## CA19.32

Format	ID	MNEMONIC	OPCODE	no operands
0	0	HLT	00000000	
<u> </u>	1	NOP	0000001	
	0	JE	00100000	immediate only (address)
	1	JNE	00100001	
	2	JA	00100010	
	3	JAE	00100011	
	4	JB	00100100	
	5 6	JBE JG	00100101	
	7	JGE	00100110 00100111	
	8	JL	00100111	
1	9	JLE	00101001	
1	10	JZ	00101001	
	11	JNZ	00101011	
	12	JC	001011100	
	13	JNC	00101101	
	14	JO 3146	00101101	
	15	JNO	00101111	
	16	JS	00101111	
	17	JNS	00110000	
	18	JMP	00110001	
	0	JE	01000000	register operand only
	1	JNE	01000000	register operand only
	2	JA	01000010	
	3	JAE	01000011	
	4	JB	0100011	
	5	JBE	01000101	
	6	JG	01000101	
	7	JGE	01000111	
	8	JL	01001000	
	9	JLE	01001001	
	10	JZ	01001011	
2	11	JNZ	01001011	
	12	JC	01001100	
	13	JNC	01001101	
	14	JO	01001101	
	15	JNO	01001111	
	16	JS	01010000	
	17	JNS	01010001	
	18	INC	01010001	
	19	DEC	01010013	
	20	NEG	0101011	
	21	NOT	01010101	
	22	JMP	01010110	
	0	MOV	01100000	immediate, register
	1	ADD	01100001	
	2	SUB	01100010	
	3	CMP	01100011	
	4	MUL	01100100	
	5	IMUL	01100101	
	6	DIV	01100101	
	7	IDIV	01100111	
3	8	AND	01101011	
	9	OR	01101000	
	10	SHL	01101001	
	11	SAL	01101010	
	11	JAL	01101011	

	12	SHR	01101100	
	13	SAR	01101101	
	14	LOAD	01101110	
	15	STORE	01101111	
	0	MOV	10000000	register, register
	1	ADD	10000001	
	2	SUB	10000010	
	3	CMP	10000011	
	4	MUL	10000100	
	5	IMUL	10000101	
	6	DIV	10000110	
	7	IDIV	10000111	
4	8	AND	10001000	
	9	OR	10001001	
	10	SHL	10001010	
	11	SAL	10001011	
	12	SHR	10001100	
	13	SAR	10001101	
	14	LOAD	10001110	
	15	STORE	10001111	
	16	XCHG	10010000	

	Register	ID	Binary
AX		0	00000000
BX		1	0000001
CX		2	0000010
DX		3	00000011
SI		4	00000100
DI		5	00000101
IP		NaN	NaN
F		NaN	NaN