

Hynix joins IMEC's (sub-)32nm CMOS research platform

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Hynix Semiconductor has entered into a strategic partnership with IMEC, Europe's leading independent nanoelectronics research center, to perform research and development for the (sub)-32nm memory process generations.

As part of the agreement, Hynix will collaborate within IMEC's advanced lithography program addressing both immersion and EUV lithography challenges and within IMEC's non-volatile memory program. The latter program has gained significantly increased momentum in the past year by expanding its floating gate and nitride memory activity lines into advanced material research, including exploration of advanced highk dielectrics.

From June 2007 onwards, a team of researchers of Hynix will reside at IMEC to closely collaborate with IMEC's researchers in the abovementioned areas. In this way, they will build up fundamental understanding and develop robust solutions for the 32nm and beyond DRAM and Flash memory process generations.

With this agreement, the top five leading memory suppliers including Hynix, Elpida, Micron, Qimonda and Samsung, collaborate within IMEC's global research platform to scale CMOS to 32nm node and beyond. The platform also unites world leading logic IDMs and foundries, including Infineon, Intel, NXP, Panasonic, STMicroelectronics, Texas Instruments and TSMC. With leading companies of the two semiconductor market segments jointly



collaborating in the platform, a unique interaction and cross-fertilization is established which enhances process R&D to the 32nm node and beyond answering the needs of the whole semiconductor market.

"With facing various challenges in developing next generation technologies, difficulty and risk have continually increased," said Dr. Park Sung-Wook, Executive Vice President and head of R&D Division, Hynix Semiconductor. "By joining IMEC and collaborating with industry-leading partners, we expect to lessen the risk for developing leading-edge, cost-effective technology and contribute to the growth of the semiconductor industry."

"We are excited that Hynix has joined our research platform. Their valuable know-how in memory scaling will be an important asset for our global research platform," said Prof. Gilbert Declerck, President and CEO of IMEC. "The fact that the world's top five memory suppliers and five leading logic manufactures and foundries joined our research platform proves that we have been successful in adapting our programs to the needs of all semiconductor players. The programs run in a balanced way with good interaction and cross fertilization between the logic and memory companies."

Source: IMEC

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