OUSTER

Ouster Launches New REV7 Sensors With Double the Range Powered by Breakthrough L3 Digital Lidar Chip

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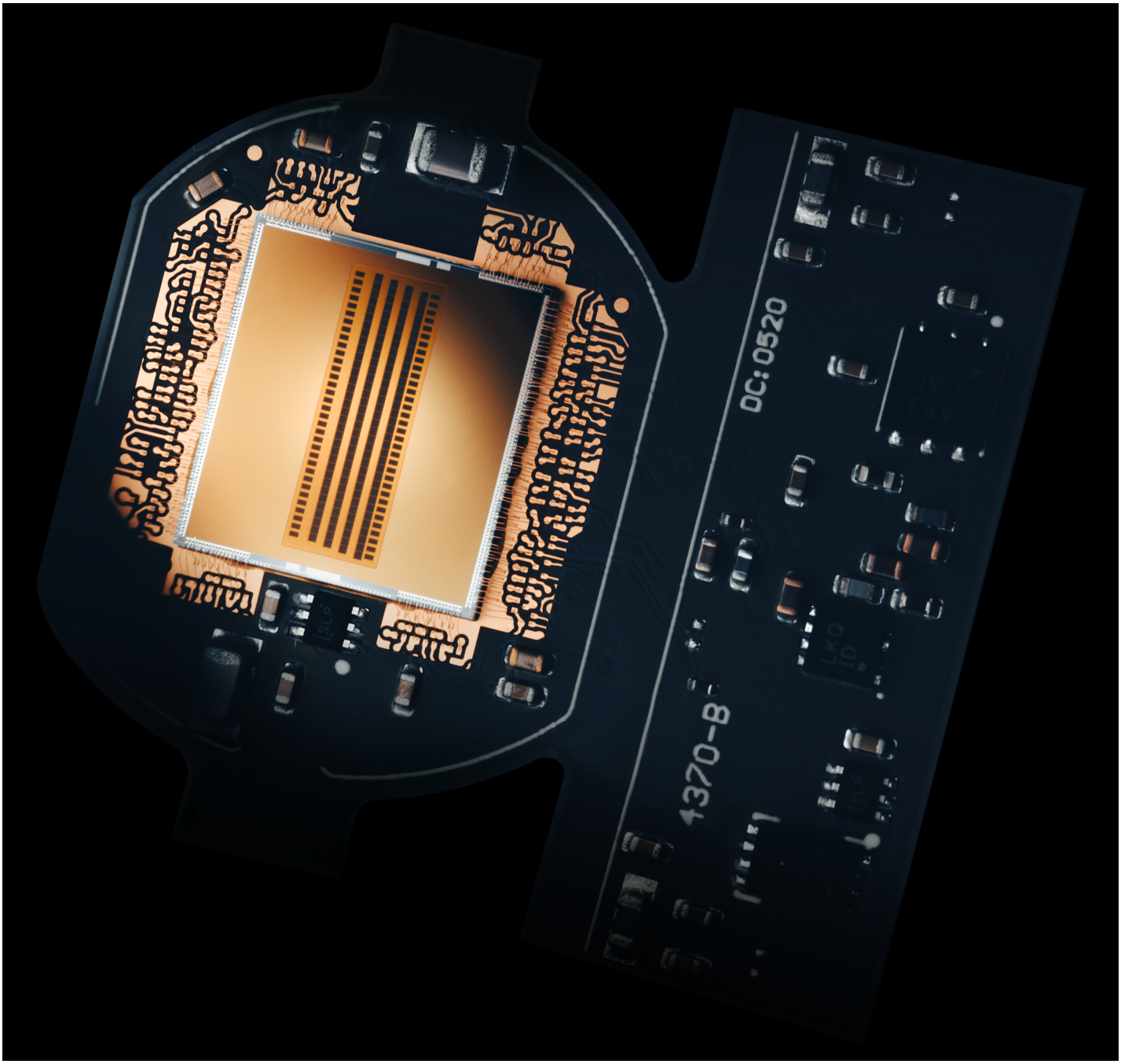
Ouster's REV7 OS series lineup of OSDome, OS0, OS1, and OS2 digital lidar sensors. (Photo: Business Wire)

