



(a) Block Diagram

C	A	Q	M		
0	0000	1101	1011	Initial Values	
0	1011	1101	1011	Add	} First Cycle
0	0101	1110	1011	Shift	
0	0010	1111	1011	Shift	} Second Cycle
0	1101	1111	1011	Add	
0	0110	1111	1011	Shift	} Third Cycle
1	0001	1111	1011	Add	
0	1000	1111	1011	Shift	} Fourth Cycle

(b) Example from Figure 9.7 (product in A, Q)

**Figure 9.8 Hardware Implementation of Unsigned Binary Multiplication**