The background features a green wireframe illustration of an airplane flying over a terrain of rolling hills. A beam of light originates from the ground and points towards the aircraft. The overall aesthetic is futuristic and digital.

emcore[®]

Investor Presentation

March 2024

Safe Harbor Statement

Forward-Looking Statements:

The information provided herein may include forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 (“Exchange Act”). These forward-looking statements are largely based on EMCORE Corporation’s (the “Company”) current expectations and projections about future events and financial trends affecting the financial condition of the Company’s business. Such forward-looking statements include, in particular, statements about the Company’s future results of operations, financial position, plans, strategies, targets, focus, goals, opportunities and business prospects; expectations regarding the Company’s customer contracts, long-term programs, backlog and pipeline; expectations with respect to operating leverage; expectations and estimates with respect to the market and industry in which the Company operates; expectations regarding the timing, size and completion of the proposed offering; expectations regarding the sale or shutdown of certain products, businesses and facilities, including the expected timeframe thereof and benefits therefrom; and assumptions relating to the inertial navigation operating model.

These forward-looking statements may be identified by the use of terms and phrases such as “anticipates”, “believes”, “can”, “could”, “estimates”, “expects”, “forecasts”, “intends”, “may”, “plans”, “projects”, “targets”, “will”, and similar expressions or variations of these terms and similar phrases. Statements regarding matters that are not historical are forward-looking statements. These forward-looking statements relate to future events or the Company’s future financial performance and are subject to business, economic, and other risks and uncertainties, both known and unknown, that may cause actual results, levels of activity, performance, or achievements of the Company’s business or its industry to be materially different from those expressed or implied by any forward-looking statements.

These forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those projected, including without limitation, the following: (a) risks related to our ability to obtain capital; (b) disruptions to our operations as a result of our restructuring activities; (c) costs and expenses incurred in connection with restructuring activities and anticipated operational cost savings arising from the restructuring actions; (d) the effects of personnel losses; (e) risks related to the sale of our Broadband and defense optoelectronics businesses, including without limitation (i) the failure to fully realize the anticipated benefits of such transaction, (ii) third party costs incurred by the Company related to any such transaction, (iii) risks associated with liabilities related to the transaction that were retained by the Company, and (iv) risks and uncertainties related to the transfer to the buyer of our manufacturing support and engineering center in China; (f) risks related to shutdown or potential sale of our Chips business and wafer fabrication facility, including without limitation (i) the failure to successfully negotiate or execute definitive transaction agreements, (ii) termination of any definitive agreement prior to closing, (iii) failure to achieve any anticipated proceeds from any such sale or to fully realize the anticipated benefits of such a transaction, even if the potential transaction occurs, (iv) diversion of management’s time and attention from our remaining businesses to the sale of such businesses, (v) third party costs incurred by the Company related to any such transaction, and (vi) risks associated with any liabilities related to the transaction or any such assets or business that are retained by the Company in any sale transaction; (g) rapidly evolving markets for the Company’s products and uncertainty regarding the development of these markets; (h) the Company’s historical dependence on sales to a limited number of customers and fluctuations in the mix of products and customers in any period; (i) delays and other difficulties in commercializing new products; (j) the failure of new products: (i) to perform as expected without material defects, (ii) to be manufactured at acceptable volumes, yields, and cost, (iii) to be qualified and accepted by our customers, and (iv) to successfully compete with products offered by our competitors; (k) uncertainties concerning the availability and cost of commodity materials and specialized product components that we do not make internally; (l) actions by competitors; (m) risks and uncertainties related to the outcome of legal proceedings; (n) risks and uncertainties related to applicable laws and regulations; (o) acquisition-related risks, including that (i) the revenues and net operating results obtained from our recent acquisitions may not meet our expectations, (ii) the costs and cash expenditures for integration of our recent acquisitions may be higher than expected, may take longer than expected to implement and may result in fewer efficiencies and improvements to the operation of our business and our financial results than currently expected, (iii) we may not recognize the anticipated synergies from our recent acquisitions, (iv) there could be losses and liabilities arising from these acquisitions that we will not be able to recover from any source, and (v) we may not realize sufficient scale from these acquisitions and will need to take additional steps, including making additional acquisitions, to achieve our growth objectives; (p) the effect of component shortages and any alternatives thereto; (q) risks and uncertainties related to manufacturing and production capacity; (r) risks related to the conversion of order backlog into product revenue; and (s) other risks and uncertainties discussed under Item 1A - Risk Factors in our Annual Report on Form 10-K for the fiscal year ended September 30, 2023, as such risk factors may be amended, supplemented, or superseded from time to time by the Company’s subsequent periodic reports it files with the Securities and Exchange Commission (“SEC”).

