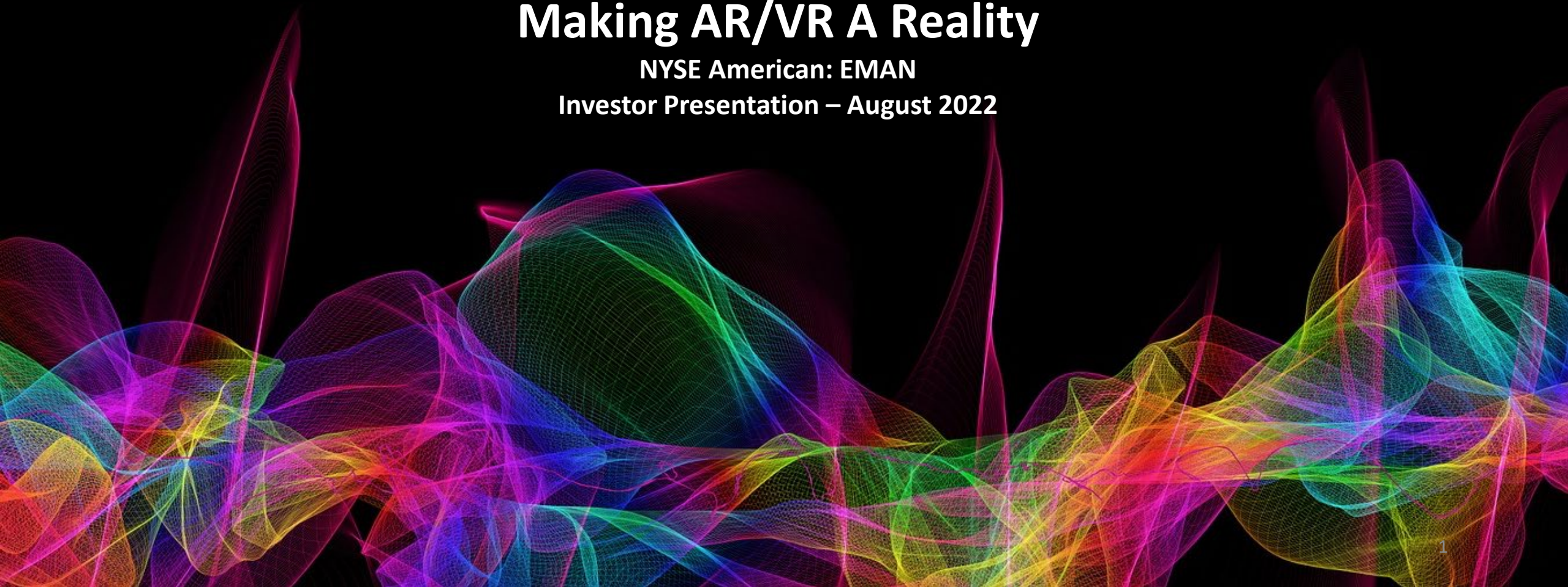
eMagin

Making AR/VR A Reality

NYSE American: EMAN

Investor Presentation – August 2022



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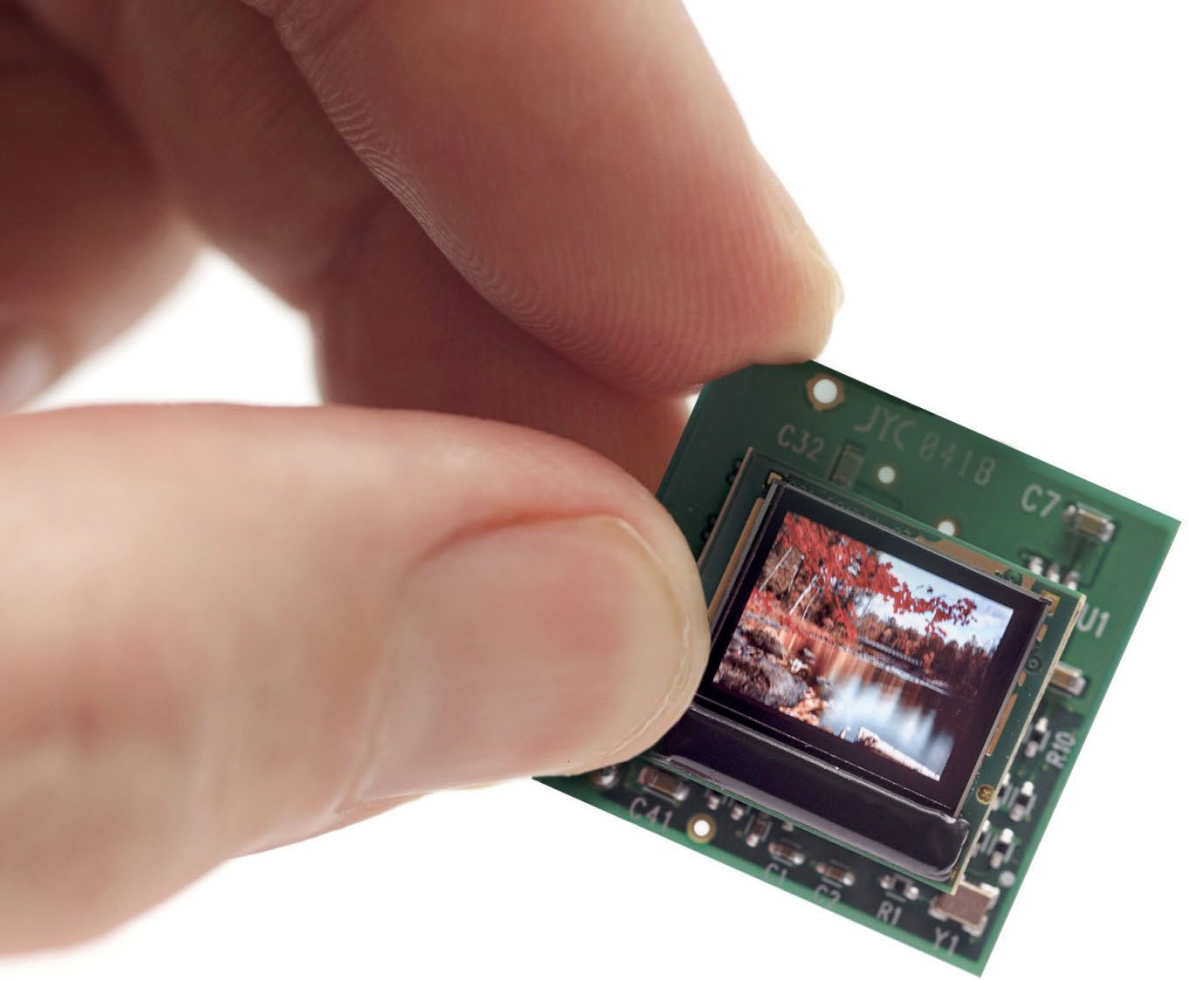

Vision:

Enable the visualization of digital information and imagery with OLED technology

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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

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eMagin at a Glance

Headquarters:	**Hopewell Junction, NY**
Employees:	**100+**
Revenue:	**$26.0M in 2021** • 93% from Product Sales, 7% Contracts • 61% U.S., 39% International • 30 countries served
Market Cap:	**$55.8M***
Ticker/Exchange:	**EMAN / NYSE American**
Patents:	**69 issued, 21 pending**

The technology leader in OLED Displays

Making AR/VR a reality

100% U.S. Based Manufacturing

**Based on closing price on 8/9/22 and approximately 73.2 million shares outstanding.*

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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

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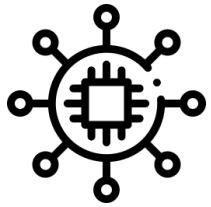
Year-To-Date Q2 2022 Update: Strong Backlog and Increased Throughput

