

Scott A. Graeff, President and CEO

East Coast IDEAS Conference June 22, 2022

Safe Harbor

Safe Harbor Statement Under the Private Securities Litigation Reform Act of 1995

This presentation includes information that constitutes "forward-looking statements" made pursuant to the safe harbor provision of the Private Securities Litigation Reform Act of 1995 that involve risks and uncertainties. These statements include the company's expectations regarding its technological and product capabilities, the nature of its market position, sales pipeline, intellectual property position and portfolio, and other expected benefits of recent acquisition, including the breadth of product offerings, complimentary products, expertise and sales opportunities and the ability to expand offerings to combined customer groups, the ability to establish a strong international presence, potential operational improvements and the ability to expand into additional high-growth markets, the company's future financial performance, including 2022 guidance, and market recognition of key technologies and demand for its products, backlog, sales growth, the company's overall growth potential, its balance sheet and capitalization and access to capital, its strategic position, and corporate and leadership culture. Management cautions the reader that these forward-looking statements are only predictions and are subject to a number of both known and unknown risks and uncertainties, and actual results, performance, and/or achievements of the company may differ materially from the future results, performance, and/or achievements expressed or implied by these forward-looking statements as a result of a number of factors. These factors include, without limitation, failure of demand for the company's products and services to meet expectations, failure of target markets to grow and expand, technological, operational and strategic challenges, integration of acquisitions, potential performance shortfalls as a result of the diversion of management's attention caused by transactions and integrating operations, global supply chain issues, geopolitical and economic factors and those risks and uncertainties set forth in the company's periodic reports and other filings with the Securities and Exchange Commission ("SEC"). Such filings are available on the SEC's website at www.sec.gov and on the company's website at www.lunainc.com. The statements made in this presentation are based on information available to Luna as of the date of this presentation, June 22, 2022, and Luna undertakes no obligation to update any of the forward-looking statements after the date of this presentation, except as required by law.

Adjusted Financial Measures

In addition to U.S. GAAP financial information, this presentation includes Adjusted EBITDA and Adjusted EPS, which are non-GAAP financial measures. These non-GAAP financial measures are in addition to, and not a substitute for or superior to, measures of financial performance prepared in accordance with U.S. GAAP. A reconciliation of Net Income to Adjusted EBITDA and Net Income to Adjusted EPS are included in the appendix to this presentation.

Luna – Enabling the Future with Fiber

- Positioned as a global fiber optic leader
- Proprietary fiber-optic based measurement technology, offering unprecedented combination of performance and economics
- Customers in attractive markets: Defense, Communications, Infrastructure, Energy, Automotive and Aerospace
- Positioned to take advantage of trends such as vehicle lightweighting, smart infrastructure, increasing needs for global security, and increasing demands on data centers and broadband capacity
- Adequately capitalized to fund growth
- Long-tenured, experienced executive team / board
- Corporate culture of innovation and integrity



Luna is a global company



Revenue² FY21 \$87.5M FY22 Guidance \$109M-115M

FY21 \$7.6M FY22 Guidance \$10M-12M

AEBITDA^{1,2}

Aberdeen, UK – Sales Edinburgh, Calgary,B - Sales/Eng/FS Farnborough, UK - Corp/Eng United Kingdom Winfrith, UK - Eng/FS TeraMetrix Division ortishead, UK - Eng, Mfg, FS Ann Arbor, MI Santa Clara, CA – RIO- Mfg/Sales Headquarters - Roanoke, VA Beijing, China Lausanne, Switzerland Chino, CA – optical communications Lightwave Division Brea, CA – Engineering/FS - Blacksburg, VA Madrid, Spain - Sales Guangzhou, China - Atlanta, GA Germany - Sales Shanghai, China Miami, FL – Sales Dubai, UAE - Sales/Eng/FS Houston, TX -Sales/Eng/FS Dallas, TX - Sales ★ Corporate HQ Division HQ Commercial only OptaSense

