State	SE	SIZE1	SIZE0	FR	RF	IR	MAR	MDR	R/W	MOV	MA1	MA0	MB1	MB0	MC2	MC1	MC0	MD	ME	OP4	OP3	OP2	OP1	OP0	Description
0	0	0	0	0	1	0	0	0	0	0	0	0	1	1	0	0	1	1	0	0	1	1	0	1	PC <- 0 (Load initial instruction Address)
1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	MAR <- PC (R15)
2	0	1	0	0	1	0	0	0	1	1	1	0	0	0	0	0	1	1	0	1	0	0	0	1	PC <- PC + 4. R/W=1 MOV=1 SIZE=10
3	0	1	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	IR <- Data Out. Wait for MOC. SIZE=10
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Check for COND. NO-OP
5	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	Data Processing. Do not save to register(opcode2)
6	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	Data Processing. Do affect flags
7	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	Data Processing. Do not affect flags
8	0	0	0	0	1	0	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	1	0	0	PC = PC + 4 x Offset (sign extended)
9	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	0	0	LR <- PC (Link)

State	SE	SIZE1	SIZE0	FR	RF	IR	MAR	MDR	R/W	MOV	MA1	MA0	MB1	MB0	MC2	MC1	MC0	MD	ME	OP4	OP3	OP2	OP1	OP0	Description
10	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	MAR <- Rn
11	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	MAR <- Rn + (Offset_12 OR Rm)
12	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	MAR <- Rn - (Offset_12 OR Rm)
13	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R/W= 1, MOV = 1, SIZE=00
14	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Wait for MOC. SIZE=00. MDR <- Data Out
15	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R/W= 1, MOV = 1, SIZE=10
16	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Wait for MOC. SIZE=10. MDR <- Data Out
17	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1	0	1	Rd <- MDR
18	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	1	1	0	0	0	0	MDR <- Rd
19	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R/W=0, MOV=1, SIZE=00
20	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Wait for MOC. SIZE=00
21	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R/W=0, MOV=1, SIZE=10
22	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Wait for MOC. SIZE=10
23	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	1	0	0	Rn <- Rn + (Offset_12 OR Rm)
24	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	1	0	Rn <- Rn - (Offset_12 OR Rm)

State	SE	SIZE1	SIZE0	FR	RF	IR	MAR	MDR	R/W	MOV	MA1	MA0	MB1	MB0	MC2	MC1	MC0	MD	ME	OP4	OP3	OP2	OP1	OP0	Description
25	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	MAR <- Rn
26	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	MAR <- Rn + (Offset_12 OR Rm)
27	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	MAR <- Rn - (Offset_12 OR Rm)
28	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R/W= 1, MOV = 1, SIZE=01
29	1	0	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Wait for MOC. ENABLE SIGN EXTENDER. MDR <- Data Out
30	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R/W= 1, MOV = 1, SIZE=00
31	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Wait for MOC. ENABLE SIGN EXTENDER. MDR <- Data Out
32	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R/W= 1, MOV = 1, SIZE=01
33	0	0	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Wait for MOC. SIZE=01. MDR <- Data Out
34	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1	0	1	Rd <- MDR
35	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R/W= 1, MOV = 1, SIZE=10
36	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Wait for MOC. SIZE=01. MDR <- Data Out
37	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1	0	1	Rd <- MDR
38	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	1	1	0	0	0	0	MDR <- Rd
39	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R/W=0, MOV=1, SIZE=10
40	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Wait for MOC. SIZE=10
41	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	1	1	1	0	0	0	0	MDR <- Rd + 1 (MA=11 => IR[15:12] + 1) (NUEVA ENTRADA MUX_A)
42	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	MAR <- Rn + 4
43	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	MAR <- Rn + (Offset_12 OR Rm) + 4
44	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	1	MAR <- Rn - (Offset_12 OR Rm) + 4 (Implementar al ALU)
45	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R/W= 1, MOV = 1, SIZE=10
46	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Wait for MOC. SIZE=01. MDR <- Data Out
47	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1	1	0	0	1	1	0	1	Rd + 1 <- MDR (MC=11 => IR[15:12] + 1) (NUEVA ENTRADA MUX_C)
48	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R/W=0, MOV=1, SIZE=10
49	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Wait for MOC. SIZE=10
50	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	R/W=0, MOV=1, SIZE=01
51	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Wait for MOC. SIZE=01