



Press Release

AIXTRON and IHP Sign Long-Term R&D Alliance

innovations
for high
performance
microelectronics

Aachen/Frankfurt (Oder), March 9, 2005 – AIXTRON AG is a leading provider of equipment for compound semiconductor epitaxy and IHP (Institute for Semiconductor Physics), in Frankfurt (Oder), Germany, have entered into a long term R&D Alliance on novel material development for integrated capacitor applications.

The three year program will target applications including the next generation of DRAMs (Dynamic Random Access Memories), Embedded DRAMs, decoupling capacitors and high frequency phase shifting devices.

The process and material development work will jointly be conducted on a two chamber AIXTRON Tricent[®] AVD[®] (Atomic Vapor Deposition) system. As part of the R&D Alliance, IHP granted licenses to AIXTRON giving access to IHP's high-k dielectrics patent portfolio.

The initial process work will focus on a new material named Praseodymium Oxide (Pr₂O₃), which recently has shown to potentially become one of the most promising replacements for the currently targeted Aluminium Oxide (Al₂O₃) or Hafnium Oxide (HfO₂) based high-k dielectrics. Building on a broad basis of expertise already available at IHP on Pr₂O₃, both parties will further investigate a large variety of innovative dielectric and novel metal thin films, in order to qualify these materials for the integration into new semiconductor devices.

Executive Vice President and COO of AIXTRON SE-Si division Tim McEntee adds: "I am extremely pleased with this exciting new strategic cooperation between our two organizations. IHP has an excellent development team combined with unique, state of the art clean rooms in Germany. I believe there will be positive results to come from this collaboration within the next year."

Prof. Dr. Wolfgang Mehr, IHP Director comments: "The time for alternative, new materials for thin films is here. Now we must capitalize on this opportunity. Our partnership with AIXTRON will significantly solidify this effort."

About AIXTRON:

AIXTRON AG is a leading provider of equipment for compound semiconductor epitaxy. The Company's products are used by a diverse range of customers worldwide to manufacture advanced semiconductor components such as HBTs, PHEMTs, MESFETs, Lasers, LEDs, Detectors, and VCSELs used in fiber optic communication systems, wireless and mobile telephony applications, optical storage devices, illumination, signaling and lighting, as well as a range of other leading-edge technologies. AIXTRON AG's securities are listed in the Prime Standard market segment of the Frankfurt Stock Exchange and are included both in the TecDAX index and the MSCI World Index. More information about AIXTRON can be found on the Web at www.aixtron.com.

About IHP:

IHP is a publicly funded R&D institution. IHP's core competencies include materials; process technologies, circuit design, and communications systems design with emphasis on wireless and broadband. The IHP consists of 200 R&D experienced professionals, working in a recently completed facility, including state-of-the-art 200 mm pilot line housed in a 1,000 square-meter class 1 cleanroom. It is located at Im Technologiepark

25, 15236 Frankfurt (Oder), Germany. More information about IHP can be found on the Web at www.ihp-microelectronics.com

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