**A COMPARATIVE STUDY OF FIR FILTERS USING VEDIC AND BOOTHS ALGORITHM**

**Abstract:**

In this paper step by step procedure for the construction of a high speed FIR filter is developed based on the concept of Vedic mathematics as well as modified Booth Wallace technique. MAC units made with both these techniques give comparative results. The objective of this paper is to find the better technique suited to the application of MAC as a filter.

**Keywords—** MAC unit, FIR filter, Vedic Multiplier, Booth Wallace Multiplie

**TOOLS:**

1. **XilinxISE 14.7**

**LANGUAGE:**

1. **VerilogHDL**