

Opcode Code		Instruction	Machine code	Flags changed	Regs changed	Cycles PC		Zero page
0x40	ADD	ADD A,0xHI	0x40HI	Z,C,N	B,A	5	PC=PC+2	
0x80	ADD	ADD A,B	0x80	Z,C,N	A	3	PC=PC+1	
0x10	ADD	ADD A,r0	0x10	Z,C,N	B,A	4	PC=PC+1	
0x90	ADD	ADD A,r1	0x90	Z,C,N	B,A	4	PC=PC+1	
0x20	ADD	ADD A,r2	0x20	Z,C,N	B,A	4	PC=PC+1	
0x60	ADD	ADD A,r3	0x60	Z,C,N	B,A	4	PC=PC+1	
0x30	ADD	ADD A,r4	0x30	Z,C,N	B,A	4	PC=PC+1	
0x70	ADD	ADD A,r5	0x70	Z,C,N	B,A	4	PC=PC+1	
0x04	ADDC	ADDC A,0xHI	0x04HI	Z,C,N	B,A	5	PC=PC+2	
0x44	ADDC	ADDC A,B	0x44	Z,C,N	A	3	PC=PC+1	
0x14	ADDC	ADDC A,r0	0x14	Z,C,N	B,A	4	PC=PC+1	
0x54	ADDC	ADDC A,r1	0x54	Z,C,N	B,A	4	PC=PC+1	
0x24	ADDC	ADDC A,r2	0x24	Z,C,N	B,A	4	PC=PC+1	
0x64	ADDC	ADDC A,r3	0x64	Z,C,N	B,A	4	PC=PC+1	
0x34	ADDC	ADDC A,r4	0x34	Z,C,N	B,A	4	PC=PC+1	
0x74	ADDC	ADDC A,r5	0x74	Z,C,N	B,A	4	PC=PC+1	
0xbd	AND	AND A,0xHI	0xbdHI	Z,C,N	B,A	5	PC=PC+2	
0xad	AND	AND A,B	0xad	Z,C,N	A	3	PC=PC+1	
0xf6	CALL	CALL 0xHIJK	0xf6HIJK	-	T	6	PC=PC+2	
0xf7	CALL_C	CALL_C 0xHIJK	0xf7HIJK	-	T T	6 4 6 4	PC=PC+ 3 3	
0xeb	CALL_E	CALL_E 0xHIJK	0xebHIJK	-	T	4 4 6 4	PC=PC+3 3 3	
0xee	CALL_G	CALL_G 0xHIJK	0xeeHIJK	-	T	6 4 4 4	PC=PC+ 3 3 3	
0xef	CALL_GE	CALL_GE 0xHIJK	0xefHIJK	-	T T	6 4 6 4	PC=PC+ 3 3	
0xf1	CALL_L	CALL_L 0xHIJK	0xf1HIJK	-	T	4 6 4 4	PC=PC+3 3 3	
0xf2	CALL_LE	CALL_LE 0xHIJK	0xf2HIJK	-	T T	4 6 6 4	PC=PC+3 3	
0xfa	CALL_NC	CALL_NC 0xHIJK	0xfaHIJK	-	T T	4 6 4 6	PC=PC+3 3	
0xed	CALL_NE	CALL_NE 0xHIJK	0xedHIJK	-	T T	6 6 4 4	PC=PC+ 3 3	
0xea	CALL_NZ	CALL_NZ 0xHIJK	0xeaHIJK	-	T T	6 6 4 4	PC=PC+ 3 3	
0xe9	CALL_Z	CALL_Z 0xHIJK	0xe9HIJK	-	T T	4 4 6 6	PC=PC+3 3	
0xe7	CLRC	CLRC	0xe7	Z,C,N		3	PC=PC+1	
0x02	CMP	CMP A,0xHI	0x02HI	Z,C,N	B	5	PC=PC+2	
