

# Control microprogramado

## Algoritmo de suma/resta en signo-magnitud (SRSM 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 SRSM m			
ADDR(SRSM)	GPR(AD) → MAR	0 0 0	-----
ADDR(SRSM)+1	M → GPR	0 0 0	-----
ADDR(SRSM)+2	-----	0 1 0	ADDR(SRSM)+5
ADDR(SRSM)+3	EA ← A + B	0 0 0	-----
ADDR(SRSM)+4	AVF ← E	0 0 1	ADDR(FETCH)
ADDR(SRSM)+5	EA ← A+B+1; AVF ← 0	0 0 0	-----
ADDR(SRSM)+6	-----	0 1 1	ADDR(SRSM)+9
ADDR(SRSM)+7	A ← $\overline{A}$	0 0 0	-----
ADDR(SRSM)+8	A ← A+1; AS ← $\overline{AS}$	0 0 1	ADDR(FETCH)
ADDR(SRSM)+9	-----	1 0 0	ADDR(FETCH)
ADDR(SRSM)+10	AS ← 0	0 0 1	ADDR(FETCH)

Tabla de la LCB

S2	S1	S0	OP	RS	E	ZA	I	B	R
0	0	0	X	X	X	X	1	0	0
0	0	1	X	X	X	X	0	1	0
1	1	1	X	X	X	X	0	0	1
0	1	0	0	0	X	X	1	0	0
0	1	0	0	1	X	X	0	1	0
0	1	0	1	0	X	X	0	1	0
0	1	0	1	1	X	X	1	0	0
0	1	1	X	X	0	X	1	0	0
0	1	1	X	X	1	X	0	1	0
1	0	0	X	X	X	0	0	1	0
1	0	0	X	X	X	1	1	0	0

$$RS \leftarrow AS \oplus BS$$

OP (0 → Suma; 1 → Resta)