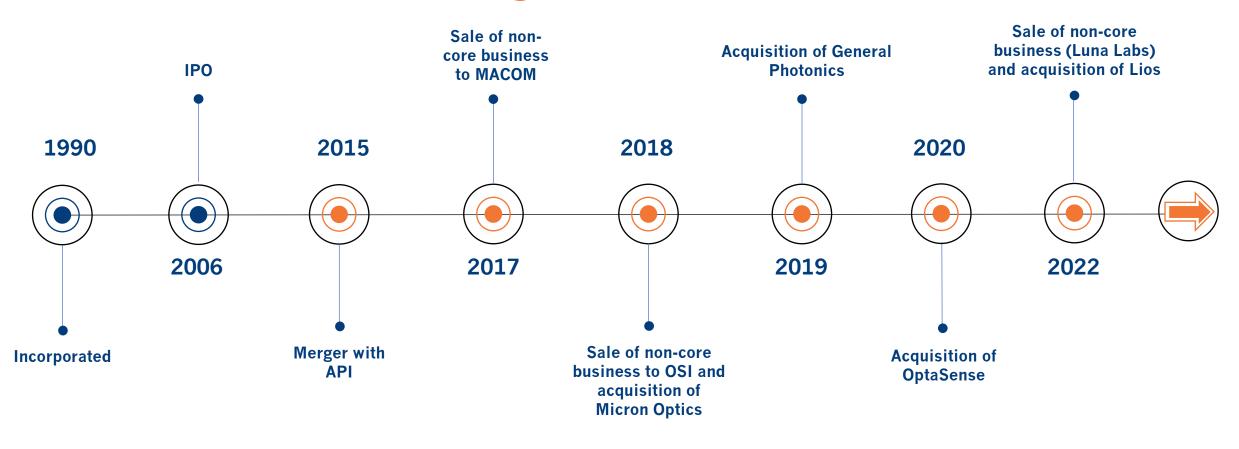
~400 Employees

¹Adj EBITDA is a non-GAAP measure. Reconciliation of comparable GAAP measures to non-GAAP measures are included in the Q4 21 supplemental materials found on our website.

² Reflects guidance provided on May 16, 2022. This is not a reaffirmation of guidance.

Luna has a clear vision and established history

Vision: Enabling the Future with Fiber



Luna Today and Into the Future:

A Compelling business model with strong growth potential

Revenue Growth



Organic Growth: Mid-to High-teens

18% to 20%

Strategic M&A

Within core focus and accretive

Bottom-Line Focus



Gross Margin 60%

AEBITDA

15%-20% of Revenue

Shareholder Return

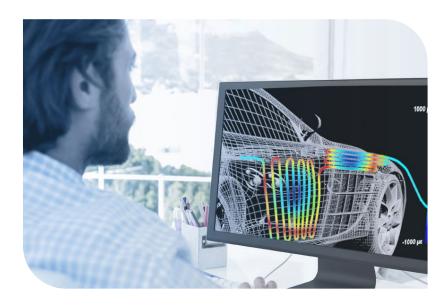


Continued Cash Generation

while investing for growth

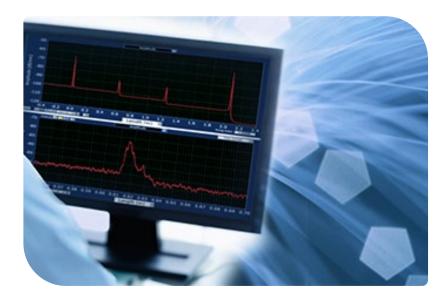
Increasing Non-GAAP EPS

Luna Overview



Sensing

- Short-range, high resolution
- Long-range, high speed
- Long-range, continuous
- Material thickness

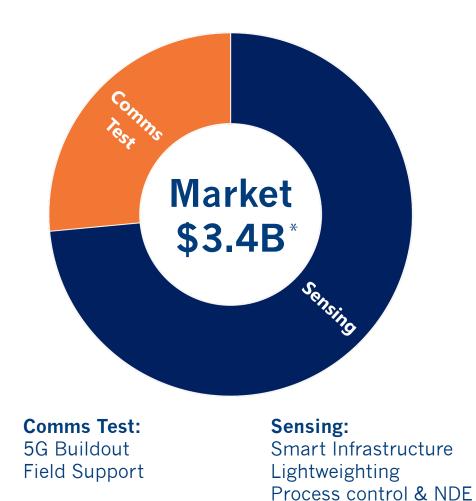


Comms Test

- Components
- Short-haul network

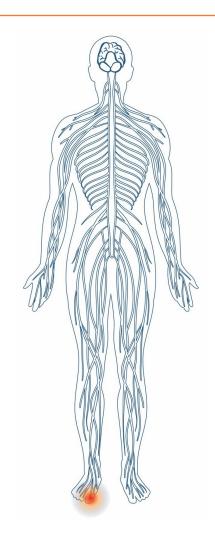
Where Does Luna Play?