Financials

- Product revenues for six months ended June 30, 2022 totaled $14.1 million, compared with $11.8 million in the prior-year period
- Contract revenues for six months ended June 30, 2022 totaled $0.5 million, compared with $1.2 million in the prior-year period
- Backlog of open orders of $14.3 million as of the end of Q2 2022, compared with $13.6 million as of the end of Q1 2022
- Cash and cash equivalents of $4.3 million as of June 30, 2022
- 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
- In December 2020, signed a 10-year lease for 25% of additional space to house the new equipment, including equipment to be purchased for the Company's patented high-brightness dPd production process
- As of the end of the second quarter, the Company has taken delivery of seven pieces of production equipment and received $19.8 million of grant money of the $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



Advancing Product Development

- 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

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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 it dPd displays and leverage the full potential of the equipment acquired under the Title III and IBAS funding grants

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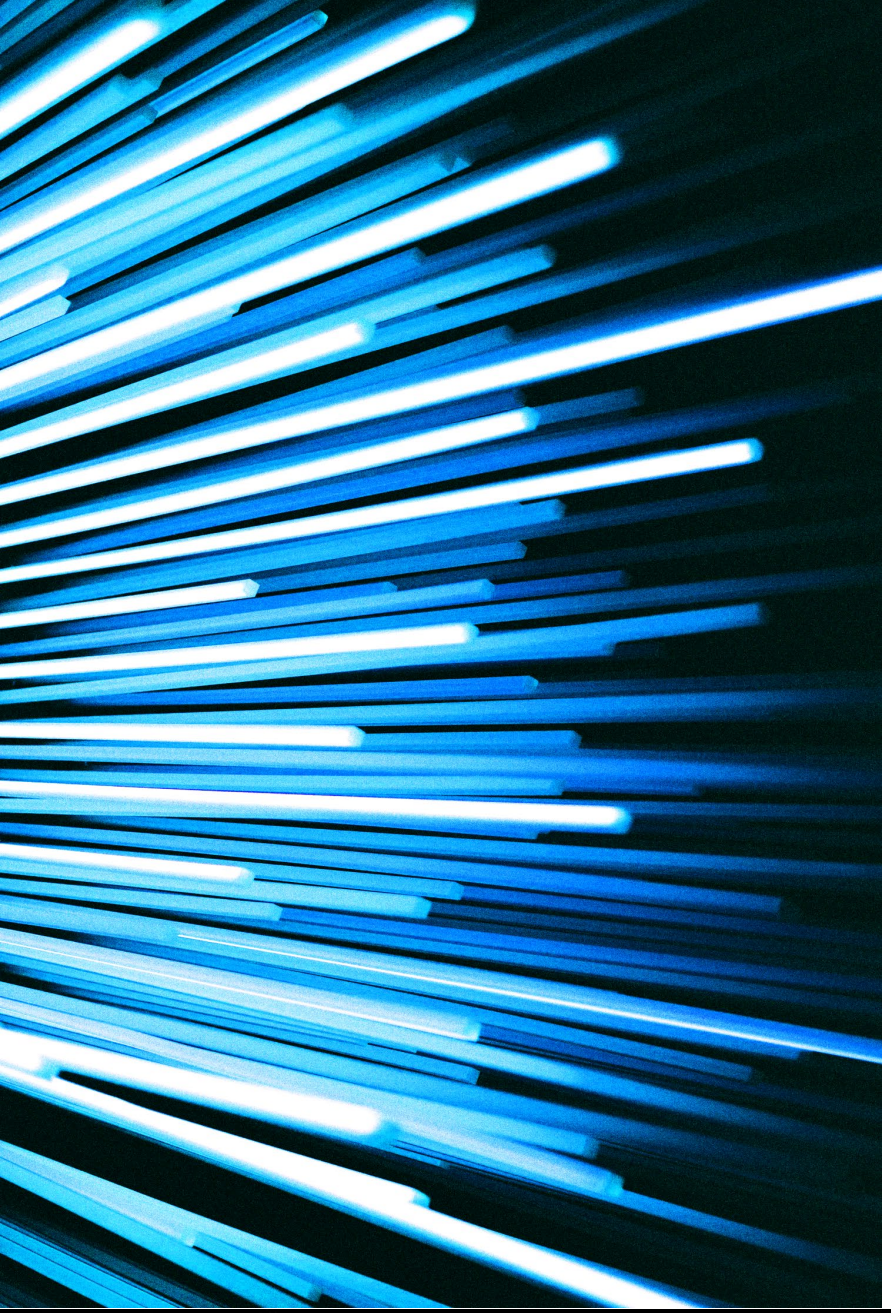

