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IDEAS Conference

August 25, 2021

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 the company's future financial performance, including 2021 guidance, and the market and demand for its products, the company's growth potential, its balance sheet and capitalization and access to capital, its technological advantages and capabilities, 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, uncertainties related to the ongoing impact of the COVID-19 pandemic 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, August 25, 2021, 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

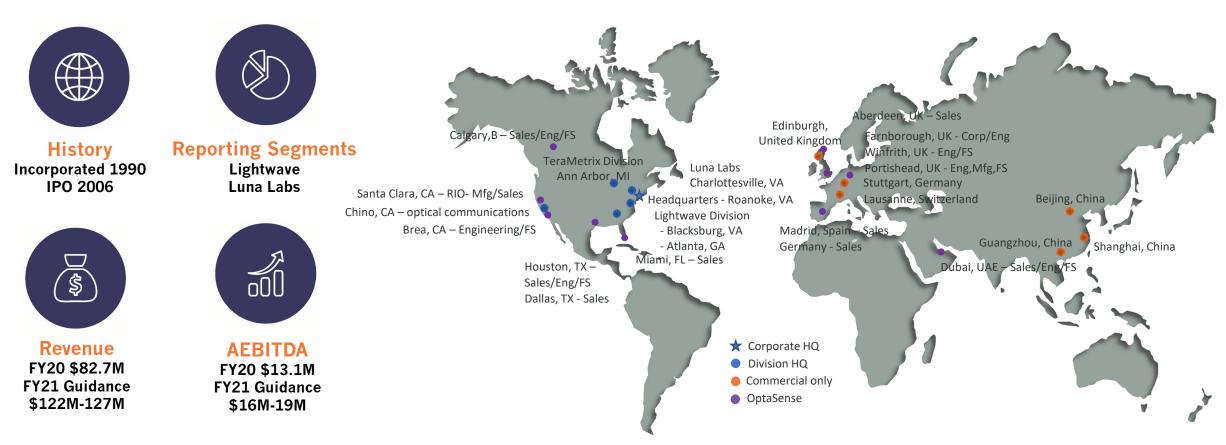
In addition to U.S. GAAP financial information, this presentation includes Adjusted EBITDA and Adjusted EPS, which are non-GAAP financial measures. These non-GAAP financial measures are in addition to, and not a substitute for or superior to, measures of financial performance prepared in accordance with 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 measurement technology, offering unprecedented combination of resolution, accuracy and speed
- Customers in attractive markets: Military and Defense, Communications, Infrastructure, Energy, Automotive and Aerospace
- Positioned to take advantage of trends such as vehicle lightweighting, smart infrastructure, 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



