Technology & Hardware for nEuromorphic coMPuting - ECSEL Research and Innovation Actions (RIA*) –



Deliverable 2.2 – Definition of OxRAM Building Blocks –

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Publishable Summary

One of the main objectives of the Work Package 2, *Emerging Technologies*, is to address all the required process and technology developments for OxRAM memories and to address the required adjustments of them for neuromorphic hardware. This deliverable presents the building blocks developed to enable the OxRAM memories integration into STM 28FDSOI technology (300 mm wafers). First, the CEA Memory Advanced Demonstrator in 300 mm (MAD 300) and associated design kit Add-on for Non Volatile Memory (NVM) are presented. This is a full custom design flow with access to parameterized Cell (PCELL). Second, the IP blocks designed to evaluate the performances of the OxRAM technology for neuromorphic hardware are described. Finally, the process flow to integrate an OxRAM cell into a 300 mm FDSOI route is presented.