

3D Bricks Project Newsletter

2024

Overview of the Project

The 3D Bricks – 3D Biofabricated high-perfoRmance dna-carbon nanotube digital electroniCKS is a 36-month project, which started in May 2023 (project number 101099125).

3D-BRICKS will provide a novel platform for the next-generation of electronic nanodevices (logics, digital circuits and memories). Hybrid DNA-nanostructures/carbon nanotubes (CNTs) will be developed for the realization of three-dimensional (3D) stacked transistors at high density, combined with a new series of designs for reproducing all the fundamental logic ports that will be fast, reliable and easily interconnected via planar (2D) and 3D configurations. Moreover, the same approach will be used to implement storage circuits (non-volatile memory) based on CNTs. The development of hybrid DNA/CNTs systems will be a paradigm change for nanoelectronics and computing, areas in which the current demand of new devices is rapidly outpacing the capabilities offered by semiconductor technologies.

Partners:

The 3D-BRICKS consortium was specifically assembled to unite the largely cross-disciplinary expertise that is crucial for the ambitious objectives on 3D CNT nanoelectronics, and to implement the developed technology in industry. The consortium is led by the Italian Institute of Technology (IIT) with the participation of 9 partners





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News

3D Bricks Project, Kick off meeting – Genoa – 4- 5 May 2023

The kick-off meeting of the EU Horizon Europe project. 3D Bricks, took place in Genoa, Italy on the 4-5 May 2023. This meeting was hosted by the Project Coordinator, Istituto Italiano di Tecnologia (IIT).

Partners had the opportunity to meet, present their organisations, and discuss their role and future work in the project.

Project Leaflet



The Project leaflet has been prepared and it is now available to be downloaded from the project website (publications tab) following this link:

www.3d-bricks.eu/publications



Project Coordinator:

Prof. Denis Garoli

Istituto Italiano di Tecnologia

Email: Denis.Garoti@iit.it

Dissemination, Exploitation Communication Management:

Dr Bojan Boskovic

CNT Innovation

Email: bojan.boskovic@cnt-innovation.com









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