Our OLED Technology Advantage: Lowest Power, Highest Brightness

- Brightest OLED commercially available – monogreen with peak luminance over 40,000 cd/m^2
- Full-color over 10,000 cd/m^2 demonstrated in 2021
- 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

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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
  - SVGA+ 852x600
  - DSVGA 800x600
  - SXGA096 1280x1024
  - SXGA120 1280x1024
  - WUXGA 1920x1200
  - 2Kx2K 2048x2048
  - 4Kx4K

- Full-color SXGA OLED microdisplay
- First to develop high brightness monochrome green, now exceed 40,000 cd/m^2 at maximum luminance
- White with color filter displays, now exceed 3,000 cd/m^2
- Demonstrated unique and proprietary full-color direct patterned dPd™ microdisplay exceeding 10,000 cd/m^2 in 2021

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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 10,000cd/m^2 full-color OLED microdisplay
- Patented dPd technology applicable to any OLED microdisplay & meets brightness requirements
- Working with tier-one consumer company to develop this technology and manufacture at commercial scale
- Other advances used on white with color filter, like tandem OLED, can be used to move beyond 10,000cd/m^2 Maximum luminance
- Roadmap to ~ 30,000 cd/m^2 full color peak luminance
  - Roadmap begins with dPd measured at over 10,000 cd/m^2
  - Next step begins with 2 year project resulting in 20,000 cd/m^2
  - New equipment from $39M grant was designed to produce these 20,000 cd/m^2 displays in production

Direct patterning is ahead today and will remain ahead

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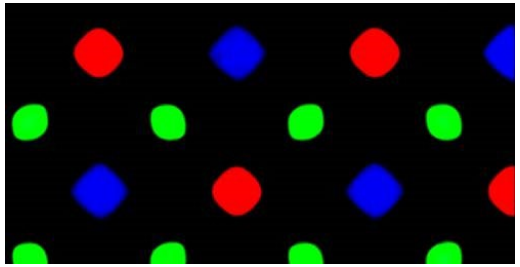
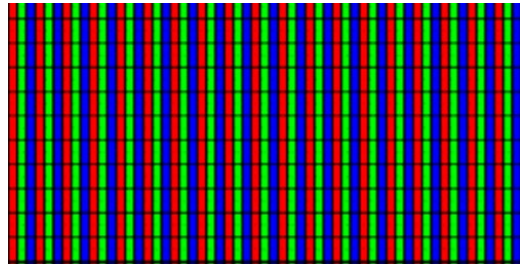
OLED Provides a Superior AR/VR Experience

