Ho Chi Minh City University of Technology
Faculty of Computer Science and Computer Engineering

– Handwritten Digits Recognition System – Research Report

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ZedBoard™ is a complete development kit for designers using Xilinx Zynq®-7000 All Programmable SoC. The board provides various interfaces such as USB-JTAG Programming, USB OTG 2.0, USB-UART bridge, SD card and so on. Combining a dual Corex-A9 Processing System (PS) with Programmable Logic (PL) cells, the Zedboard can be targeted to use in many applications.

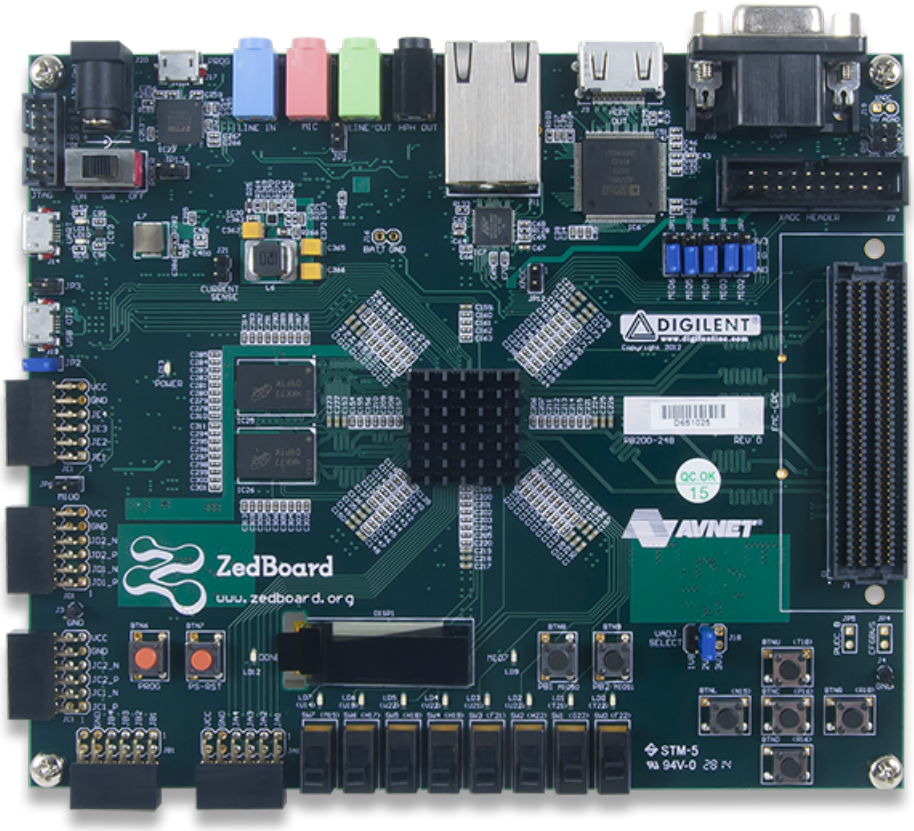

Figure 1: Zedboard

1.3 MNIST Database

The dataset consists of 60000 digits for the training set and 10000 examples for the test set. Each digit have been size-normalized and centered in a fixed-size 28x28 pixel image.

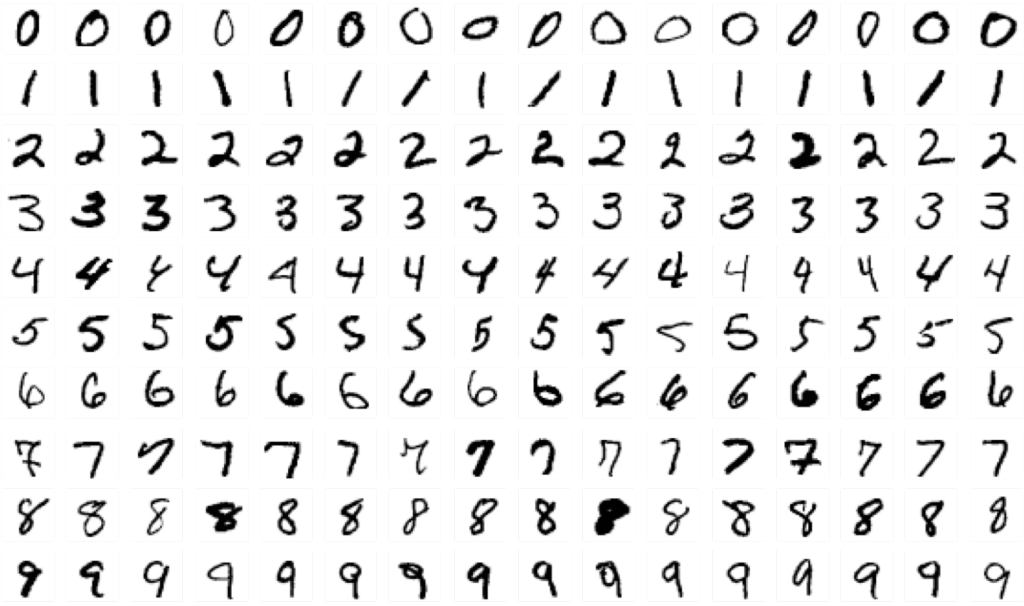

Figure 2: MNIST Database

1.4 Algorithm

2 Methods

3 Results

4 Discussion

References

[1] Zedboard
http://zedboard.org//

[2] THE MNIST DATABASE of handwritten digits
http://yann.lecun.com/exdb/mnist/