Forward-looking statements are based on certain assumptions and analysis made in light of the Company’s experience and perception of historical trends, current conditions, and expected future developments as well as other factors that the Company believes is appropriate under the circumstances. While these statements represent the Company’s judgment on what the future may hold, and the Company believes these judgments are reasonable, these statements are not guarantees of any events or financial results. All forward-looking statements in this presentation are made as of the date hereof, based on information available to the Company as of the date hereof, and subsequent facts or circumstances may contradict, obviate, undermine, or otherwise fail to support or substantiate such statements. The Company cautions you not to rely on these statements without also considering the risks and uncertainties associated with these statements and the Company’s business that are addressed in its filings with the SEC that are available on the SEC’s web site located at www.sec.gov, including the sections entitled “Risk Factors” in the Company’s Annual Report on Form 10-K. Certain information included in this presentation may supersede or supplement forward-looking statements in its other Exchange Act reports filed with the SEC. The Company does not intend to update any forward-looking statement to conform such statements to actual results or to changes in the Company’s expectations, except as required by applicable law or regulation.

Safe Harbor Statement

Non-GAAP Financial Measures:

This presentation includes non-GAAP financial measures where indicated. Management believes these non-GAAP financial measures reflect the Company's core ongoing operating performance and facilitates comparisons across reporting periods. The Company uses these measures when evaluating its financial results and for planning and forecasting of future periods. The Company believes that these non-GAAP measures are also useful to investors in assessing its operating performance. While the Company believes in the usefulness of these non-GAAP measures, there are limitations. Non-GAAP measures may not be reported by other companies in the Company's industry and/or may not be directly comparable to similarly titled measures of other companies due to potential differences in calculation. Further, the Company believes that non-GAAP measures have limitations in that they do not reflect all of the amounts associated with the Company's results of operations as determined in accordance with GAAP. These measures should only be used to evaluate the Company's results of operations in conjunction with the corresponding GAAP measures and investors should consult the appendix of this presentation for reconciliations of these non-GAAP financial measures to their most directly comparable U.S. GAAP measure.

Trademarks:

EMCORE and the EMCORE logo are trademarks of EMCORE Corporation. All other trademarks and service marks are the property of their respective owners. This presentation shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of these securities in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or other jurisdiction.

The New EMCORE: A&D Inertial Navigation Solutions (INS)

emcore[®]

Founded in 1986, IPO in 1997

INERTIAL NAVIGATION SOLUTIONS

- › **Largest independent supplier** of Inertial Navigation solutions with **vertically integrated operations**
- › **Pure Play in Aerospace and Defense** in the \$3B+¹ Inertial Navigation Market
- › **\$605M of Estimated Lifetime Contract Value in Production and Awarded** with the leading Prime Contractors world-wide



FACILITIES

Budd Lake, NJ (HQ):
FOG and RLG
(acquired April 2022)

Alhambra, CA:
Wafer Fab, FOG, Admin

Concord, CA:
QMEMS
(acquired June 2019)

Tinley Park, IL:
FOG and TACNAV
(acquired August 2022)

(1) Estimated global market size for high-end inertial sensors in 2021 per Yole High End Sensors Market Research Report 2022.

The New EMCORE: A&D Inertial Navigation Solutions (INS)

LARGEST INDEPENDENT SUPPLIER OF INERTIAL NAVIGATION SOLUTIONS

~\$3B

ADDRESSABLE MARKET - A SIGNIFICANT GROWTH OPPORTUNITY

COMMERCIAL



\$394M TAM

TACTICAL



\$898M TAM

NAVIGATION



\$845M TAM

STRATEGIC



\$687M TAM

WARFIGHTERS DEPEND ON EMCORE FOR MISSION CRITICAL INERTIAL NAVIGATION PRODUCTS

EMCORE's inertial navigation systems are vital in GPS-denied environments and crucial for the U.S. Military's resilient PN&T capabilities

EMCORE ADVANTAGE^(a)

