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## **FPGA implementation of quantum cryptography algorithm**

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Quantum cryptography is a process for developing a perfectly secret encryption key that can be used with any classical encryption system. This paper presents a study of the EPR state protocol [1], the first continuous variable quantum key distribution protocol. We propose an algorithm to this protocol and subsequently its implementation on FPGA (Field-Programmable Gate Array). For the implementation, we used Xilinx's ISE System Edition tool as Software and Xilinx's Artix7 Nexys4 DDR board as hardware.

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