Control microprogramado

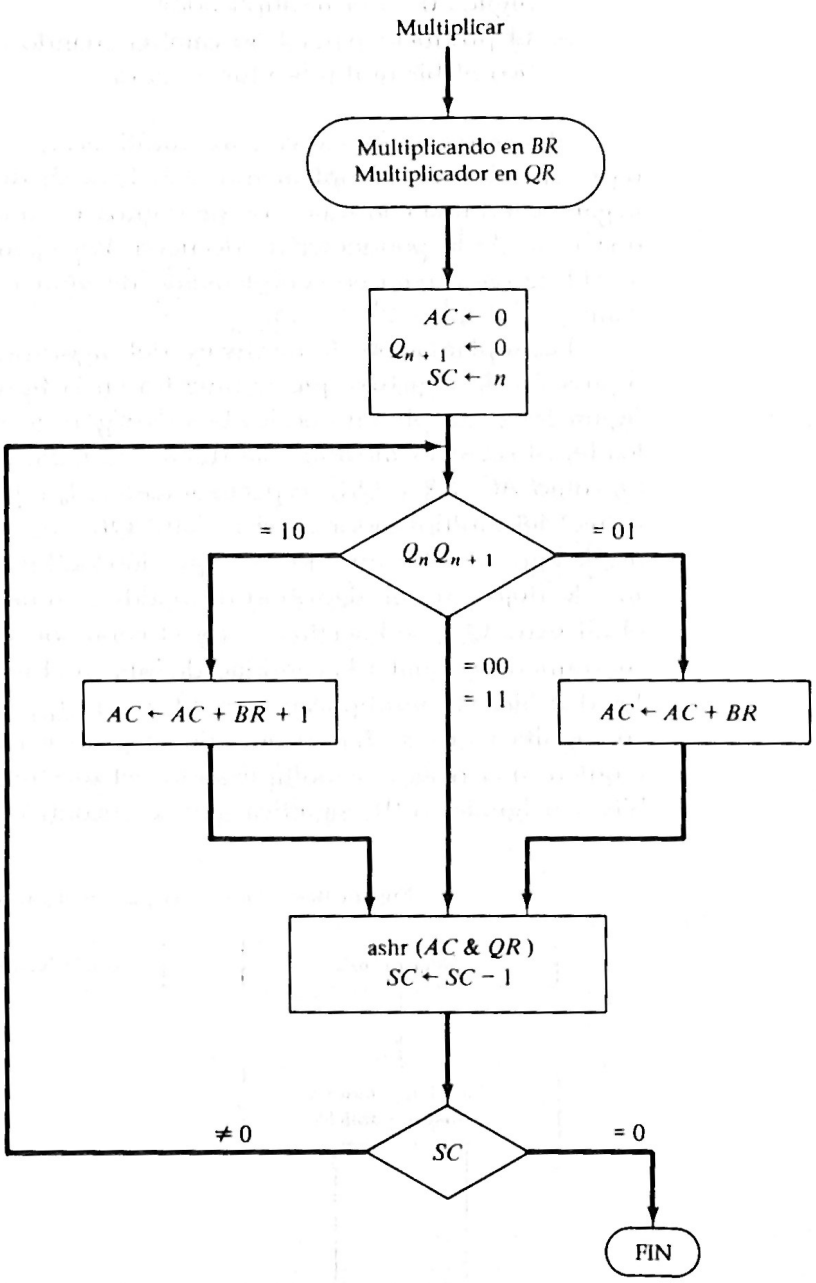
Algoritmo de Booth (MC2 m)

Tabla de la CROM

Dirección	µOperaciones	Bits LCB	µDir. salto
Ciclo de búsqueda			
ADDR(FETCH)	PC → MAR	0 0 0	----------
ADDR(FETCH)+1	M → GPR; PC+1 → PC	0 0 0	----------
ADDR(FETCH)+2	GPR(OP) → OPR	1 1 1	----------
Ciclo de ejecución de MC2 m			
ADDR(MC2)	GPR(AD) → MAR	0 0 0	----------
ADDR(MC2)+1	M → GPR	0 0 0	----------
ADDR(MC2)+2	AC ← 0; Qn+1 ← 0; SC ← n	0 0 0	----------
ADDR(MC2)+3	SC ← SC − 1	0 1 0	ADDR(MC2)+7
ADDR(MC2)+4	----------	0 1 1	ADDR(MC2)+6
ADDR(MC2)+5	AC ← AC+BR	0 0 1	ADDR(MC2)+7
ADDR(MC2)+6	AC ← AC+$\overline{BR}$+1	0 0 0	----------
ADDR(MC2)+7	ashr (AC & QR)	1 0 0	ADDR(MC2)+3
ADDR(MC2)+8	----------	0 0 1	ADDR(FETCH)

Tabla de la LCB

S2	S1	S0	Qn	Qn+1	ZSC	I	B	R
0	0	0	X	X	X	1	0	0
0	0	1	X	X	X	0	1	0
1	1	1	X	X	X	0	0	1
0	1	0	0	0	X	0	1	0
0	1	0	0	1	X	1	0	0
0	1	0	1	0	X	1	0	0
0	1	0	1	1	X	0	1	0
0	1	1	0	X	X	1	0	0
0	1	1	1	X	X	0	1	0
1	0	0	X	X	0	0	1	0
1	0	0	X	X	1	1	0	0


Multiplicar
Multiplicando en BR
Multiplicador en QR
AC ← 0
Q_{n+1} ← 0
SC ← n
Q_n Q_{n+1}
= 10
= 01
= 00
= 11
AC ← AC + B̄R + 1
AC ← AC + BR
ashr (AC & QR)
SC ← SC − 1
SC
≠ 0
= 0
FIN