

## Investigation quality of hybridization matrix photodetector devices on equipment with autocollimator

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***Results of researches hybridization of ROIC and Focal Plane Array (FPA) are discussed. Work was performed by flip chip method on hybridization equipment with an autocollimator and without an autocollimator. We investigated of necessity to use an autocollimator for various formats of photodetectors. Based on research the processes of hybridization were optimized. We were found that it is more reliable and rational to hybridize large-sized FPA and ROIC of 640×512 pixels on equipment with an autocollimator. And small-sized Detector Arrays and multi-row photodetectors are better to hybridize on equipment without an autocollimator.***

**Keywords:** hybridization, autocollimator, FPA, ROIC, MFPA, crystal.

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