0x42	CMP	CMP A,B	0x42	Z,C,N		3	PC=PC+1	
0x12	CMP	CMP A,r0	0x12	Z,C,N	B	4	PC=PC+1	
0x52	CMP	CMP A,r1	0x52	Z,C,N	B	4	PC=PC+1	
0x22	CMP	CMP A,r2	0x22	Z,C,N	B	4	PC=PC+1	
0x62	CMP	CMP A,r3	0x62	Z,C,N	B	4	PC=PC+1	
0x32	CMP	CMP A,r4	0x32	Z,C,N	B	4	PC=PC+1	

0x72	CMP	CMP A,r5	0x72	Z,C,N	B	4	PC=PC+1	
0x06	CMPC	CMPC A,0xHI	0x06HI	Z,C,N	B	5	PC=PC+2	
0x46	CMPC	CMPC A,B	0x46	Z,C,N		3	PC=PC+1	
0x16	CMPC	CMPC A,r0	0x16	Z,C,N	B	4	PC=PC+1	
0x56	CMPC	CMPC A,r1	0x56	Z,C,N	B	4	PC=PC+1	
0x26	CMPC	CMPC A,r2	0x26	Z,C,N	B	4	PC=PC+1	
0x66	CMPC	CMPC A,r3	0x66	Z,C,N	B	4	PC=PC+1	
0x36	CMPC	CMPC A,r4	0x36	Z,C,N	B	4	PC=PC+1	
0x76	CMPC	CMPC A,r5	0x76	Z,C,N	B	4	PC=PC+1	
0x03	DEC	DEC A	0x03	Z,C,N	A	3	PC=PC+1	
0x0b	DEC	DEC B	0x0b	Z,C,N	A,B	4	PC=PC+1	
0x53	DEC	DEC r0	0x53	Z,C,N	A,r0	4	PC=PC+1	
0x5b	DEC	DEC r1	0x5b	Z,C,N	A,r1	4	PC=PC+1	
0xa3	DEC	DEC r2	0xa3	Z,C,N	A,r2	4	PC=PC+1	
0xab	DEC	DEC r3	0xab	Z,C,N	A,r3	4	PC=PC+1	
0xf3	DEC	DEC r4	0xf3	Z,C,N	A,r4	4	PC=PC+1	
0xfb	DEC	DEC r5	0xfb	Z,C,N	A,r5	4	PC=PC+1	
0xfe	HALT	HALT	0xfe	-		3	PC=PC+1	
0x00	INC	INC A	0x00	Z,C,N	B,A	4	PC=PC+1	
0x08	INC	INC B	0x08	Z,C,N	A,B	4	PC=PC+1	
0x50	INC	INC r0	0x50	Z,C,N	B,A,r0	5	PC=PC+1	
0x5c	INC	INC r0r1	0x5c	Z,C,N	A,B,r1,r0	8	PC=PC+1	
0x58	INC	INC r1	0x58	Z,C,N	B,A,r1	5	PC=PC+1	
0xa0	INC	INC r2	0xa0	Z,C,N	B,A,r2	5	PC=PC+1	
0xac	INC	INC r2r3	0xac	Z,C,N	A,B,r3,r2	8	PC=PC+1	
0xa8	INC	INC r3	0xa8	Z,C,N	B,A,r3	5	PC=PC+1	
0xf4	INC	INC r4	0xf4	Z,C,N	B,A,r4	5	PC=PC+1	
0xfc	INC	INC r4r5	0xfc	Z,C,N	A,B,r5,r4	8	PC=PC+1	
0xf8	INC	INC r5	0xf8	Z,C,N	B,A,r5	5	PC=PC+1	
0xbf	INT	INT	0xbf	-	T	6	PC=PC+1	ZP
0xe5	JC	JC 0xHIJK	0xe5HIJK	-	T T	6 4 6 4	PC=PC+ 3 3	