	Comms Test	Sensing
Market size*	\$900M	\$2.5B
Luna growth	15%-20%	20-25%
Drivers	5G, Silicon Photonics	Lightweighting, Smart Infrastructure, IoT
Key competition	Keysight, Viavi, Exfo	HBM, Vishay, National Instruments



^{*}Total SAM based on Luna estimates and published market reports

Sensing



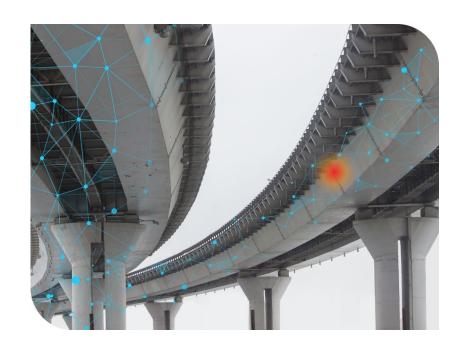
- Fiber optic sensors are the "nerves" of smart materials
- Luna's products are the "brain" that collects and aggregates data from fiber sensor "nerves"
- The new OptaSense acquisition will add missing capability to Luna's Sensing business

Sensing: Short-range, high-resolution



- Product: ODiSI
- High-Definition Fiber Optic Sensing
 - Measuring strain and temperature in composites and other advanced materials
 - Focus on military and commercial aerospace and automotive

Sensing: Long-range, high-speed



- Product: Hyperion
- High-Speed, Long-Range FBG Sensing
 - Measuring strain, temperature, acceleration, displacement and pressure
 - Focus on structural health and security
 - Buildings, tunnels, bridges
 - Perimeter security

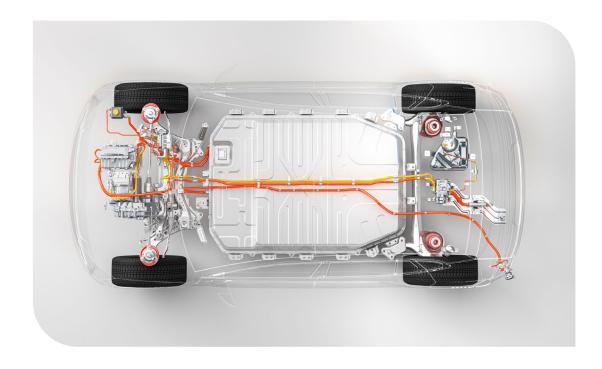


Sensing: Long-range, continuous



- Product: OptaSense
- Market Leader in Long-Range Distributed Acoustic Sensing (DAS)
 - Proprietary distributed acoustic sensing and software analytics
 - Measure acoustic signals continuously using fiber over very long lengths (100 km)
 - Markets
 - Borders, perimeter security, transportation, pipelines, oil and gas

Sensing: Material thickness



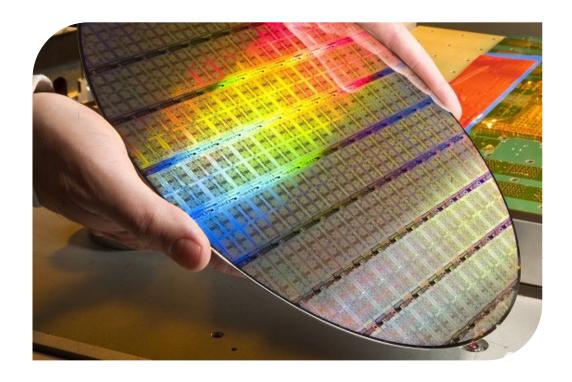
- Product: Terahertz technology
- Layer thickness measurements for process control, inspection and non-destructive testing
 - Advanced technology measures thickness of opaque materials
 - Unique measurement of composites and coatings with easy-to-use hand-held tools
 - Focus on manufacturing environments and field test for military-aerospace
 - Plastic and industrial packaging
 - Used extensively on F35 and F22 for anti-radar surface treatment
 - Optimization of EV battery production

Comms Test



- Increased data and video consumption
 - Video forecasted to represent 82% of all IP traffic in 2022, 34% CAGR
- Growth in mobile and 5G
 - Mobile data traffic growing at 46% CAGR
- Cloud services and adoption of Internet of Things
 - Data center traffic growing at 26% CAGR
 - 28.5 billion IoT networked devices by 2022

Comms Test: Components



- Product: Optical Vector Analyzer (OVA)
- Ensuring speed at the chip level
- Unprecedented visibility inside devices you can't fix what you can't see
- Reduces time and cost associated with the development of high-speed optical components
- Focus on enabling the carriers to move to 5G networks

Comms Test: Short-haul network



- Product: Optical Backscatter Reflectometer (OBR)
- Bandwidth demands continue to drive double-digit connectivity growth
- Delivers unprecedented visibility into short-haul networks
- Emerging market for on-board aircraft communications
- Ensuring network "up time" on Lockheed Martin's F-35