Magnification Highlights eMagin's Superior Fill Factor

OLED Cell Phone Display ~600 ppi



eMagin OLED Microdisplay >2,500 ppi



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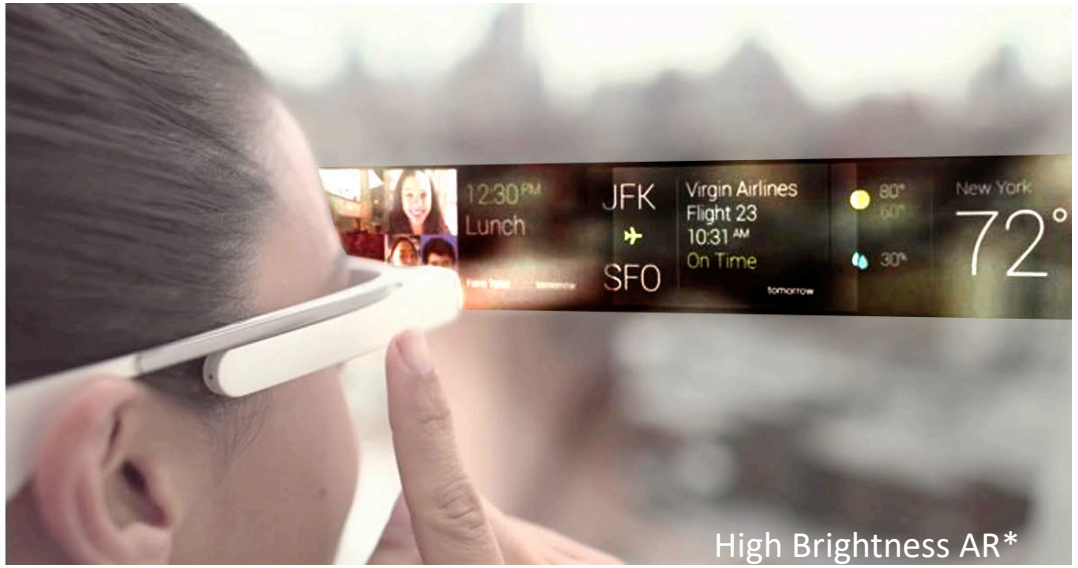
The Future of AR/VR Powered by dPd

Low Brightness AR*



High Brightness AR*

- 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 is ahead today in full-color OLED microdisplay brightness and will stay ahead with dPd

*for illustrative purposes only

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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 10,000 cd/m^2

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

Patents

- 69 patents issued and 21 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

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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

BAE SYSTEMS

TATA POWER

Elbit Systems

THALES

L3HARRIS™

LEONARDO DRS

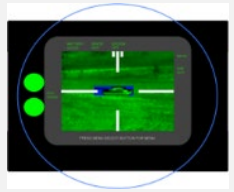
Raytheon

Products

Enhanced Night Vision Goggle

Helmet Display

Laser Range Finder



Simulation Training Devices

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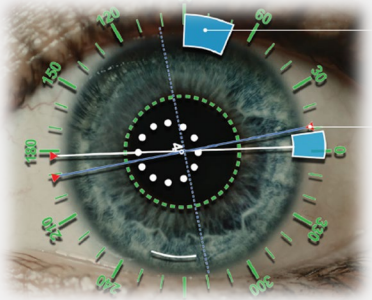
Commercial and Medical Markets Represent New Growth Opportunities and End-market Diversification