Next-generation L3 chip delivers performance gains in range, precision, and reliability

Introduces OSDome hemispheric view sensor for industrial automation, crowd analytics, and security

SAN FRANCISCO--(BUSINESS WIRE)-- Ouster, Inc. (NYSE: OUST) ("Ouster" or "the Company"), a leading provider of high-resolution digital lidar sensors for the automotive, industrial, robotics, and smart infrastructure industries, announced the launch of its newest OS series scanning sensors, REV7, powered by its next-generation L3 chip. REV7 features the all-new OSDome sensor, as well as upgraded OS0, OS1, and OS2 sensors that deliver double the range, enhanced object detection, increased precision and accuracy, and greater reliability.

"The promise of digital lidar is that year after year, with new chips like L3, our customers benefit from an ever-improving lineup of sensors that follows the exponential performance path of Moore's Law," said Ouster CEO Angus Pacala. "Digital lidar never stops improving – and doubling the range of our existing sensors while adding the OSDome is truly unprecedented, and is only possible with a digital architecture. REV7 is our biggest leap forward in performance and features yet, and positions us to serve a wider set of use-cases and win new customers in all of our target verticals."

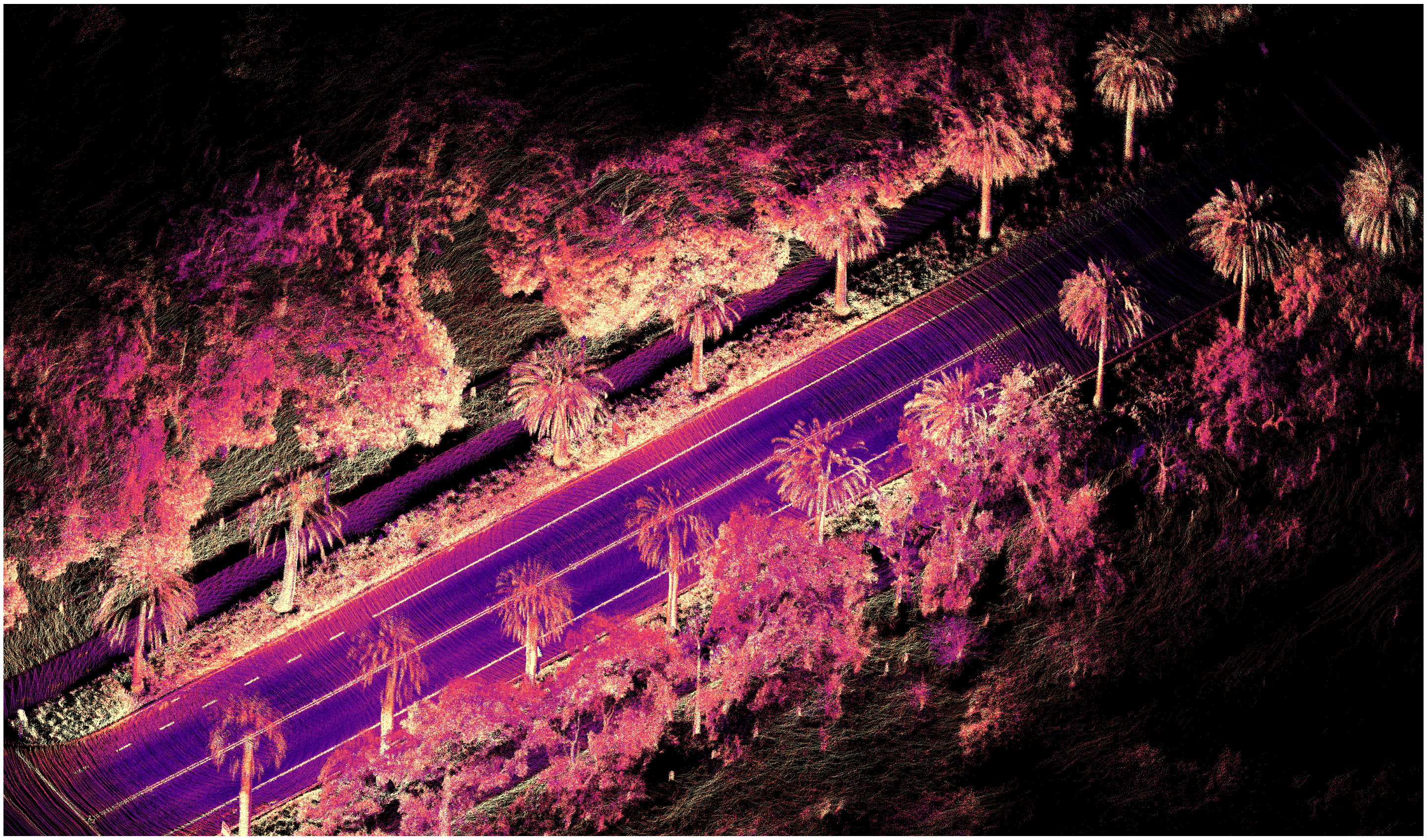


The Next-Generation Digital Lidar's Chip

REV7 is powered by Ouster's next-generation L3 chip, a fully custom and proprietary system-on-chip that brings back-side-illumination technology, the same imaging technology that revolutionized the digital camera industry, to the high-performance lidar industry for the very first time. The L3 chip boasts 120 million transistors and a maximum computational power of 21.47 GMACS, bringing even better digital signal processing and more features to customers than ever before. With the improved on-chip processing, the L3 is capable of counting approximately 10 trillion photons per second and produces up to 5.2 million points per second.

Introducing the REV7 OS Series

