

# Vedic Multiplier

EE18MTECH11006,EE18MTECH11007

March 8, 2019

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Vedic multiplier is a multiplier which uses **Urdhva Tiryagbhyam sutra**, one of the 16 sutras available in vedic mathematics

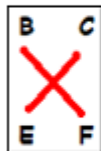
The Sutra(formula) URDHVA TIRYAGBHYAM means:  
**Vertically and crosswise**

This the general formula applicable to all cases of multiplication and also in the division of a large number by another large number

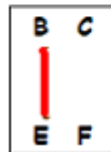
# Implementation



Step 1:  $C \times F$



Step 2:  $B \times F + C \times E$



Step 3:  $B \times E$

# Implementation

The 8 bit vedic multiplier is created using structural modelling.

AND gates and ADDERS are designed according to the Urdhva Tiryagbhyam algorithm.