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

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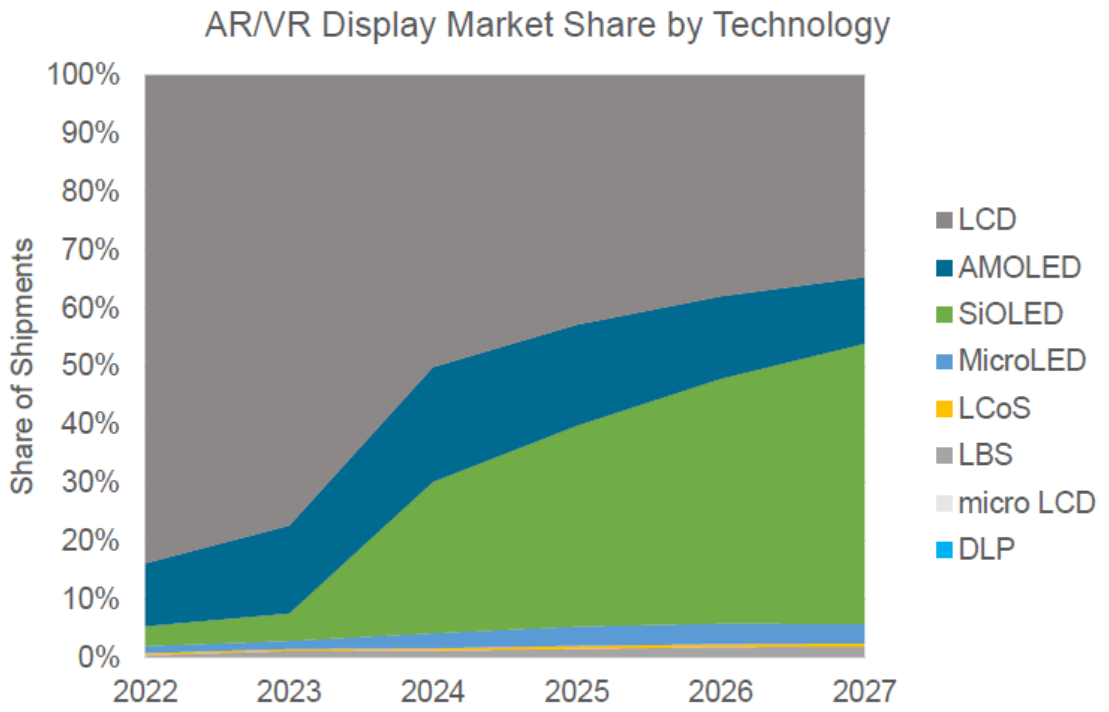
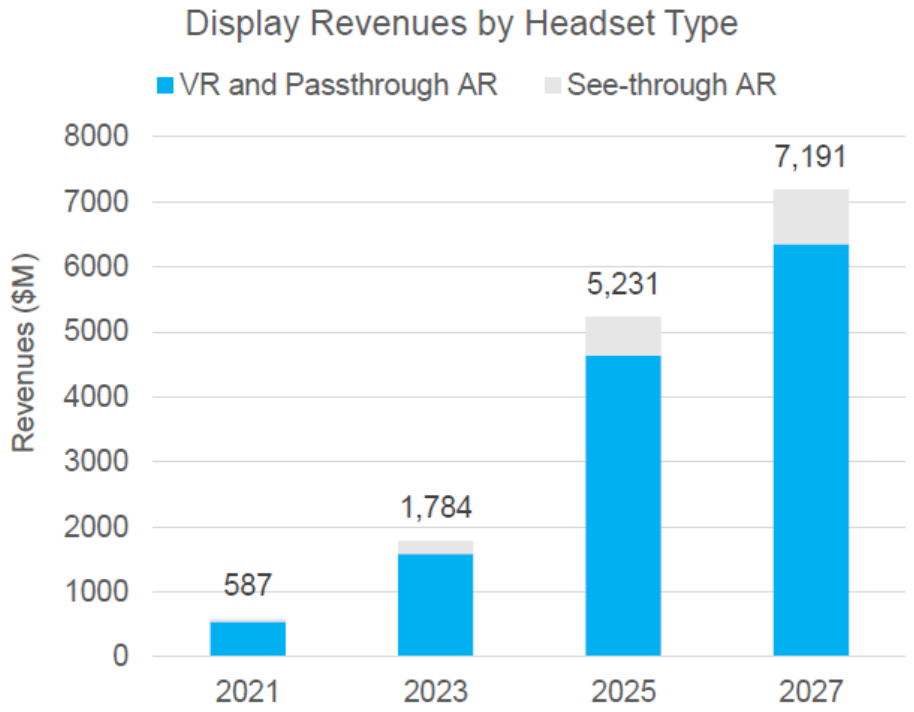
Display Market Share and Revenues

