

## HLJ Technology expands VCSEL production with cutting-edge MOCVD technology from AIXTRON

New customer relies on proven AIX 2800G4-TM system to increase manufacturing capacity and epitaxial wafer size

**Herzogenrath/Germany, August 29, 2018** – AIXTRON SE (FSE: AIXA), a worldwide leading provider of deposition equipment to the semiconductor industry, announced today that Taiwanese VCSEL epitaxy and chip manufacturer, HLJ Technology Co., Ltd has ordered multiple AIX 2800G4-TM MOCVD sets to increase its wafer capacity as well as its epitaxial wafer size production line from 4-inch to 6-inch for high-volume manufacturing of vertical-cavity surface emitting lasers (VCSEL). AIXTRON's fully automated Planetary Reactor® systems will be supplied in 8x6-inch configuration in the course of Q4/2018 and beyond.

The AIX 2800G4-TM platform is considered the industry standard for high-end laser applications such as VCSEL for 3D sensing due to the matchless performance of the Planetary Reactor® concept with respect to thickness and wavelength uniformity control of epitaxial layers. The system consequently delivers maximum yield production of premium level products.

Dr. Larry Lai, General Manager of HLJ, comments: "In order to meet fast growing market demand for VCSEL both at epi wafer and chip levels, we decided to expand to 6-inch epi wafer manufacturing. Starting from Q4/2018, two sets of newly ordered AIXTRON MOCVD systems are scheduled to arrive at HLJ. In Q2/2019, the first complete high-volume VCSEL production line will be ready."

"We are very pleased that our new customer HLJ has picked the AIX 2800G4-TM system as it offers best-in-class high-volume VCSEL epi and chip manufacturing processes. Looking forward to our cooperation with HLJ, we will support the company in the alignment of their production processes to our equipment technology in the best way possible," says Dr. Bernd Schulte, President of AIXTRON SE.

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**For further information please contact**

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# PRESS RELEASE



## About AIXTRON

AIXTRON SE is a leading provider of deposition equipment to the semiconductor industry. The Company was founded in 1983 and is headquartered in Herzogenrath (near Aachen), Germany, with subsidiaries and sales offices in Asia, United States and in Europe. AIXTRON's technology solutions are used by a diverse range of customers worldwide to build advanced components for electronic and opto-electronic applications based on compound, or organic semiconductor materials. Such components are used in a broad range of innovative applications, technologies and industries. These include LED applications, display technologies, data storage, data transmission, energy management and conversion, communication, signaling and lighting as well as a range of other leading-edge technologies.

Our registered trademarks: AIXACT®, AIXTRON®, APEVA®, Atomic Level SolutionS®, Close Coupled Showerhead®, CRIUS®, EXP®, EPISON®, Gas Foil Rotation®, Optacap™, OVPD®, Planetary Reactor®, PVPD®, STExS®, TriJet®

For further information on AIXTRON (FSE: AIXA, ISIN DE000A0WMPJ6) please visit our website at: [www.aixtron.com](http://www.aixtron.com).

## About HLJ Technology Co., Ltd

HLJ was established in 2001. Through many years of devotion in the field of VCSEL science and technologies, HLJ has grown into a full-fledged professional manufacturer of the photo-electronic semiconductors with several breakthroughs in manufacturing processes. From epitaxial wafers to chip processes, from upper to mid streams of the industry chains, HLJ owns leading manufacturing technologies. HLJ is one of the few companies in Taiwan having the capabilities of independent R&D and mass production.

Having the strongest management team with ultimate ambitions to consistently innovate and adapt to changes, HLJ strategizes on developing the best VCSEL structures with self-owned MOVCD tools and latest process know-hows to meet the market demands on product reliability and specifications. HLJ works closely with IC designers to actively conduct international deployment to realize our vision as the world leading VCSEL manufacturing company.

For more information on HLJ (3688.TWO) please visit our website at: [www.hlj.com.tw](http://www.hlj.com.tw)

## Forward-Looking Statements

This document may contain forward-looking statements regarding the business, results of operations, financial condition and earnings outlook of AIXTRON. These statements may be identified by words such as "may", "will", "expect", "anticipate", "contemplate", "intend", "plan", "believe", "continue" and "estimate" and variations of such words or similar expressions. These forward-looking statements are based on our current assessments, expectations and assumptions, of which many are beyond control of AIXTRON, and are subject to risks and uncertainties. You should not place undue reliance on these forward-looking statements. Should these risks or uncertainties materialize, or should underlying expectations not occur or assumptions prove incorrect, actual results, performance or achievements of AIXTRON may materially vary from those described explicitly or implicitly in the relevant forward-looking statement. This could result from a variety of factors, such as actual customer orders received by AIXTRON, the level of demand for deposition technology in the market, the timing of final acceptance of products by customers, the condition of financial markets and access to financing for AIXTRON, general conditions in the market for deposition plants and macroeconomic conditions, cancellations, rescheduling or delays in product shipments, production capacity constraints, extended sales and qualification cycles, difficulties in the production process, the general development in the semi-conductor industry, increased competition, fluctuations in exchange rates, availability of public funding, fluctuations and/or changes in interest rates, delays in developing and marketing new products, a deterioration of the general economic situation and any other factors discussed in any reports or other announcements, in particular in the chapter Risks in the Annual Report, filed by AIXTRON. Any forward-looking statements contained in this document are based on current expectations and projections of the executive board based on information available the date hereof. AIXTRON undertakes no obligation to revise or update any forward-looking statements as a result of new information, future events or otherwise, unless expressly required to do so by law.

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