0xd6	JE	JE 0xHIJK	0xd6HIJK	-	T	4 4 6 4	PC=PC+3 3 3	
0xdd	JG	JG 0xHIJK	0xddHIJK	-	T	6 4 4 4	PC=PC+ 3 3 3	
0xde	JGE	JGE 0xHIJK	0xdeHIJK	-	T T	6 4 6 4	PC=PC+ 3 3	
0xdf	JL	JL 0xHIJK	0xdfHIJK	-	T	4 6 4 4	PC=PC+3 3 3	
0xe2	JLE	JLE 0xHIJK	0xe2HIJK	-	T T	4 6 6 4	PC=PC+3 3	
0xe3	JMP	JMP 0xHIJK	0xe3HIJK	-	T	6	PC=PC+2	
0xe6	JNC	JNC 0xHIJK	0xe6HIJK	-	T T	4 6 4 6	PC=PC+3 3	
0xdb	JNE	JNE 0xHIJK	0xdbHIJK	-	T T	6 6 4 4	PC=PC+ 3 3	
0xd5	JNZ	JNZ 0xHIJK	0xd5HIJK	-	T T	6 6 4 4	PC=PC+ 3 3	
0xd3	JZ	JZ 0xHIJK	0xd3HIJK	-	T T	4 4 6 6	PC=PC+3 3	

0x1d	MOV	MOV A,0xHI	0x1dHI	-	A	4	PC=PC+2	
0x0e	MOV	MOV A,B	0x0e	-	A	3	PC=PC+1	
0x9f	MOV	MOV A,F	0x9f	-	A	3	PC=PC+1	
0x07	MOV	MOV A,U	0x07	-	A	3	PC=PC+1	
0x1f	MOV	MOV A, [0xHIJK]	0x1fHIJK	-	T,A	7	PC=PC+3	
0x1e	MOV	MOV A,[0xHI]	0x1eHI	-	A	5	PC=PC+2	ZP
0x91	MOV	MOV A,[r0r1]	0x91	-	T,A	5	PC=PC+1	
0x67	MOV	MOV A,[r2r3]	0x67	-	T,A	5	PC=PC+1	
0x77	MOV	MOV A,[r4r5]	0x77	-	T,A	5	PC=PC+1	
0x93	MOV	MOV A,r0	0x93	-	A	3	PC=PC+1	
0x1b	MOV	MOV A,r1	0x1b	-	A	3	PC=PC+1	
0xa1	MOV	MOV A,r2	0xa1	-	A	3	PC=PC+1	
0x28	MOV	MOV A,r3	0x28	-	A	3	PC=PC+1	
0xb1	MOV	MOV A,r4	0xb1	-	A	3	PC=PC+1	
0x38	MOV	MOV A,r5	0x38	-	A	3	PC=PC+1	
0x0d	MOV	MOV AB,0xHIJK	0x0dHIJK	-	A,B	6	PC=PC+3	
0x18	MOV	MOV AB,r0r1	0x18	-	B,A	4	PC=PC+1	
0x19	MOV	MOV AB,r2r3	0x19	-	B,A	4	PC=PC+1	
0x1a	MOV	MOV AB,r4r5	0x1a	-	B,A	4	PC=PC+1	
0x2b	MOV	MOV B,0xHI	0x2bHI	-	B	4	PC=PC+2	
0x0f	MOV	MOV B,A	0x0f	-	B	3	PC=PC+1	
0x0c	MOV	MOV B,U	0x0c	-	B	3	PC=PC+1	
0x2d	MOV	MOV B, [0xHIJK]	0x2dHIJK	-	T,B	7	PC=PC+3	
0x2c	MOV	MOV B,[0xHI]	0x2cHI	-	B	5	PC=PC+2	ZP
0x94	MOV	MOV B,r0	0x94	-	B	3	PC=PC+1	
0x1c	MOV	MOV B,r1	0x1c	-	B	3	PC=PC+1	
0xa2	MOV	MOV B,r2	0xa2	-	B	3	PC=PC+1	