Lower Cost

Smaller

Lighter

Less Power

ESTABLISHED, LONG-STANDING RELATIONSHIPS WITH LEGACY AND EMERGING PRIME CONTRACTORS

BOEING
35 years

LOCKHEED MARTIN
35 years

L3HARRIS
35 years

ULA
35 years

THALES
25 years

Collins Aerospace
20 years

Raytheon Technologies
20 years

BAE SYSTEMS
15 years

TELEDYNE FLIR
15 years

aselsan
16 years

gyrodata
12 years

KRATOS
11 years

KONGSBERG
10 years

GENERAL ATOMICS
7 years

roketis n
5 years

ROBOTIC RESEARCH
5 years

SHIELD AI
4 years

ANDURIL
3 years

BLUE ORIGIN
3 years

VITA
3 years

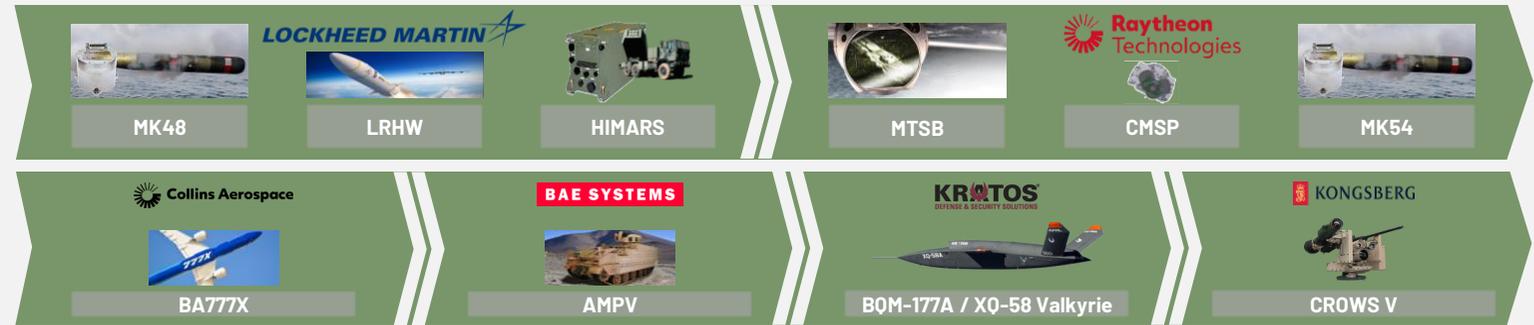
The New EMCORE: A&D Inertial Navigation Solutions (INS)

WIDE RANGE OF PRODUCTS AND TECHNOLOGIES WITH VERY HIGH BARRIERS TO ENTRY

- From Drilling Rigs to Satellites, EMCORE offers unique FOG, RLG and QMEMS products and technologies
- Component engineering and manufacturing drive superior cSWAP and Margins



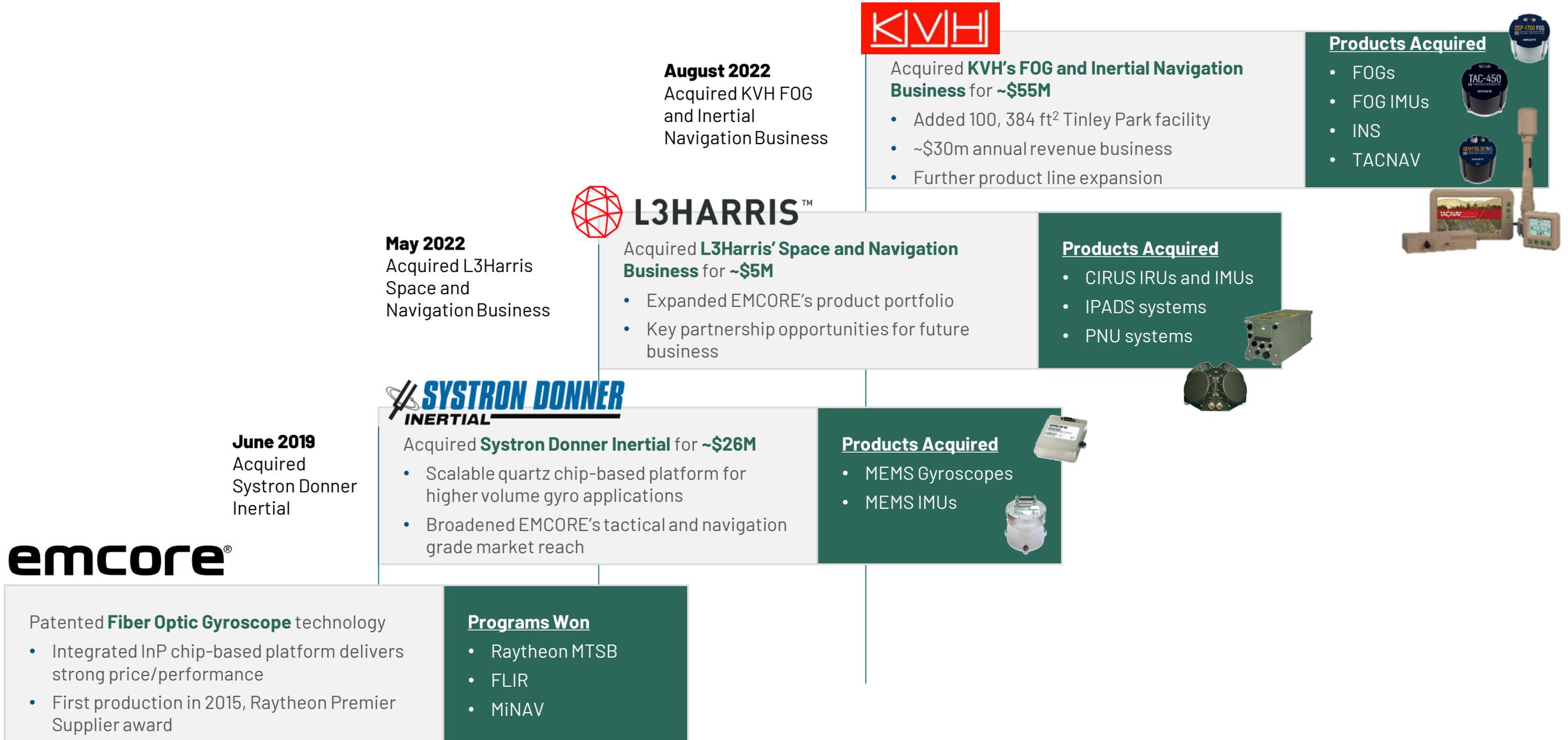
ROBUST BACKLOG, LARGE AND GROWING PIPELINE ON KEY LONG-TERM AND WELL-FUNDED PROGRAMS