Ouster's REV7 sensors see more than ever before, over longer ranges, and with greater precision for improved mapping, more accurate obstacle detection, and safer autonomous operations both indoors and outdoors. Upgrades to the REV7 sensors increase their maximum operating temperature, reduce their power draw, and double their resistance to shock and vibration while maintaining the same small, light-weight, and power-efficient form factor design of previous generations. With approximately 95% automotive-grade components, Ouster's REV7 sensors are purpose built for production-scale fleets.



REV7 OS Series Highlights:

- Powered by new backside-illuminated L3 chip with 10x increase in photon sensitivity
- 2x range increase across all sensors, up to 200m at 10% reflectivity
- High resolution for short, mid, and long-range applications
- Increases maximum operating temperature by +10° C
- 1000BASE-T1 automotive ethernet now available

With the extended range of REV7, we are unlocking an all-new category of long-range and higher-speed use-cases, essential for many robotaxi, shuttle, bus, and truck operators. Not only does the REV7 OS2 achieve over 200 meters range on 10% reflective objects, but it now has a maximum range of over 400 meters, opening up the unique ability to track vehicles and objects beyond a quarter mile in all directions. With the 10x signal improvement of the L3 chip, REV7 can better detect objects closely surrounding the vehicle as well as at a distance. Automotive and industrial customers alike can expect incredible detection performance on challenging objects such as tires, black cars, cables, fencing, or the forks on a forklift. These same benefits make REV7 an excellent fit for mapping.

Dome

The All-New OSDome Sensor

The OSDome introduces a new hemispheric field-of-view for comprehensive coverage and detection in industrial and smart infrastructure applications.Packaged in a uniquely small form-factor, the OSDome can be installed discreetly in the body of a vehicle or on the ceiling of a building. By removing the blind spot on the top of the sensor, customers can now monitor wide zones with a single sensor, simplifying installations and reducing system complexity.