0x29	MOV	MOV B,r3	0x29	-	B	3	PC=PC+1	
0xb2	MOV	MOV B,r4	0xb2	-	B	3	PC=PC+1	
0x39	MOV	MOV B,r5	0x39	-	B	3	PC=PC+1	
0x13	MOV	MOV U,0xHI	0x13HI	-	U	4	PC=PC+2	
0x09	MOV	MOV U,A	0x09	-	U	3	PC=PC+1	
0x0a	MOV	MOV U,B	0x0a	-	U	3	PC=PC+1	
0x3b	MOV	MOV [0xHIJK],A	0x3bHIJK	-	T	7	PC=PC+3	
0xcf	MOV	MOV [0xHIJK],B	0xcfHIJK	-	T	7	PC=PC+3	
0xd2	MOV	MOV [0xHIJK],r0	0xd2HIJK	-	T	7	PC=PC+3	
0x9a	MOV	MOV [0xHIJK],r1	0x9aHIJK	-	T	7	PC=PC+3	
0xa7	MOV	MOV [0xHIJK],r2	0xa7HIJK	-	T	7	PC=PC+3	
0xaa	MOV	MOV [0xHIJK],r3	0xaaHIJK	-	T	7	PC=PC+3	

0xb7	MOV	MOV [0xHIJK],r4	0xb7HIJK	-	T	7	PC=PC+3	
0x7b	MOV	MOV [0xHIJK],r5	0x7bHIJK	-	T	7	PC=PC+3	
0x3a	MOV	MOV [0xHI],A	0x3aHI	-		5	PC=PC+2	ZP
0xce	MOV	MOV [0xHI],B	0xceHI	-		5	PC=PC+2	ZP
0x97	MOV	MOV [0xHI],r0	0x97HI	-		5	PC=PC+2	ZP
0x5f	MOV	MOV [0xHI],r1	0x5fHI	-		5	PC=PC+2	ZP
0xa6	MOV	MOV [0xHI],r2	0xa6HI	-		5	PC=PC+2	ZP
0x6f	MOV	MOV [0xHI],r3	0x6fHI	-		5	PC=PC+2	ZP
0xb6	MOV	MOV [0xHI],r4	0xb6HI	-		5	PC=PC+2	ZP
0x3f	MOV	MOV [0xHI],r5	0x3fHI	-		5	PC=PC+2	ZP
0x17	MOV	MOV [r0r1],0xHI	0x17HI	-	A,T	7	PC=PC+2	
0x57	MOV	MOV [r0r1],A	0x57	-	T	5	PC=PC+1	
0x23	MOV	MOV [r2r3],0xHI	0x23HI	-	A,T	7	PC=PC+2	
0x27	MOV	MOV [r2r3],A	0x27	-	T	5	PC=PC+1	
0x33	MOV	MOV [r4r5],0xHI	0x33HI	-	A,T	7	PC=PC+2	
0x37	MOV	MOV [r4r5],A	0x37	-	T	5	PC=PC+1	
0x4b	MOV	MOV r0,0xHI	0x4bHI	-	r0	4	PC=PC+2	
0x49	MOV	MOV r0,A	0x49	-	r0	3	PC=PC+1	
0x4a	MOV	MOV r0,B	0x4a	-	r0	3	PC=PC+1	
0x6b	MOV	MOV r0, [0xHIJK]	0x6bHIJK	-	T,r0	7	PC=PC+3	
0x6a	MOV	MOV r0,[0xHI]	0x6aHI	-	r0	5	PC=PC+2	ZP
0x59	MOV	MOV r0,r1	0x59	-	r0	3	PC=PC+1	
0x6c	MOV	MOV r0,r2	0x6c	-	r0	3	PC=PC+1	
0x68	MOV	MOV r0,r3	0x68	-	r0	3	PC=PC+1	
0x7c	MOV	MOV r0,r4	0x7c	-	r0	3	PC=PC+1	
