عنوان مقاله:

A New Signal Processing System for IRFPA Nonuniformity Detection and Correction Based on FPGA & DSP

محل انتشار:

پانزدهیمن کنفرانس مهندسی برق ایران (سال: 1386)

تعداد صفحات اصل مقاله: 6

نویسندگان:

Babak Zamanlooy - *Department of Electrical Engineering Iran University of Science and Technology Tehran,Iran*

Vahid Hamiatti Vaghef - *Department of Electrical Engineering Iran University of Science and Technology Tehran,Iran*

Sattar mirzakuchaki - *Department of Electrical Engineering Iran University of Science and Technology Tehran,Iran*

Ali shojaee bakhtiari - *Department of Electrical Engineering Iran University of Science and Technology Tehran,Iran*

خلاصه مقاله:

The principle, configuration, and the special features of a new processing system for Infrared Focal Plane Arrays norumifurmity detection and correction is presented in this paper. The work has been done in two phases. First, the nonunifurmity ofIRFPA is detected using a processing system based on FPGA & microcontroller. The FPGA generates system timing and performs data acquisition. The microcontroller reads the IRFPA data from FPGA and sends it to the computer. Afterwards the nonuniftrmity is corrected using a processing system based on FPGA & DSP. .The FPGA here generates system timing and DSP applies the nonunformity c orr e ction al gorithm

کلمات کلیدی:

IRFPA, nonuniformity detection, nonuni formity c orrecti on