- 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

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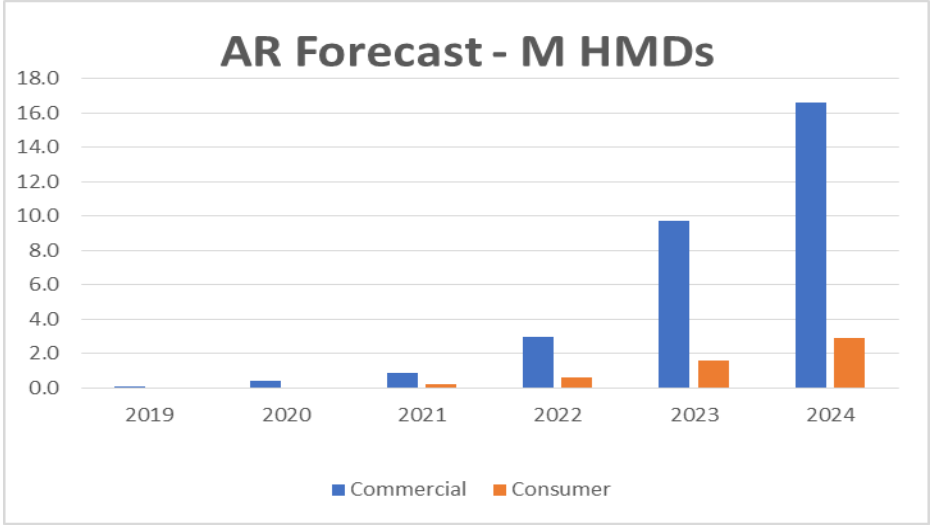
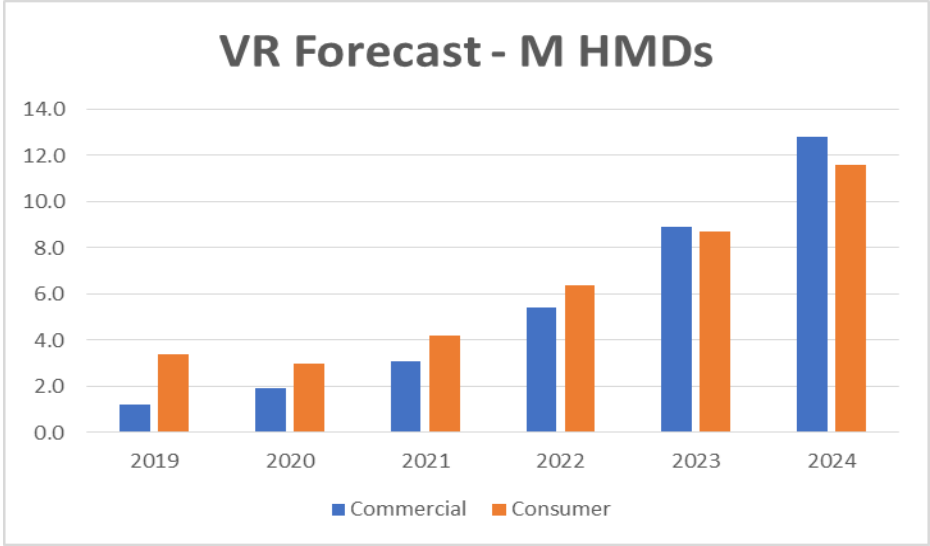
Well Positioned to Capitalize on Large Commercial and Consumer Opportunities

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

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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

Glass Lid

Advanced Packaging Capabilities

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Experienced Management Team of Recognized Industry Experts

Andrew Sculley *CEO*	• More than 20 years experience in OLED technology and manufacturing • Led Kodak OLED Systems • MS Physics Cornell, MBA Carnegie-Mellon
Dr. Amal Ghosh *COO*	• 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 *CFO*	• Previously eMagin's VP of Finance and Corporate Controller • +25 years of financial experience • Certified Public Accountant; BS Manhattan College
Oliver Prache *SVP Product Development*	• OLED product commercialization pioneer at Pixtech (France) and OIS Optical Imaging Systems • Diplôme d'Ingénieur from E.N.S.E.R.G.Grenoble France

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Appendices

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Consolidated Statement of Operations

