

# Green Computing and DX

**R&D Project Title : Innovative Nonvolatile Green Computing Platform**

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## Summary :

Our goal is to create resilient edge computing platform technologies that can guarantee sustainable and stable advanced computing operations even with unstable and tiny energy supplied by energy harvesting. To realize reliable and extremely energy-efficient edge devices that form the basis of this technology, we will promote the following development items: (1) highly efficient intermittent computing technology utilizing nonvolatile logic, (2) device and circuit technology that enables the implementation of dynamic reconfiguration functions with low overhead, (3) environment-adaptive and highly reliable LSI technology, and (4) technology for sensing environmental information and energy-saving information processing. In addition, we will concurrently conduct research and development on (5) construction of an integrated design and development environment for social implementation. Through the development of a new era of green computing that drastically reduces the energy consumption of systems, this project contributes to the realization of a carbon-neutral society.