IMPROVING GROSS MARGIN PROFILE WITH SIGNIFICANT OPERATING LEVERAGE

- Operational improvements and restructuring initiatives continue to improve gross margins
- Reducing internally funded R&D costs with customer funded NRE
- Significant operating leverage of business will drive margin enhancement as revenue continues to grow

Building the Leading Inertial Navigation Solutions Company



Successfully Exited Broadband & Defense-Opto Businesses

April 2023

Restructuring announced to shutdown Broadband & Defense-Opto product lines following months of discussions with interested buyers

August 2023

LOI signed for the sale of Broadband (excluding Chips) and Defense-Opto product lines

October 2023

Successfully completed sale of Broadband (excluding Chips) and Defense-Opto businesses to Photonics Foundries

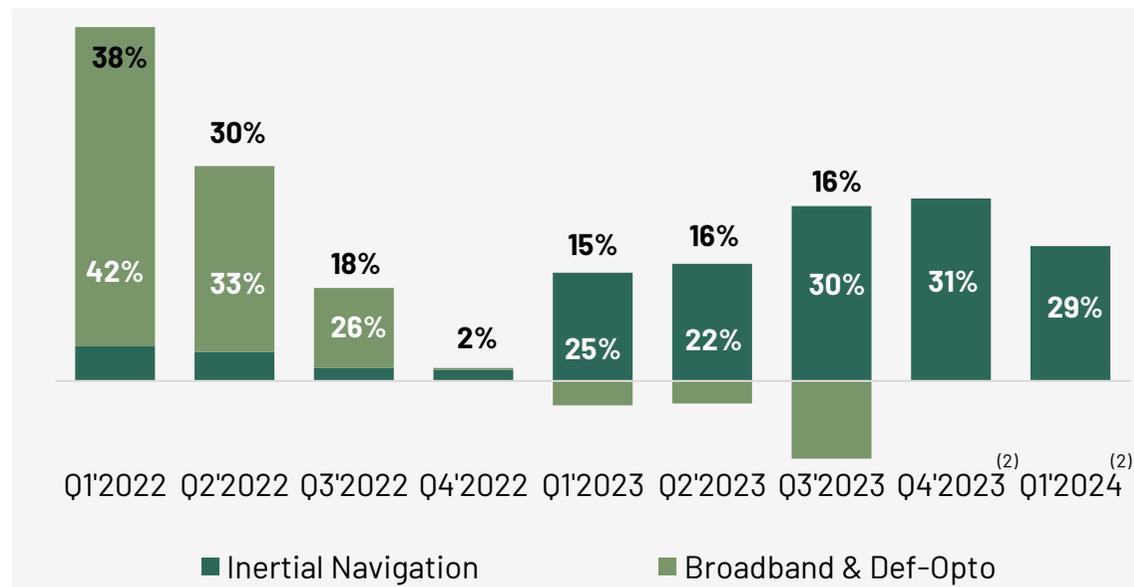
Future

Exploring sale of Chips business and Indium Phosphide (InP) wafer fabrication facility in Alhambra
Focus on growing A&D revenue and returning to profitability

Revenue



Non-GAAP Gross Profit & Margin⁽¹⁾



Note: Historical financials are not pro forma for the acquisitions of KVH and L3S&N.
 (1) Non-GAAP measure.
 (2) Q4'2023 and Q1'2024 do not include Non-GAAP Gross Profit contribution from Broadband & Def-Opto.