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	2021	2022	2021
Revenues:				
Product	$ 7,026	$ 5,742	$ 14,053	$ 11,847
Contract	133	537	464	1,205
Total revenues, net	7,159	6,279	14,517	13,052
Cost of revenues:				
Product	5,522	5,466	10,309	10,173
Contract	68	242	150	600
Total cost of revenues	5,590	5,708	10,459	10,773
Gross profit	1,569	571	4,058	2,279
Operating expenses:				
Research and development	1,457	1,788	2,941	3,630
Selling, general and administrative	1,904	1,690	4,074	3,514
Total operating expenses	3,361	3,478	7,015	7,144
Loss from operations	(1,792)	(2,907)	(2,957)	(4,865)
Other (expense) income:				
Change in fair value of common stock warrant liability	226	2,642	1,372	(4,566)
Interest expense, net	(225)	(205)	(439)	(415)
Gain on forgiveness of debt	—	—	—	1,963
Other income, net	351	192	447	227
Total other income (expense)	352	2,629	1,380	(2,791)
Loss before provision for income taxes	(1,440)	(278)	(1,577)	(7,656)
Income taxes	—	—	—	—
Net loss	$ (1,440)	$ (278)	$ (1,577)	$ (7,656)
Loss per share, basic and diluted	$ (0.02)	$ 0.00	$ (0.02)	$ (0.11)
Weighted average number of shares outstanding:				
Basic and Diluted	73,895,212	72,193,205	73,368,347	71,238,060

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Consolidated Balance Sheet

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

	June 30, 2022	December 31, 2021
ASSETS		
Current assets:		
Cash and cash equivalents	$ 4,290	$ 5,724
Restricted cash	511	806
Accounts receivable, net	5,020	4,488
Account receivable-due from government awards	367	292
Unbilled accounts receivable	1,318	1,102
Inventories	7,661	7,632
Prepaid expenses and other current assets	672	691
Total current assets	19,839	20,735
Property, plant and equipment, net	37,499	30,483
Operating lease right - of - use assets	84	113
Intangibles and other assets	33	37
Total assets	$ 57,455	$ 51,368
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 1,160	$ 1,348
Accrued compensation	2,181	1,664
Revolving credit facility, net	2,087	1,974
Common stock warrant liability	2	1,374
Other accrued expenses	391	722
Deferred revenue	114	54
Operating lease liability - current	63	60
Finance lease liability - current	1,127	1,133
Other current liabilities	366	608
Total current liabilities	7,491	8,937
Other liability - long term	28	28
Deferred income - government awards - long term	19,161	12,458
Operating lease liability - long term	22	54
Finance lease liability - long term	11,647	11,647
Total liabilities	38,349	33,124
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 $5,659) stated value $1,000 per share, $0.001 par value: 10,000 shares designated and 5,659 issued and outstanding as of June 30, 2022 and December 31, 2021.	—	—
Common stock, $0.001 par value: authorized 200,000,000 shares, issued 75,621,126 shares, outstanding 75,459,060 shares as of June 30, 2022 and issued 72,931,490 shares, outstanding 72,769,424 shares as of December 31, 2021.	75	72
Additional paid-in capital	278,372	275,936
Accumulated deficit	(258,841)	(257,264)
Treasury stock, 162,066 shares as of June 30, 2022 and December 31, 2021.	(500)	(500)
Total shareholders' equity	19,106	18,244
Total liabilities and shareholders' equity	$ 57,455	$ 51,368

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Adjusted EBITDA

$ in thousands

	Three Months Ended June 30,		Six Months Ended June 30,	
	2022	**2021**	**2022**	**2021**
Net loss	$ (1,440)	$ (278)	$ (1,577)	$ (7,656)
Non-cash compensation	214	37	379	50
Change in fair value of common stock warrant liability	(226)	(2,642)	(1,372)	4,566
Depreciation and intangibles amortization expense	949	694	1,671	1,427
Interest expense	225	205	439	415
Adjusted EBITDA	$ (278)	$ (1,984)	$ (460)	$ (1,198)

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