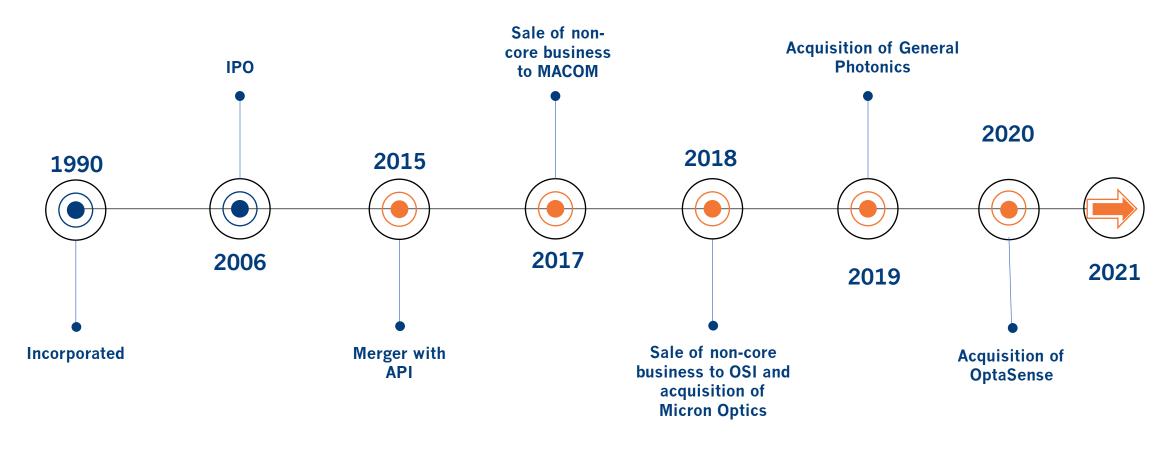
Luna is a global company



400+ Employees

Luna has a clear vision and established history

Vision: Enabling the Future with Fiber



Compelling business model with strong growth potential

Revenue Growth



Organic Growth: Mid-to High-teens

Lightwave = 18% to 20% Luna Labs = 5% to 8%

Strategic M&A

Within core focus and accretive

Bottom-Line Focus



Gross Margin 50% to 55%

AEBITDA

15%-20% of Revenue

Shareholder Return



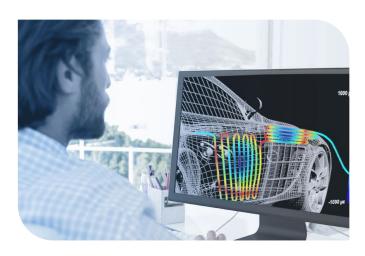
Continued Cash Generation

while investing for growth

Increasing Non-GAAP EPS

Luna Overview

Lightwave



Sensing

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



Comms Test

- Components
- Short-haul network

Luna Labs

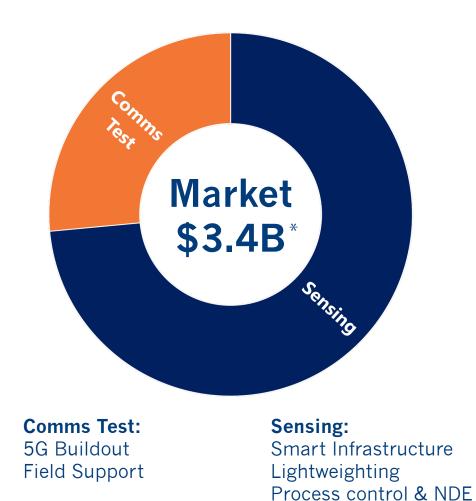


Contract Research

- Materials
- Systems & Analytics
- Biotech

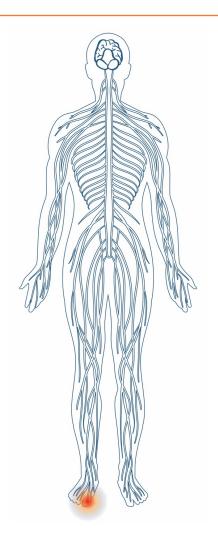
Where Does Luna Play?

	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



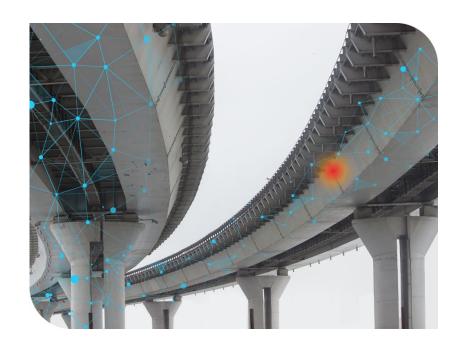
- Fiber optic sensors are the "nerves" of smart materials
- Luna's products are the "brain" that collects and aggregates data from fiber sensor "nerves"
- The new OptaSense acquisition will add missing capability to Luna's Sensing business

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 (50 km)
 - Markets
 - Boarders, perimeter security, transportation, pipelines, oil and gas

Sensing: Material thickness



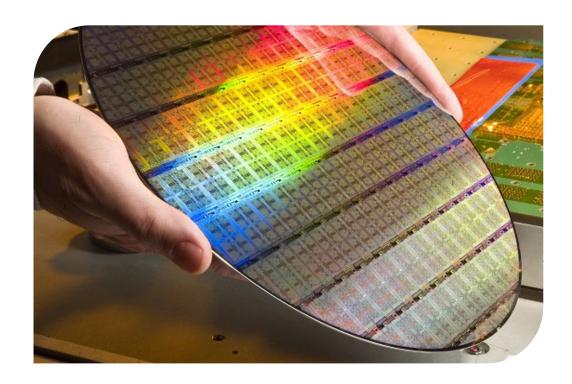
- Product: Terahertz technology
- Layer thickness measurements for process control, inspection and non-destructive testing
 - Advanced technology measures thickness of opaque materials
 - Unique measurement of composites and coatings with easy to use hand-held tools
 - Focus on manufacturing environments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

Comms Test



- Increased data and video consumption
 - Video forecasted to represent 82% of all IP traffic in 2022, 34% CAGR
- Growth in mobile and 4G/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



Luna Labs



- Work with universities and government research labs to explore technological feasibility with a goal toward proof of concept
- Collaborate with prime contractors, government offices and federally-funded R&D centers
- Work with contract manufacturers, suppliers, licensees and distributors to develop everything from small-scale prototypes up to and including market-ready products
- Based in Charlottesville, VA

2Q FY21 Results

Second-Quarter 2021: Key Financial Results

- Total revenues of \$28M; up 50% year-over-year
 - Proforma¹ up >20%
- Lightwave revenue of \$22M, up 70% year-over-year
 - Proforma¹ up nearly 30%
- Luna Labs revenue of \$6M, up 6% year-over-year
- Gross Margin of 50%, compared to 51% for the prior-year period
- Operating loss of \$1M, compared to operating income of \$1.8M for the prior-year period
 - Loss primarily due to \$1.5M of transaction-related costs
- Adjusted EBITDA² of \$2.1M, compared to \$3.0M for the prior-year period
- Adjusted EPS² of \$0.06, compared to \$0.06 for the prior-year period

¹Proforma percentages represent results as if Luna owned OptaSense from the beginning of 2020.