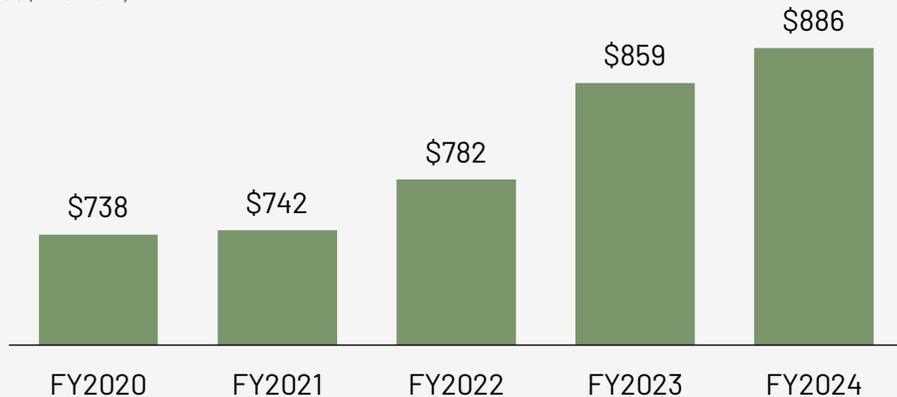
Positioned to Capitalize On Large & Growing TAM

EMCORE is positioned to benefit from increased U.S. defense spending:

- › Modernization and sustainment is a key focus of the U.S. military as geopolitical threats are increasing – specifically in Eastern Europe and the Indo-Pacific regions
- › Relevant modernization focus areas include space and GPS, hypersonic weapons & missile defense and unmanned aircraft – all which require sophisticated defense electronics systems and positioning units
- › Increasing FMS and DCS spending is driven by increased global demand for sophisticated weapons systems that require inertial navigation solutions

U.S. National Defense Budget⁽²⁾

(US\$ in billions)



~\$110B

FY23 US FMS NOTIFICATIONS

\$30B+

FY24 DOD BUDGET FOR MUNITIONS

\$185B+

GLOBAL MILITARY UAS SPENDING (10 YEARS)

\$280B

US CHIPS ACT SPENDING (10 YEARS)

\$3B+ Global Inertial Navigation Market⁽¹⁾

\$845M



Navigation Grade

(e.g., unmanned vehicles)

\$687M



Strategic Grade

(e.g., nuclear weapons)

\$898M



Tactical Grade

(e.g., platform stabilization)

\$394M



Industrial Grade

(e.g., industrial robots)

(1) Estimated global market size for high-end inertial sensors in 2021 per Yole High End Inertial Sensors Market Research Report 2022.

(2) Per historical U.S. DoD budget documents, Fiscal Year 2023 National Defense Authorization Act and FY2024 President's Budget Request.

\$605M of Est. Lifetime Contract Value in Production and Awarded + Additional ~\$300M of Identified New Opportunities

- Estimated \$160M of total Lifetime Contract Value of programs in production
- Selected and awarded development and qualification contracts on an additional estimated \$440M of Lifetime Contract Value
- Long lived, high priority programs provide strong visibility on future growth
- Pursuing additional ~\$300M in program pipeline

Major Current Programs

Program	Customer	End User	Initial Contract Date	Stage	Estimated Lifetime Value	Expected Duration
BoRG	L3 Harris	ULA	2022	Production	\$25M	6 Years
MK54 Torpedo	Raytheon	US Navy	2020	Production	\$20M	4 Years
IRST	Lockheed	USAF	2019	Production	\$20M	5 Years
AMPV	BAE	US Army	2018	Production	\$40M	10 years
MK48 Torpedo	Lockheed	US Navy	2014	Production	\$50M	10 Years
MMS	Raytheon	US Navy	2018	Dev/Qual	\$70M	5 Years
"Jaguar"	Raytheon	USAF	2018	Development	\$180M	10 Years

Tactical Grade: Product Overview

EMCORE is a trusted supplier of high-quality tactical-grade QMEMS and FOG products to Tier 1 Primes and global A&D players

Inertial Navigation System (INS)

Key Features:

- ✓ TACNAV optimized for land vehicles
- ✓ 30K unit installed base of TACNAV
- ✓ Powerful GPS integration at all levels



TAC-480
(SDI500)



TAC-460
(GEO-FOG 3D)



TACNAV 3D

Inertial Measurement Unit (IMU)

Key Features:

- ✓ Superior MTBF to Ring Laser Gyros
- ✓ QMEMS inherently Vibration tolerant
- ✓ PIC enables small FOG footprint



TAC-470
(SDI400)



TAC-480
(SDI500)



TAC-460
(SDI170)



TAC-450

Gyroscope (Rate Sensor)

Key Features:

- ✓ World's smallest closed loop FOG
- ✓ Ruggedized for Aviation
- ✓ Enables Industrial Robotics