OSDome Sensor Highlights:

- Hemispherical 180° FOV for floor-to-ceiling coverage
- 128 channels of vertical resolution
- 20m range (10% reflectivity) for wide area coverage
- High-precision dual returns for enhanced object detection
- Privacy-safe, accurate people tracking

Within the industrial vertical, the OSDome delivers floor-to-ceiling vertical visibility to autonomous mobile robots (AMRs) operating in warehouses, which have historically struggled to detect objects directly below or overhead. In the smart infrastructure market, the OSDome is designed to augment or replace CCTV and thermal cameras. Whether it's monitoring a retail store for occupancy and dwell time or a secure data center for intruders in a keep-out zone, the OSDome offers the ability to cover a wide area with accurate 3D object classification and tracking.

Ouster's REV7 sensors powered by the L3 chip are available to order today, with the first units expected to ship to customers in Q4 2022.

For more information, watch the launch video, visit Ouster's product page , or reach out to the Ouster sales team at lidar@ouster.io.

REV7-Forklift-Point-Cloud

About Ouster

Ouster (NYSE: OUST) is building a safer and more sustainable future through its high-resolution digital lidar sensors for the automotive, industrial, smart infrastructure, and robotics industries. Ouster's sensors offer an excellent combination of price and performance with the flexibility to span hundreds of use-cases and enable revolutionary autonomy across industries. With a global team and high-volume manufacturing, Ouster supports approximately 600 customers in over 50 countries. Ouster is headquartered in San Francisco, CA with offices in the Americas, Europe, Asia-Pacific, and the Middle East. For more information, visit www.ouster.com, or connect with us on Twitter or LinkedIn.

Forward-Looking Statements

This press release contains "forward-looking statements" within the meaning of the "safe harbor" provisions of the Private Securities Litigation Reform Act of 1995, including but not limited to, statements regarding Ouster's technological advancements, new product releases including their precision and performance, opportunities in its different verticals, customer adoption of Ouster's products, positioning to capture market share, and driving near and long-term revenue growth. Forward-looking statements give Ouster's current expectations and projections relating to its financial condition, competitive position, financial position, future results of operations, plans, objectives, future orders whether binding or non-binding, and business. You may identify forward-looking statements by the fact that they do not relate strictly to historical or current facts. These statements may include words such as "aim", "anticipate", "estimate", "expect", "project", "plan", "forecast", "intend", "believe", "may", "will", "should", "can have", "likely", "guidance", "continue", "could", "would", "potentially", "preliminary" and other words and terms of similar meaning in connection with any discussion of the timing or nature of future operating or financial performance or other events. All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those that we expected, including but not limited to Ouster's limited operating history and history of losses; the negotiating power and product standards of its customers; fluctuations in its operating results; supply chain constraints and challenges; cancellation or postponement of contracts or unsuccessful implementations; the adoption of its products and the growth of the lidar market generally; its ability to grow its sales and marketing organization; substantial research and development costs needed to develop and commercialize new products; the competitive environment in which it operates; selection of its products for inclusion in target markets; its future capital needs and ability to secure additional capital on favorable terms or at all; its ability to use tax attributes; its dependence on key third party suppliers, in particular Benchmark Electronics, Inc., and manufacturers; its ability to maintain inventory and the risk of inventory write-downs; inaccurate forecasts of market growth; its ability to manage growth; the creditworthiness of its customers; risks related to acquisitions; risks related to international operations; risks of product delivery problems or defects; costs associated with product warranties; its ability to maintain competitive average selling prices or high sales volumes or reduce product costs; conditions in its customers' industries; its ability to recruit and retain key personnel; its use of professional employer organizations; its ability to adequately protect and enforce its intellectual property rights; its ability to effectively respond to evolving regulations and standards; risks related to operating as a public company; risks related to the COVID-19 pandemic; risks related to certain of its warrants being accounted for as liabilities; and other important factors discussed in the Company's Annual Report on Form 10-K for the year ended December 31, 2021, filed with the Securities and Exchange Commission (the "SEC") on February 28, 2022 and in most recently filed periodic reports including form 10-Q and subsequent filings. Any such forward-looking statements represent management's reasonable estimates and beliefs as of the date of this press release. While Ouster may elect to update such forward-looking statements at some point in the future, it disclaims any obligation to do so, other than as required by law, even if subsequent events cause its views to change.

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