

# 3D Transistor Trends: Market Research Report

https://marketpublishers.com/r/316358F3A69EN.html

Date: December 2013

Pages: 15

Price: US\$ 950.00 (Single User License)

ID: 316358F3A69EN

# **Abstracts**

The report projects that 3D Transistors is set to become the norm as a 3D transistor is an advanced transistor that is manufactured by using nano wires in comparison to traditional usage of silicon. The development of 3D Transistors is likely to change the dynamics of semiconductor manufacturing industry. The manufacturing process of 3D transistors involves a top-down method, wherein components of the transistor are etched on the transistor's base. The nano wires, made of iridium, gallium as well as arsenide semiconductors, are layered with a thinner dielectric made of lanthanum aluminate for performing the gate operation efficiently with reduced voltage requirements.



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#### 5. MARKET PARTICIPANTS

Globalfoundries, Inc. (USA) Intel Corporation (USA)



Laboratoire D'analyse ET D'architecture Des Systèmes (LAAS-CNRS) (France)
National Institute of Advanced Industrial Science and Technology (AIST) (Japan)
Samsung Semiconductor, Inc. (USA)
Soitec SA (France)
Taiwan Semiconductor Manufacturing Co. , Ltd. (TSMC) (Taiwan)
Unisantis Electronics (Japan) Ltd. (Japan)

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