EG-200



EG-120



SDD3000



DSP-4000



DSP-3100

End Use Cases

Stabilizing Systems



Guidance Systems



Flight Controls



Stabilizing Systems



Selected Customers & Programs

CROWS V



KONGSBERG



AMPV

BAE SYSTEMS



MK48 / MK54



Raytheon Technologies



BA777X

Collins Aerospace



BQM-177A / XQ-58

Valkyrie

KRATOS
DEFENSE & SECURITY SOLUTIONS



LRHW

LOCKHEED MARTIN



Navigation Grade: Product Overview

EMCORE has an expanding presence in the A&D market for FOG and RLG products

Inertial Navigation System (INS)

Key Features:

- ✓ Common High Accuracy RLG and FOG subsystems
- ✓ Robust, proprietary INS software with high order corrections



Inertial Measurement Unit (IMU)

Key Features:

- ✓ Integral Vibration Isolators for high shock environments
- ✓ Robust sensor hardware
- ✓ Industry standard form factors



Gyroscope (Rate Sensor)

Key Features:

- ✓ Used in geo-compassing, surveying and industrial applications
- ✓ Extremely small, closed loop architecture



End Use Cases

Advanced
Tactical Pods



Nuclear
Submarines



Unmanned &
Autonomy

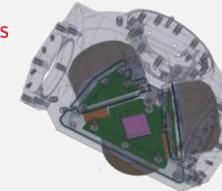


Ground Attack
Platforms



Selected Customers & Programs

CMSP



IRST



HIMARS



MTSB



Strategic Grade: Product Overview

Premier supplier of mission-critical precision and pointing navigation systems to U.S. space programs and land navigation systems

CIRUS-EX Compact IRU

Key Features:

- ✓ TOR qualified for vacuum operation
- ✓ Optimal redundancy through four gyro design
- ✓ High accuracy sensors require minimal compensation



STRAT-1000
(CIRUS)

CIRUS-A Inertial Measurement Unit (IMU)

Key Features:

- ✓ Wide variety of applications spanning aviation, marine, and land systems
- ✓ Common Sensor core with CIRUS-EX



STRAT-950
(CIRUS-A)

Ring Laser & Fiber Optic Gyro INS

Key Features:

- ✓ Quality pointing and positioning capabilities for land navigation systems
- ✓ Military and commercial use cases



PNU

End Use Cases

Missile
Guidance



Space
Navigation



Launcher
Pointing



Altitude
Control



Potential Customers



L3HARRIS™
FAST. FORWARD.



Leveraging 60+ years of experience and proven performance in systems deployed in space, EMCORE's Compact Inertial Reference Unit for Space (CIRUS) is designed and qualified as the next-generation product of our heritage system

Unmanned Navigation Opportunity: Overcoming GPS Denial with Size

Unmanned platforms serve as the catalyst of advanced modern warfare, presenting a large revenue opportunity

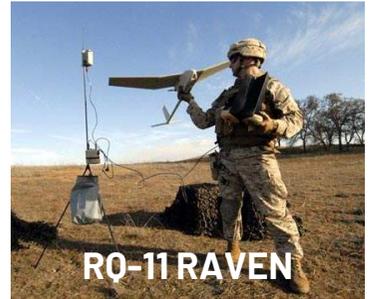
- > In a GPS denied environment, warfighters and unmanned systems depend on INS for situational awareness and navigation
- > Within cSWaP, size represents the single most important factor for inertial navigation systems in the unmanned systems market
- > EMCORE's TAC480 (SDI400) has 7X the accuracy of other comparable products in a package of only 5 cubic inches, which will drive demand for applications in small tactical UAS

~75% sensor size reduction creates worlds smallest 1^o/hr IMU



Cumulative Global Military Unmanned / UAS spending 2020A-2030E  **~\$188B⁽¹⁾**

CURRENT & FUTURE UAV PLATFORMS

Large (Groups 4-5)	 VALKYRIE	 MQ-9	 RQ-4
Medium (Groups 2-3)	 JUMP 20	 V-BAT	 FVR-90
Small (Groups 1-2)	 RQ-11 RAVEN	 COYOTE	 PUMA

