

A CONFIGURABLE MIXED SIGNAL PROCESSOR FOR AI ENGINE

Abstract:

Advent of semiconductor technology has made possible the emergence of Mixed signal ICs for efficient implementation of AI Engine on both Analog as well as Digital platform due to the facts that the accuracy level required for Neural Networks in AI Engine is not very high, they provide high synapse density, high computational speed, less power consumption and smaller area in comparison to digital circuits.

Digital circuits on the other hand are very efficient for overall control and are capable of performing operations with high level of accuracy and flexibility.

Keeping these issues in view, this presentation offers the architecture of a new mixed signal AI processor for VLSI implementation by leveraging advantages of both analog and digital