

A study on the development of integrated software for testing SMIA camera module systems

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Abstract

This paper describes a method and framework for evaluating camera sensors and their modules based on the Standard Mobile Imaging Architecture (SMIA) which is a standard specification for mobile phone camera modules proposed by Nokia and ST Microelectronics. This system uses SMIA-based Characteristic Test Methods and Functional Test Methods through a graphical user interface given to the user who are using various image formats such as RAW, RGB, YUV, JPEG and MPEG. In this evaluation software, new menu is added to the existing software module, making it more convenient and easy to access. In addition, basic functions, which are necessary for constructing all proposed test methods and basic functions for data processing, are implemented based on SMIA.