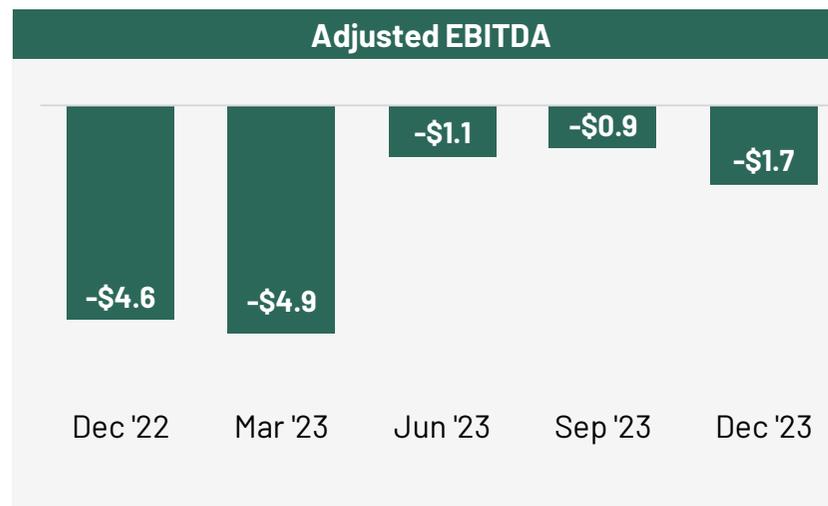
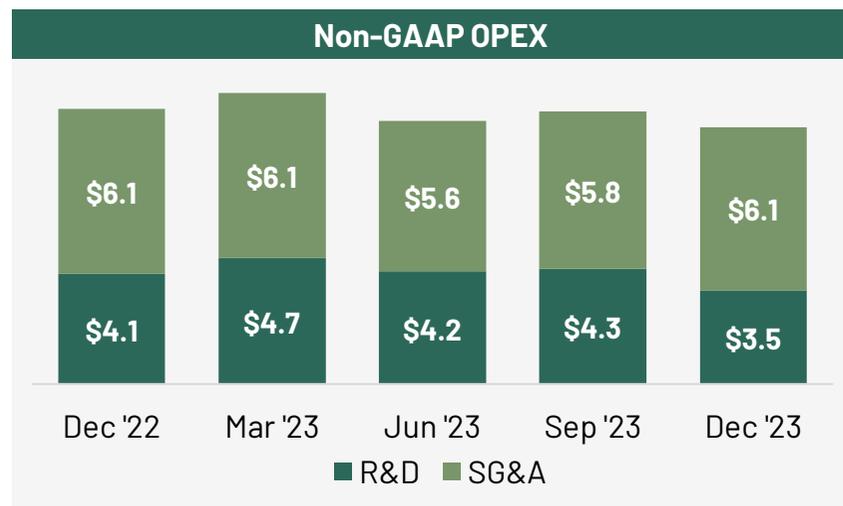
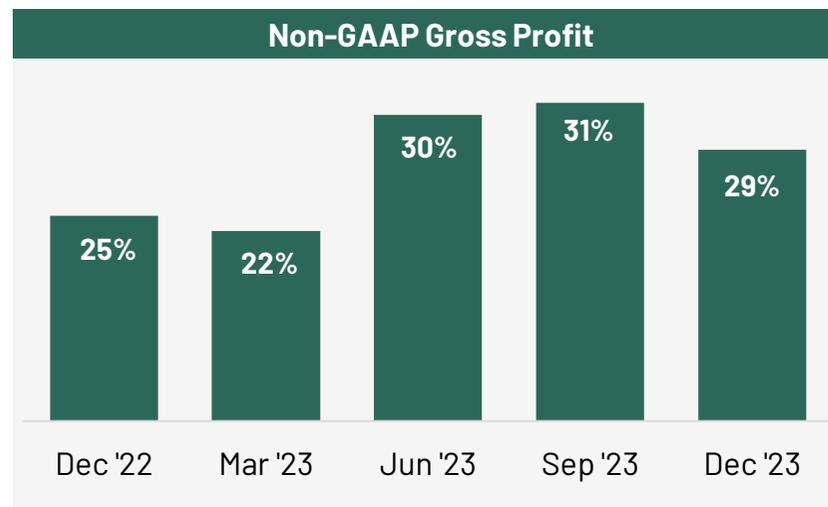
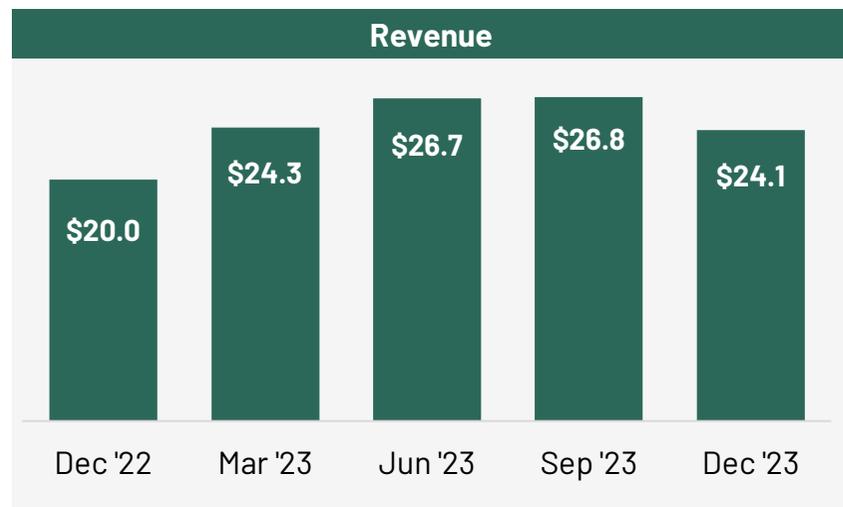
(1) Teal Group, World Military Unmanned Aerial Vehicle Systems, Market Profile and Forecast 2022.

