

www.cnt.fraunhofer.de

Phone: +49 (0) 351 / 2607 3001

Fax: +49 (0) 351 / 2607 / 3005

E-Mail: contact@cnt.fraunhofer.de

Press release

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The Fraunhofer Center Nanoelectronic Technologies (CNT) implements Critical Manufacturing's MES Productivity Suite *cmNavigo* in Dresden

Critical Manufacturing, an enterprise which creates leading edge software solutions for the high-tech manufacturing industries of solar, electronics and semiconductors, announced today that Fraunhofer Center Nanoelectronic Technologies (CNT), selected and implemented cmNavigo Productivity Suite, comprising of a Manufacturing Execution System and Equipment Integration, in its facilities in Dresden, Germany

The business areas of Fraunhofer CNT include the development of processes and materials as well as the physical and electrical characterization of high performance logic, derivatives (e. g. embedded DRAM) and memory technologies for volatile and non- volatile devices . In close cooperation with industrial partners and other R&D organizations, the objective of the institute is to develop innovative unit process solutions and modules for systems as well as enabling production on 300 mm silicon wafers on their approx. 40 tools in an industrial clean room environment. The aim is to transfer research results fast into industrial manufacturing.

"CNT operates in a demanding environment, in projects with some of the top semiconductor companies based on 300mm technology. Beyond the know-how of our employees, in order to be able to perform our projects successfully and in time, we needed a system that would allow us the right levels of flexibility, reliability in data collection and feature richness as well as automation" says Prof. Dr. Peter Kücher. "From the different systems we looked at during our evaluation, cmNavigo was the more promising. We're now confirming the choice was absolutely right and will yield outstanding results for our customers" he adds.

cmNavigo is a lean Manufacturing Productivity solution developed from the ground up on proven Microsoft technologies which provide extensive benefits and lower total cost of ownership. The system is completely scalable making it ideal from small R&D environments to large scale high volume production facilities. A full range of MES capabilities facilitate increased control, visibility and productivity for manufacturers seeking higher profitability and a competitive edge.

"Advanced semiconductor R&D environments like CNT are extremely challenging for MES systems" states Tom Bednarz, Critical Manufacturing Deutschland's Managing Director. "On

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one side, it requires key features of a volume production, ranging from equipment integration and process control, up to business intelligence; on the other, it requires enormous flexibility to handle the large numbers of smaller runs with unique characteristics, data collections and flows in an efficient way.”

About Fraunhofer CNT

Fraunhofer CNT, which was established on 31st May 2005, is an example of the close cooperation between research and manufacturing for which Dresden offers excellent conditions. Due to its advantageous location within the “Silicon Saxony”, it provides ideal collaboration opportunities for research institutes and material/equipment manufacturers in the field of micro- and nanoelectronics.

Within the premises of Infineon there is a clean room area (clean room class 1000) of about 800 m² available for the research of Fraunhofer CNT as well as an infrastructure which meets industry standard. The main focus is on the development of special process steps for the manufacturing of high performance chips as well as process modules to be integrated in micro- or nanoelectronic systems. Furthermore, Fraunhofer CNT works on the development of new analytic and metrology methods and on the analysis of wafer processing results for which considerable laboratories are available.

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Additional information on cmNavigo is available at www.criticalmanufacturing.com/products