



SDI Review Form 1.6

Journal Name:	Journal of Advances in Mathematics and Computer Science
Manuscript Number:	Ms_JAMCS_38072
Title of the Manuscript:	Novel technique for IRFPA blind pixels detection
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	This study presents a blind pixel detection system. The proposed method is not clearly written and its novelty seems to be limited. There are parts of the manuscript that are not explained in full extent and thus the full potential of this work is not clearly exploited.	Thank you very much. We have added more figures like: (3,4,5 and 10) to clarify the problem and we have modified many paragraphs more detailed. We think, this technique has a novelty due to its way of extracting the Blind pixels. Figure 5 which is a new figure explains the current techniques and compares them with proposed technique. The proposed technique suggests controlling the Vsk voltage by the DSP and doing a simple routine while IRFPA system initializes its parameters. New figure 10 and its related text below, explains the rule of the proposed technique. Our proposal takes two images ONLY while the IRFPA shutter is closed. These two images were taken when Vsk is 5.276V and 4.935V respectively and apply Otsu's method which is the simplest and lightest to implement on DSP or FPGA to find out the blind pixels. Current SBNUC's techniques keep watching if there are blind pixels appeared over hundreds of separated frames on long time period while real-time streaming. It is so slow and has complex algorithms. It makes DSP busier and puts a lot of parameters and temporary data in memory. Many other SBNUC's techniques (which are the majority) prefer to save their resources and not enter into this headache. They think that it's a manufacturer issue and the system has to be calibrated periodically anyhow by manufacture itself (applying RBNUC). This proposed technique helps SBNUC's algorithms to avoid all complexity above and do blind pixel calibration during system initialization stage which all systems used to do and we proved that it detects the same dead pixels. Our university has a blackbody device and optical bench in physics department where we test the system for RBNUC technique to extract the lookup tables as same as the manufacturer does. Thank you again, your gentle question aimed us to add more details and clarify some steps.
Minor REVISION comments	English use should be refined as many parts of the manuscript are hard to understand. Many misspellings and typos also exist.	Thank you again and we apologize for this unprofessional fault. We have fixed this issue which has caused due to different versions of the document updates from both researcher and a tiny issue by MSWord spelling & grammar tool.
Optional/General comments	References are not according to the format So many typing errors Example: Page 3: First Paragraph; Last Line: RBNUC priority is to generate two lookup tables for gain and offset that satisfies [6]; Bad English and wrong statement here. Please rephrase as follows: RBNUC priority is to generate two lookup tables for gain and offset that satisfies the equation (1). Page 3: Second Paragraph: Theas classified So many mistakes of this kind, so kindly rephrase it all.	Thank you All issues Noted and has fixed