

EpiWorld qualifies AIXTRON G5 WW C system for SiC production ramp-up

AIXTRON's new SiC platform meets stringent production qualification specifications / EpiWorld build up epitaxial structures for SiC power devices

Herzogenrath/Germany, December 16, 2020 – Epiworld International Co., Ltd. has qualified AIXTRON's new SiC platform <u>AIX G5 WW C</u> for high volume manufacturing of SiC Epitaxy products at its new production side in Xiamen. The Vapor Phase Epitaxy (VPE) tool of AIXTRON SE (FSE: AIXA), a worldwide leading provider of deposition equipment to the semiconductor industry, is the latest AIXTRON 8x150 mm SiC Planetary Reactor[®] platform.

EpiWorld, a leading China-based SiC epitaxial service foundry in the global market, seeks to further expand its production capacity to meet the increasing demand by customers. The company has already completed production lines for 4- and 6-inch SiC epi-wafers for making 650 Volt-, 1,200 Volt- and 1,700 Volt-power devices. A recently completed manufacturing center provides space for rapid expansion to 400,000 6-inch epi wafers per year. EpiWorld currently has a capacity of over 60,000 pc/yr.

Epi-Wafer at highest quality level on new SiC platform

"In recent years, we have been qualified as a leading supplier of SiC epi-wafers for power devices by various players in the automotive sector and therefore, have a strong footprint in one of the most challenging industries. As we and our customers have high quality standards, we rely on AIXTRON's proven system technology and are ready to move into high-volume production of our SiC epitaxial components with the AIX G5 WW C," says Dr. Feng, General Manager of EpiWorld.

Dr. Feng adds: "The SiC epi reactor in the AIX G5 WW C system of AIXTRON combines the performance of a single-wafer system with the cost advantages of a multi-wafer reactor. The system guarantees EpiWorld highest throughput in the industry at lowest production cost, while enabling excellent production quality".

Serving megatrends like e-mobility

The market of SiC epi-wafers for power devices is a fast growing market. The high efficiency of silicon carbide power devices allows for energy savings, heat reduction, weight and system size reduction and as a result of this overall lower system costs. This predestines them for use in areas such as electric vehicles (EVs), EV charging stations as well as renewable energy

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applications such as solar and wind power converters.

"We are delighted to achieve the important production qualification milestone with one of the leading epi foundries with our new SiC platform to accelerate the further commercialisation of silicon carbide," comments Dr. Frank Wischmeyer, Vice President Marketing Power Electronics of AIXTRON SE, and adds: "Our customer EpiWorld is well positioned to address the fast growing market of SiC power devices in the Chinese automotive industry and beyond. The enlarged production capabilities at EpiWorld will support the development of numerous high- end power electronics applications serving megatrends such as e-mobility or renewable energy".

To download photos please click here.

Contact Persons

Guido Pickert Vice President Investor Relations & Corporate Communications PHONE +49 (2407) 9030-444 MAIL <u>g.pickert@aixtron.com</u>

Rita Syre Senior PR Manager PHONE +49 (2407) 9030-3665 MOBILE +49 (162) 269 3791 MAIL <u>r.syre@aixtron.com</u>

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 Laser and LED applications, display technologies, data transmission, SiC and GaN power 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/en.

About EpiWord

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

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Epiworld International Co., LTD is a privately held company registered in the city of Xiamen, China. The company is a joint venture with investors from the United States, Japan and China, equipped with multiple most advanced epitaxial systems for 4" and 6" SiC epitaxy, auto defect identification and mapping systems in a class-100 cleanroom. Its mission is to be the leading SiC epitaxial service foundry in the global market, providing the highest quality epitaxial wafers with the most competitive price in the shortest delivery time. As a pure play SiC epitaxial service foundry, EpiWorld provides standard 4H-SiC epitaxial wafers of 4"and 6" for Schottky diodes, MOSFETs, JFETs, and BJTs over a wide voltage range for green energy systems such as solar inverters, wind farms, hybrid and electric vehicles, and numerous other energy-efficient systems. EpiWorld also provides customized wafers for IGBTs, GTO thyristors, and R&D structures over a wider voltage range for medium to very high voltage power conversion system applications.

Further information is available at the company's website: www.epiworld-cn.com

Forward-Looking Statements

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