Abstract
The progressive implementation of software functions in Integrated Circuits (ICs) has considerably increased the number of transistors and pin connections of ICs. For that reason, Printed Circuit Boards (PCBs) are fabricated with the Surface Mount Technology (SMT) nowadays and IC mounting on PCB is a crucial process that requires high precision. An Automatic Mechanical Montage (AMM) system is used to mount ICs on the sockets using a couple of reference points for every IC in order to find the correct positions for mounting the IC. Due to some factors in the process of PCB development, there are differences between designed and manufactured PCBs, which could generate delays in their production. In this work, a software tool which allows to work with digital images of PCBs is described. This tool finds the differences generated in PCB development, especially the differences in IC reference points using Digital Image Processing (DIP) techniques.

Keywords