International Journal of Electronics and Communication Engineering (IJECE) ISSN(P): 2278-9901; ISSN(E): 2278-991X Vol. 4, Issue 2, Mar 2015, 13-22 © IASET



## A NOVEL LOW POWER PIPELINED DATAPATH DESIGN USING

## PARALLELISM HAVING CONSTANT THROUGHPUT

## ANSHUMAN TEWARI<sup>1</sup> & HARSH GUPTA<sup>2</sup>

<sup>1</sup>R. V. College of Engineering, RVCE, Bangalore, Karnataka, India <sup>2</sup>Department of ECE, Manipal University Jaipur, Rajasthan, India

## **ABSTRACT**

In this paper, we present a novel algorithm to make Pipelined Datapath architecture to be combined with another Datapath module in a Parallel fashion known as Parallel Pipelined datapath. It has the best power saving efficiency of up to 0.1125X as compared to 2.5X, at the cost of decreased throughput from 4X to 1X, while maintaining the same chip area

**KEYWORDS:** A Novel Low Power Pipelined Datapath Design

www.iaset.us editor@iaset.us