1Q FY22 Results

First-Quarter 2022: Key Financial Results

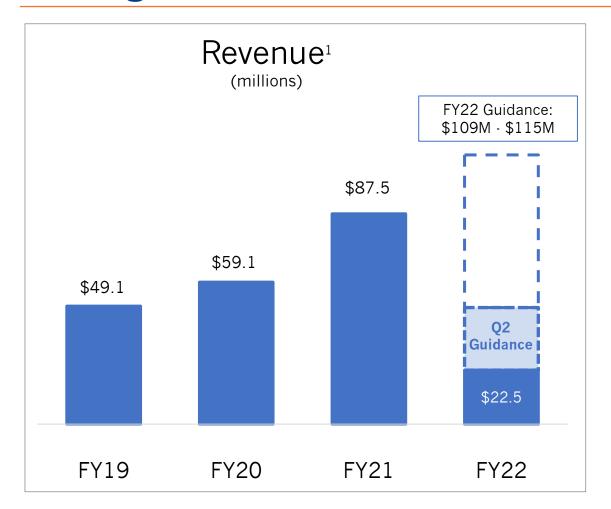
- Revenues of \$22.5M; up 7% year-over-year
- Gross margin of 64%, compared to 58% for the prior-year period
- Adjusted operating income of \$1.4M, compared to \$957k for the prior-year period
- Adjusted EBITDA¹ of \$1.7M, compared to \$1.3M for the prior-year period
- Adjusted EPS¹ of \$0.05, compared to \$0.03 for the prior-year period
 - Reported (GAAP) EPS was \$0.30 due to the gain on the sale of Luna Labs

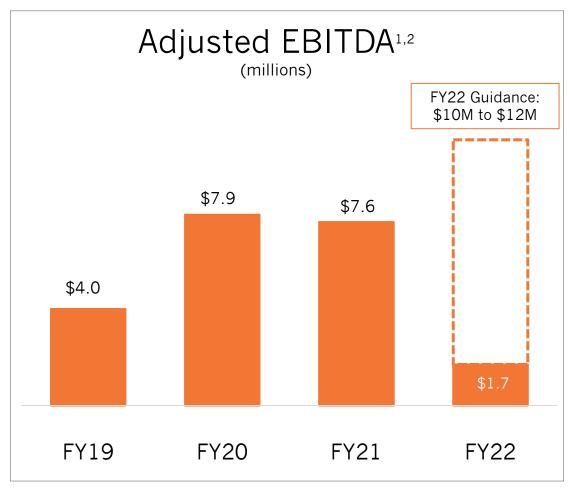
¹Adj EPS and EBITDA are a non-GAAP measures. Reconciliation of comparable GAAP measures to non-GAAP measures are included in the appendix to this presentation.

First-Quarter 2022 and Recent Business Highlights

- Luna Innovations is now a pure play leader in fiber-based technologies with the divestiture of Luna Labs complete
- Q1 2022 financial performance
 - Record ODiSI shipments
 - Strong backlog in Hyperion and THz; growth in Rio Laser sales
 - Strong demand for OptaSense
- Closed on the acquisition of Lios, creating the strongest distributed fiber sensing play on the market
 - Further expands global presence, building on existing, strong international customer base and sales capability
- Building pipeline of larger, multi-unit, blanket orders
 - Expanded relationships with existing customers in aerospace, electric vehicle and perimeter defense markets
 - Secured incremental, multi-unit order for OBR 6200 through strong, long-standing relationship with Lockheed Martin
- Luna receives Gold Tier Award from BAE Systems, for exceptional performance and contributions to supply chain success

Strong Financial Results





¹Results shown include the reclassification of Luna Labs to Discontinued Operations.

² Adj EBITDA is a non-GAAP measure. Reconciliation of comparable GAAP measures to non-GAAP measures are included in the appendix of the Q1 22 presentation found on our website.

Balance Sheet

- Balance sheet on March 31, 2022:
 - \$144.7M in total assets
 - \$10.8M in cash and cash equivalents
 - \$47.4M in working capital
- Total debt of \$22.3M outstanding
 - \$7.3M in term debt
 - \$15.0M drawn on revolver
- All investments over the past five years in both business and in M&A have been funded by using the balance sheet through cash and bank debt
- Luna will continue to deploy capital prudently to generate long-term sustainable growth
 - Increasing organic sales
 - Reinvesting in our business
 - Identifying inorganic opportunities

Luna – Enabling the Future with Fiber

- Positioned as a global fiber optic leader
- Proprietary fiber-optic based measurement technology, offering unprecedented combination of performance and economics
- Customers in attractive markets: Defense, Communications, Infrastructure, Energy, Automotive and Aerospace
- Positioned to take advantage of trends such as vehicle lightweighting, smart infrastructure, increasing needs for global security, and increasing demands on data centers and broadband capacity
- Adequately capitalized to fund growth
- Long-tenured, experienced executive team / board
- Corporate culture of innovation and integrity



NASDAQ: LUNA