

Instruction Set*

*71° Address operand
1 by te address up
address 256° relative
8 BY te address
No Address or operand*

ACCUMULATOR AND MEMORY		ADDRESSING MODES												BOOLEAN/ARITHMETIC OPERATION						COND. CODE REG.											
OPERATIONS	MNEMONIC	IMMED			DIRECT			INDEX			EXTND			INHER			(All register labels refer to contents)														
		OP	~	#	OP	~	#	OP	~	#	OP	~	#	OP	~	#	H	I	N	Z	V	C									
Add	ADDA	8B	2	2	9B	3	2	AB	5	2	BB	4	3				A + M → A			↑	●	↓	↑	↑	↑	↑	↑	↑			
	ADDB	CB	2	2	DB	3	2	EB	5	2	FB	4	3				B + M → B			↑	●	↓	↑	↑	↑	↑	↑	↑			
Add Acmltrs	ABA																A + B → A			↑	●	↓	↑	↑	↑	↑	↑	↑			
Add with Carry	ADCA	89	2	2	99	3	2	A9	5	2	B9	4	3				A + M + C → A			↑	●	↓	↑	↑	↑	↑	↑	↑			
	ADCB	C9	2	2	D9	3	2	E9	5	2	F9	4	3				B + M + C → B			↑	●	↓	↑	↑	↑	↑	↑	↑			
And	ANDA	84	2	2	94	3	2	A4	5	2	B4	4	3				A • M → A			●	●	↓	↑	↑	↑	↑	↑	↑			
	ANDB	C4	2	2	D4	3	2	E4	5	2	F4	4	3				B • M → B			●	●	↓	↑	↑	↑	↑	↑	↑			
Bit Test	BITA	85	2	2	95	3	2	A5	5	2	B5	4	3				A • M			●	●	↓	↑	↑	↑	↑	↑	↑			
	BITB	C5	2	2	D5	3	2	E5	5	2	F5	4	3				B • M			●	●	↓	↑	↑	↑	↑	↑	↑			
Clear	CLR																00 → M			●	●	R	S	R	R	R	R				
	CLRA																4F	2	1	00 → A			●	●	R	S	R	R	R	R	
	CLRB																5F	2	1	00 → B			●	●	↑	↓	↑	↑	↑	↑	
Compare	CMPA	81	2	2	91	3	2	A1	5	2	B1	4	3				A - M			●	●	↑	↓	↑	↑	↑	↑	↑			
	CMPB	C1	2	2	D1	3	2	E1	5	2	F1	4	3				B - M			●	●	↑	↓	↑	↑	↑	↑	↑			
Compare Acmltrs	CBA																11	2	1	A - B			●	●	↑	↑	↑	↑	↑	↑	
Complement, 1's	COM																43	2	1	M → M			●	●	↑	↑	↑	↑	↑	↑	
	COMA																53	2	1	Ā → A			●	●	↑	↑	↑	↑	↑	↑	
Complement, 2's	COMB																00 - M → M			●	●	↑	↑	↑	↑	↑	↑	↑	↑		
(Negate)	NEG																40	2	1	00 - A → A			●	●	↑	↑	↑	↑	↑	↑	
	NEGA																50	2	1	00 - B → B			●	●	↑	↑	↑	↑	↑	↑	
Decimal Adjust, A	DAA																19	2	1	Converts Binary Add. of BCD Characters into BCD Format			●	●	↑	↑	↑	↑	↑	↑	
Decrement	DEC																6A	7	2	7A	6	3	●	●	↑	↑	↑	↑	↑	↑	
	DECA																4A	2	1	A - 1 → A			●	●	↑	↑	↑	↑	↑	↑	
	DECB																5A	2	1	B - 1 → B			●	●	↑	↑	↑	↑	↑	↑	
Exclusive OR	EORA	88	2	2	98	3	2	A8	5	2	B8	4	3				A ⊕ M → A			●	●	↑	↑	↑	↑	↑	↑	↑	↑		
	EORB	C8	2	2	D8	3	2	E8	5	2	F8	4	3				B ⊕ M → B			●	●	↑	↑	↑	↑	↑	↑	↑	↑		
Increment	INC																6C	7	2	7C	6	3	●	●	↑	↑	↑	↑	↑	↑	
	INCA																4C	2	1	A + 1 → A			●	●	↑	↑	↑	↑	↑	↑	
	INCB																5C	2	1	B + 1 → B			●	●	↑	↑	↑	↑	↑	↑	
Load Acmltr	LDAA	86	2	2	96	3	2	A6	5	2	B6	4	3				M → A			●	●	↑	↑	↑	↑	↑	↑	↑	↑		
	LDAB	C6	2	2	D6	3	2	E6	5	2	F6	4	3				M → B			●	●	↑	↑	↑	↑	↑	↑	↑	↑		
Or, Inclusive	ORAA	8A	2	2	9A	3	2	AA	5	2	BA	4	3				A + M → A			●	●	↑	↑	↑	↑	↑	↑	↑	↑		
	ORAB	CA	2	2	DA	3	2	EA	5	2	FA	4	3				B + M → B			●	●	↑	↑	↑	↑	↑	↑	↑	↑		
Push Data	PSHA																36	4	1	A → MSP, SP - 1 → SP			●	●	●	●	●	●	●	●	
	PSHB																37	4	1	B → MSP, SP - 1 → SP			●	●	●	●	●	●	●	●	
Pull Data	PULA																32	4	1	SP + 1 → SP, MSP → A			●	●	●	●	●	●	●	●	
	PULB																33	4	1	SP + 1 → SP, MSP → B			●	●	●	●	●	●	●	●	
Rotate Left	ROL																69	7	2	79	6	3	●	●	↑	↑	↑	↑	↑	↑	↑