

AIXTRON successfully qualified for MicroLED production at PlayNitride

PlayNitride prepares high-volume manufacturing of MicroLEDs with follow-up order of AIX G5+ C

Herzogenrath/Germany, December 10, 2019 – AIXTRON SE (FSE: AIXA), a worldwide leading provider of deposition equipment to the semiconductor industry, announced today that PlayNitride Inc., has qualified its <u>AIX G5+ C</u> MOCVD system for the manufacturing of GaNbased (gallium nitride) MicroLEDs. Thus, the joint collaboration agreement signed in January has been successfully concluded. At the same time and based on the excellent results achieved during that evaluation, PlayNitride ordered another AIX G5+ C tool to expand its capacities for high-volume production of MicroLEDs.

The MicroLED technology is on the verge to relieve existing display technologies for next-gen consumer products. Since displays made of MicroLEDs consist of micron-sized LED arrays forming individual sub-pixel elements, they offer lowest power consumption while exhibiting superior pixel density, contrast ratio and brightness at the same time. In comparison to the existing LCD and OLED technologies, MicroLEDs open new opportunities for the design of consumer mobile products as well as premium TV displays.

Dr. Charles Li, CEO & Chairman at PlayNitride Inc., says: "We are pleased that we were able to successfully qualify the AIX G5+ C by meeting the requirements for MicroLED processing. AIXTRON's advanced Planetary[®] technology addresses these tightened MicroLED industry standards at best: excellent wavelength uniformity, high yield and high-volume manufacturing against lowest cost per wafer."

"The qualification of our AIX G5+ C tool by PlayNitride as well as the company's decision to expand its high-volume production capacities for MicroLEDs with another AIX G5+ C system means an important milestone for AIXTRON. We are looking forward to continue our partnership in the MicroLED market and we value highly our common efforts to bring this promising technology to market", comments Dr. Bernd Schulte, President of AIXTRON.

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 MicroLED display applications - it is branding its technology as PixeLED[®] Display.

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

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

Forward-Looking Statements

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