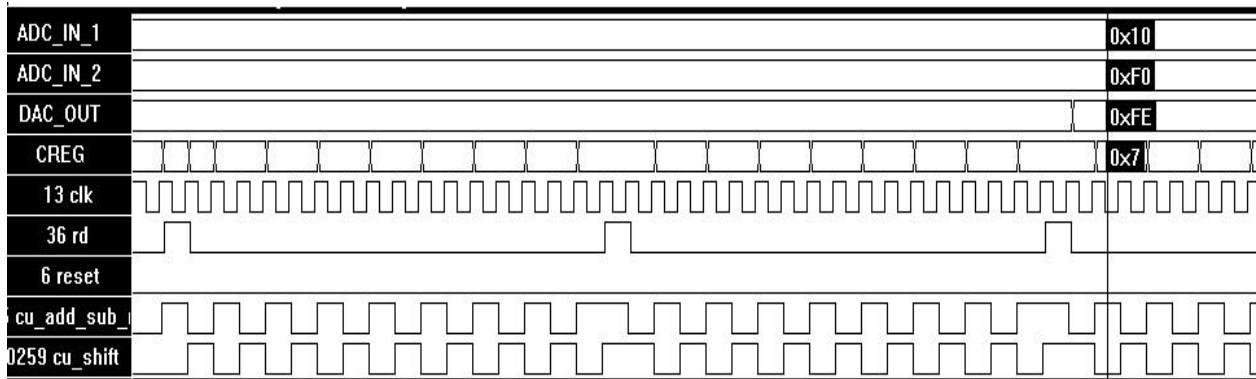
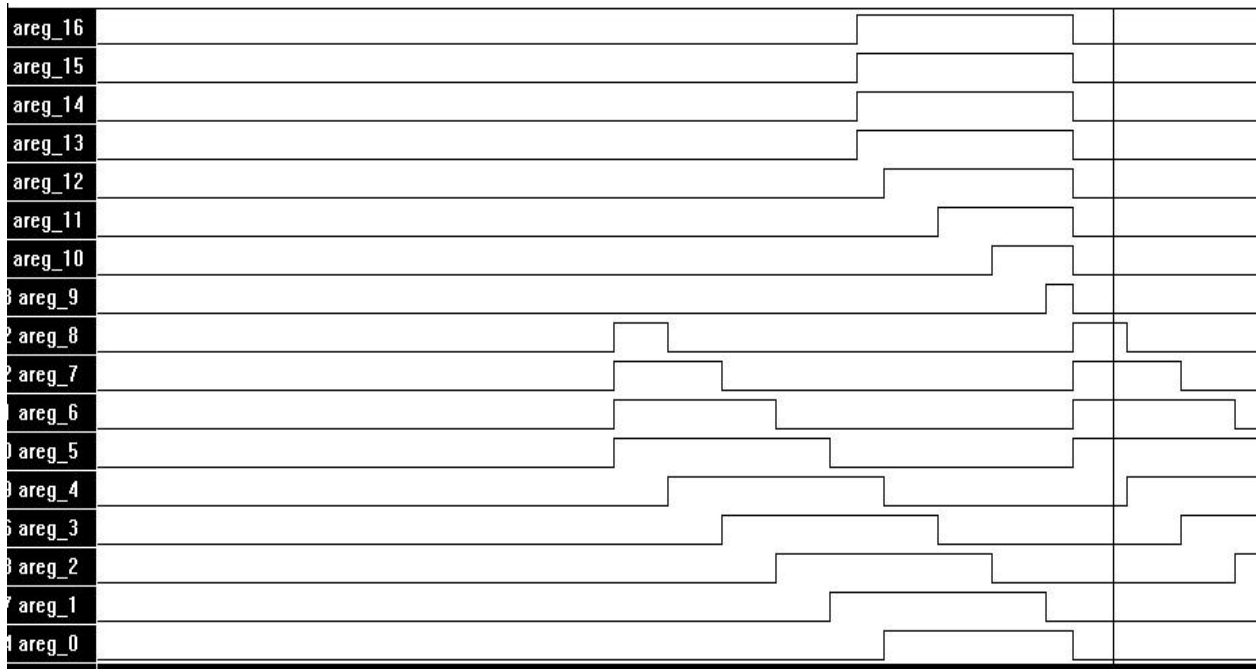


MULTIPLICATION EXAMPLES

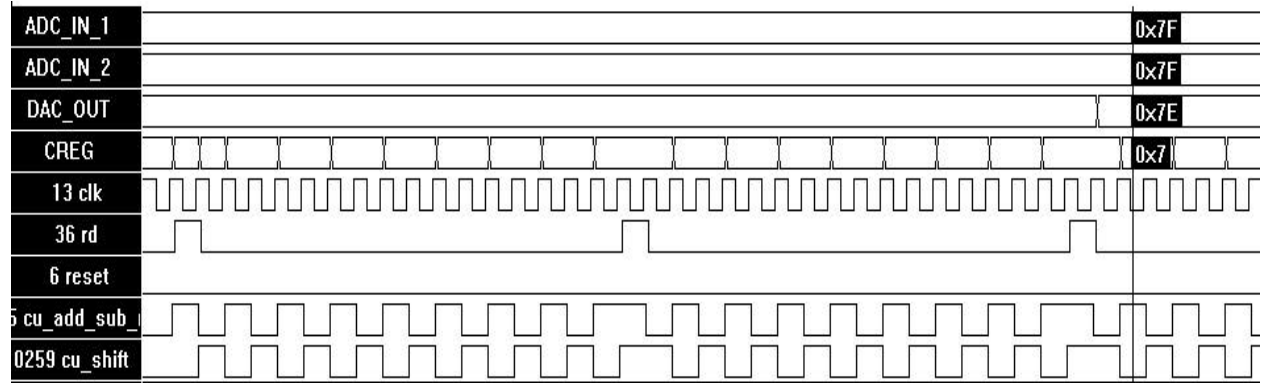


The above example shows the multiplication of 16 (hex 10) by -16 (hex FE). The result should be -256. Since we are discarding the lower 7 bits of the product, we are, in effect, dividing by 128. The result should be -2 (hex FD) which it is. Note that the state variables, CU_ADD_SUB and CU_SHIFT are inverted signals in the diagram.

The “goings on” in the AC Register are shown below.



The next example is 127 (hex 7F) time 127 (hex 7F), the largest possible numbers. The product should be 16,129. When divided by 128, it is 126 (hex 07E). This is shown below.



The final example is 127 (7F) times -127 (hex 81) which should give -16,129. This divided by 128 is -126 (hex 82). This is shown below.

