

Instructions set with theirs machine codes and control signals UCC ROM table

Instr	Description	Op Code	Adr Suiv	JM PC	Mux B		ALU			Signaux de commande									Code en Hex	
					MB 1	MB 0	F 2	F 1	F 0	IND	OUTI	HLT	R@I	RDI	RDO	DBO	PCI	RBI		RAI
Fetch (main loop)	MAR←PC	0	1	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	012440
	PC++	1	2	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	022804
	MPC←Opcode	2	X	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	008010
NOP	MPC←0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	000000
HALT	MPC←0,HLT	4	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	000080
INPUT	IND	5	6	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	060200
	MPC←0 A←IR	6	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	004401
OUTPUT	OR←A	7	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	000100
LOAD	MAR←PC	8	9	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	092440
	PC++	9	A	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0A2804
	MAR←mem	A	B	0	1	1	0	0	1	0	0	0	1	0	1	0	0	0	0	0B6450
	A←mem MPC←0	B	0	0	1	1	0	0	1	0	0	0	0	0	1	0	0	0	1	006411
LDI	MAR←PC	C	D	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0d2440
	PC++	D	E	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0e2804
	A←mem MPC←0	E	0	0	1	1	0	0	1	0	0	0	0	0	1	0	0	0	1	006411
STR	MAR←PC	F	10	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	102440
	PC++	10	11	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	112804
	MAR←mem	11	12	0	1	1	0	0	1	0	0	0	1	0	1	0	0	0	0	126450
	mem←A MPC←0	12	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	000028
JMP	PC←A	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	000004
MOVE B	A←B	14	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	000401
MOVE A	B←A	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	000002
ADD	A←A+B	16	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	000C01
SUB	A←A-B	17	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	001001
AND	A←A&B	18	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	001801
OR	A←A B	19	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	1	001C01
NOT	A←~A	1A	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	001401
BEQ	MAR←PC	1B	1C	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	1C2440
	PC++	1C	1D	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	1D2804
	A-B	1D	1E	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1E1000
	PC←mem MPC←0	1E	40	0	1	1	0	0	1	0	0	0	0	0	1	0	0	0	0	406410

BLT	MAR←PC	1F	20	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	202440
	PC++	20	21	0	0	1	0	1	0	0	0	0	0	0	0	0	1	0	0	212804
	A-B	21	22	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	221000
	PC←mem MPC←0	22	80	0	1	1	0	0	1	0	0	0	0	0	1	0	0	0	0	806410