

A	Q	Q <sub>-1</sub>	M	Initial Values	
0000	0011	0	0111		
1001	0011	0	0111	A $\leftarrow$ A - M Shift	} First Cycle
1100	1001	1	0111		
1110	0100	1	0111	Shift	} Second Cycle
0101	0100	1	0111	A $\leftarrow$ A + M Shift	} Third Cycle
0010	1010	0	0111		
0001	0101	0	0111	Shift	} Fourth Cycle

**Figure 9.13 Example of Booth's Algorithm ( $7 \times 3$ )**