²Adj EPS and EBITDA are a non-GAAP measures. Reconciliation of comparable GAAP measures to non-GAAP measures are included in the appendix of the Q2 supplemental presentation on our website

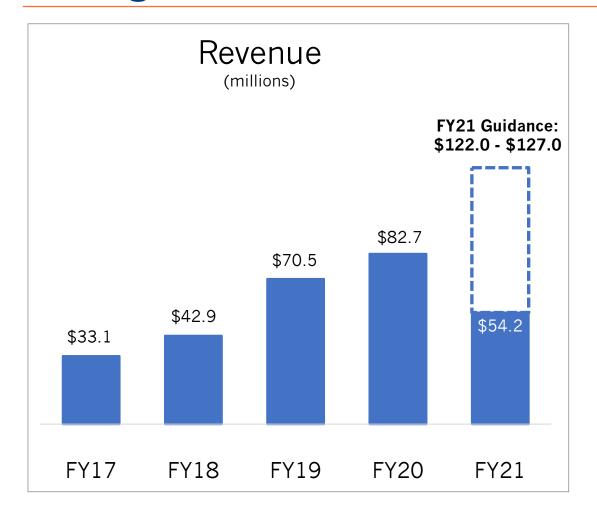
Second-quarter 2021 Highlights

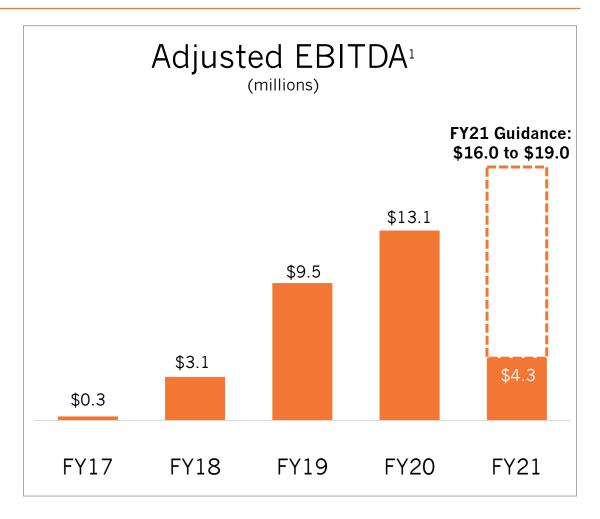
- Significant customer successes, strong ongoing pipeline of opportunities
 - Large orders from blue-chip customers for sensing products
 - Military & defense
 - Infrastructure & mining
 - Inter-Data Center
 - Commercial engagement with customers in the EV-battery space for sensing products to optimize battery design and production
 - Continued success and robust pipeline for silicon photonics applications
 - Continued strong bookings for RIO lasers
 - Primarily for LiDAR for wind and automotive
- Significant progress in product development and delivery
 - Continued success in deliveries of first 100+ OBR 6200 units to LMCO for global support of F-35
 - Released 6th generation DAS data acquisition system, OS6, with integrated machine learning for faster turn-up time

Second-quarter 2021 Highlights, continued

- Strengthened executive team
 - Promoted Brian Soller to COO
 - Promoted Yves Le Maitre to SVP of North America Operations
 - Promoted Jamie Pollard to SVP of EMEA Operations
 - Promoted Salvan Farooqui to SVP of Global Sales
 - Added Bhaskar Banerjee as SVP and Head of Strategy
 - Added William Van Anglen as SVP and Head of Human Resources
 - Added Ray Matty as VP of Financial Planning and Analysis
- Significant progress in integration of OptaSense; completed the integration of support functions
 - IT
 - HR
 - Finance

Strong Financial Results





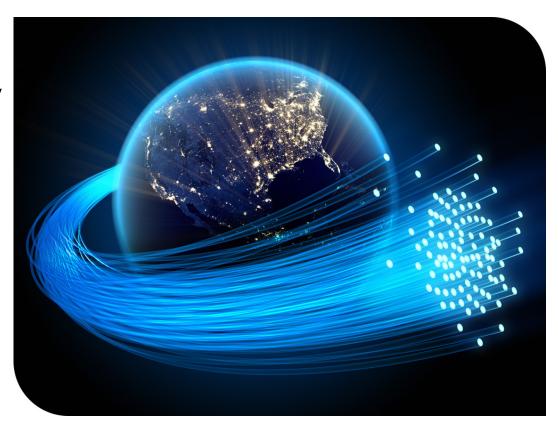
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A Flexible Balance Sheet

- Strong balance sheet on June 30, 2021:
 - \$129.3M in total assets
 - \$12.0M in cash and cash equivalents
 - \$47.8M in working capital
- Total debt of \$17.9M outstanding
 - \$10.4M in term debt
 - \$7.5M drawn on revolver
 - \$7.5M available
- Allows us to deploy our capital to generate long-term sustainable growth by increasing organic sales, reinvesting in our business and identifying inorganic opportunities

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Thank you!