Abstract

Breast cancer, the second-leading cause of cancer deaths in American women, is the disease women fear most all over the world. Efficient technique for medical diagnosis is defined to provide better chance of a proper treatment. In this paper, we present a new parallel processing architecture to perform medical detection that uses multiple ultra-sono-graphic features and a
diagnostic algorithm for identifying breast nodule malignancy. The algorithm has been implemented in the first phase without breaking them into macro-blocks, and in the next phase after breaking the frames into the respective macro-blocks. MATLAB has been used for the simulation of the algorithm and the results obtained are presented in this paper. We have also done the simulation and FPGA based synthesis of the proposed architecture for the most commonly used target hardware to analyze the hardware cost.

**Reference**


**Index Terms**

Computer Science  
Signal Processing
Key words
FPGA          Malignant Breast Lesion          MATLAB