

PlayNitride selects AIX G5+ C for Micro LED production

AIXTRON and PlayNitride sign Joint Collaboration Agreement to accelerate technical and commercial breakthroughs of Micro LEDs

Herzogenrath/Germany, January 09, 2019 – AIXTRON SE (FSE: AIXA), a worldwide leading provider of deposition equipment to the semiconductor industry, announced today that PlayNitride Inc., will receive an AIX G5+ C MOCVD system for the manufacturing of GaN-based (gallium nitride) Micro LEDs. The Taiwanese company is one of the technology leaders in the field of Micro LED displays, having recently demonstrated its Micro LED display prototypes. By signing a joint collaboration agreement, AIXTRON and PlayNitride will join forces to technically and commercially enable the decisive step forward to unlock the potential markets.

Micro LED technology is on the roadmap of all tier one display manufacturers as a challenger to the existing display technology for next-gen consumer products. Displays made of Micro LEDs consist of micron-sized LED arrays forming individual sub-pixel elements. Compared to the existing LCD and OLED technologies, Micro LED displays offer lowest power consumption while exhibiting superior pixel density, contrast ratio and brightness. Thus, opening new horizons for consumer mobile products as well as premium TV displays.

PlayNitride Inc. has chosen the AIX G5+ C as it is the tool of record for Micro LED MOCVD processing. AIXTRON's advanced production tool offers market leading wavelength uniformity to meet the tightened Micro LED market specifications in a batch reactor high-throughput environment. Furthermore, the system allows for the lowest defect and particle level in the industry due to an effective in-situ cleaning technology and the cassette-to-cassette handler which is essential for high yields. Overall, the AIX G5+ C provides leading-edge products that are necessary to meet the high-quality standards in Micro LED applications.

"We are very pleased that PlayNitride as a key player in the business has selected the AIX G5+ C for the further development of groundbreaking Micro LED production processes. We are looking forward to our joint collaboration to accelerate a breakthrough in the commercial and technical use of Micro LEDs for displays. Our AIX G5+ C platform perfectly backs PlayNitride's product strategy since it allows for outstanding performance in a high-volume manufacturing environment", comments Dr. Bernd Schulte, President of AIXTRON.

For further information please contact

Corporate Communications

AIXTRON SE, Dornkaulstr. 2, 52134 Herzogenrath, Germany

PHONE +49 (2407) 9030-444 FAX +49 (2407) 9030-445

E-MAIL info@aixtron.com WEB www.aixtron.com

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.

About PlayNitride

Taiwan-based PlayNitride was established in June 2014 to research and develop Nitride related materials and applications. The company is now focusing on GaN-based Micro LEDs - it is branding its technology as PixelLED™ displays.

In April 2018 Taiwan's Ministry of Science and Technology approved [PlayNitride's](#) application to setup a NT\$500 million (US\$17 million) production facility at Hsinchu Science Park. PlayNitride aims to produce Micro LEDs, display modules and panels at its new facility at Hsinchu.

For more information on PlayNitride, please visit the following website: www.playnitride.com

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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For further information please contact

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AIXTRON SE, Dornkaulstr. 2, 52134 Herzogenrath, Germany

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