SADIQ M. SAIT, YAAGOUB AY, MASUD M
CAD TOOL FOR THE AUTOMATIC-GENERATION OF MICROPROGRAMS
MICROPROCESSORS AND MICROSYSTEMS 12 (8): 463-470 OCT 1988

Abstract

A methodology for automatic synthesis of microprograms for digital systems modeled in the UAHPL register-transfer-level language is described. The algorithms used in the process of translation from UAHPL description to microprograms are also discussed. Since the UAHPL model is directly related to hardware, this approach is better than those based on ordinary high-level languages or special microprogram languages. A simple example of microprogramming for an 8085-based target system is given.

Keywords: digital systems; microprogramming CAD tools UAHPL 8085