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Financial

Inertial Navigation Quarterly Operating Results



- **Inertial Navigation revenue grew ~21% YoY in the December quarter**
 - Chicago, Concord, & Alhambra showed increased revenue from the September quarter, but not enough to offset lower shipments out of Budd Lake
 - Unexpected headwinds from export license timing and a PCB materials issues that ran up against the holidays
- **Continue to achieve a solid gross margin and substantially reduce internally-funded R&D**
- **Revenue guidance range for the March quarter is \$23-25M**
- **Expect a return to quarterly top-line growth in the June quarter, including:**
 - Revenue from new programs
 - Continued engineering and operational integration among sites
 - Full business systems integration within the fiscal year

Note: See appendix for reconciliations of GAAP to Non-GAAP financial measures.

Balance Sheet and Capitalization Summary

(USD in thousands)

Balance Sheet Snapshot	Spread	Maturity	Balance
Revolving Line of Credit ¹	3.75% ²	8/8/2026	\$4,650
Loan Payable - Current	5.50% ²	8/8/2026	\$852
Loan Payable - Non-Current	5.50% ²	8/8/2026	\$3,117
Total Debt at 12/31/23			\$8,619
Emcore Cash at 12/31/23 ³			\$18,959
Net Cash at 12/31/23			\$10,340

1) Revolving Line of Credit with Wingspire is an asset-based facility with an ability to borrow up to \$34m based on eligible accounts receivable and inventory. As of February 2, 2024 there was \$3.6m available for borrowing. Company must maintain minimum liquidity of \$12.5m, comprised of \$6m required excess availability and \$6.5m unrestricted cash. Company has \$500k restricted cash.

2) Interest is 1 Month SOFR + Spread

3) Reported Cash \$21,174k, less pass-through amounts related to discontinued operations totaling \$2,215k

Capitalization Snapshot	Outstanding	WAEP
Common Shares ⁴	89,127,898	
RSUs	3,758,881	
PSUs ⁵	1,574,668	
Options	7,704	\$4.68
Fully Diluted Shares ⁶	94,469,151	

4) Includes Pre-Funded Warrants totaling 11.9m

5) PSUs are shown assuming the maximum payout of 100%

6) Fully diluted shares do not count shares available for new grants (currently 416,612 shares) under Equity Plans or purchases to be made under the D&O share purchase plan

Data as of 12/31/2023

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Appendix

Experienced Management Team



JEFF RITTICHER
President, Chief Executive
Officer, and Director



TOM MINICHELLO
Chief Financial Officer



MATT VARGAS
VP of Sales



RYAN HOCHGESANG
VP & General Counsel



Inertial Navigation GAAP to Non-GAAP Reconciliations

\$000s	1Q23			2Q23			3Q23			4Q23			1Q24		
	GP	Opex	Op Profit	GP	Opex	Op Profit									
Inertial Navigation GAAP	4,379	12,349	(7,971)	4,861	13,995	(9,134)	7,260	10,070	(2,809)	6,893	35,718	(28,825)	6,087	10,397	(4,310)
	22%			20%			27%			26%			25%		
Stock Based Compensation	199	1,155	1,354	211	966	1,177	337	1,032	1,369	352	978	1,330	329	519	848
Asset Retirement Obligation	39	-	39	(30)	-	(30)	51	-	51	51	-	51	61	-	61
Acquisition Related	326	2,060	2,386	254	1,264	1,518	353	323	676	924	661	1,585	494	158	652
Restructuring, Separations, & Transitions	-	-	-	-	-	-	-	11	11	-	-	-	-	211	211
Litigation Related	-	105	105	-	884	884	-	(1,086)	(1,086)	-	1,346	1,346	-	(2)	(2)
Asset Impairment Charge	-	-	-	-	-	-	-	-	-	-	22,612	22,612	-	-	-
Gain/Loss on Asset Sales	-	(1,171)	(1,171)	-	-	-	-	-	-	-	-	-	-	(31)	(31)
Inertial Navigation Non-GAAP	4,943	10,200	(5,258)	5,296	10,881	(5,585)	8,001	9,790	(1,788)	8,220	10,121	(1,901)	6,971	9,542	(2,571)
	25%			22%			30%			31%			29%		
Depreciation			688			687			728			994			903
Inertial Navigation Adjusted EBITDA			(4,570)			(4,898)			(1,060)			(907)			(1,668)
Inertial Nav Adjusted EBITDA Margin			-18%			-18%			-5%			-3%			-7%