0x78	MOV	MOV r0,r5	0x78	-	r0	3	PC=PC+1	
0x48	MOV	MOV r0r1,0xHIJK	0x48HIJK	-	r0,r1	6	PC=PC+3	
0x43	MOV	MOV r0r1,AB	0x43	-	r1,r0	4	PC=PC+1	
0x63	MOV	MOV r0r1,r2r3	0x63	-	r1,r0	4	PC=PC+1	
0x73	MOV	MOV r0r1,r4r5	0x73	-	r1,r0	4	PC=PC+1	
0x4d	MOV	MOV r1,0xHI	0x4dHI	-	r1	4	PC=PC+2	
0x47	MOV	MOV r1,A	0x47	-	r1	3	PC=PC+1	
0x4c	MOV	MOV r1,B	0x4c	-	r1	3	PC=PC+1	
0x4f	MOV	MOV r1, [0xHIJK]	0x4fHIJK	-	T,r1	7	PC=PC+3	
0x4e	MOV	MOV r1,[0xHI]	0x4eHI	-	r1	5	PC=PC+2	ZP
0x5a	MOV	MOV r1,r0	0x5a	-	r1	3	PC=PC+1	
0x69	MOV	MOV r1,r2	0x69	-	r1	3	PC=PC+1	
0x6d	MOV	MOV r1,r3	0x6d	-	r1	3	PC=PC+1	
0x79	MOV	MOV r1,r4	0x79	-	r1	3	PC=PC+1	
0x7d	MOV	MOV r1,r5	0x7d	-	r1	3	PC=PC+1	
0x89	MOV	MOV r2,0xHI	0x89HI	-	r2	4	PC=PC+2	

0x83	MOV	MOV r2,A	0x83	-	r2	3	PC=PC+1	
0x88	MOV	MOV r2,B	0x88	-	r2	3	PC=PC+1	
0x8b	MOV	MOV r2, [0xHIJK]	0x8bHIJK	-	T,r2	7	PC=PC+3	
0x8a	MOV	MOV r2,[0xHI]	0x8aHI	-	r2	5	PC=PC+2	ZP
0x9c	MOV	MOV r2,r0	0x9c	-	r2	3	PC=PC+1	
0x98	MOV	MOV r2,r1	0x98	-	r2	3	PC=PC+1	
0xa9	MOV	MOV r2,r3	0xa9	-	r2	3	PC=PC+1	
0xb3	MOV	MOV r2,r4	0xb3	-	r2	3	PC=PC+1	
0xb8	MOV	MOV r2,r5	0xb8	-	r2	3	PC=PC+1	
0x82	MOV	MOV r2r3,0xHIJK	0x82HIJK	-	r2,r3	6	PC=PC+3	
0x81	MOV	MOV r2r3,AB	0x81	-	r3,r2	4	PC=PC+1	
0x92	MOV	MOV r2r3,r0r1	0x92	-	r3,r2	4	PC=PC+1	
0xb0	MOV	MOV r2r3,r4r5	0xb0	-	r3,r2	4	PC=PC+1	
0x86	MOV	MOV r3,0xHI	0x86HI	-	r3	4	PC=PC+2	
0x84	MOV	MOV r3,A	0x84	-	r3	3	PC=PC+1	
0x8c	MOV	MOV r3,B	0x8c	-	r3	3	PC=PC+1	
0x8d	MOV	MOV r3, [0xHIJK]	0x8dHIJK	-	T,r3	7	PC=PC+3	
0x87	MOV	MOV r3,[0xHI]	0x87HI	-	r3	5	PC=PC+2	ZP
0x95	MOV	MOV r3,r0	0x95	-	r3	3	PC=PC+1	
0x9d	MOV	MOV r3,r1	0x9d	-	r3	3	PC=PC+1	
0xa4	MOV	MOV r3,r2	0xa4	-	r3	3	PC=PC+1	
0xb4	MOV	MOV r3,r4	0xb4	-	r3	3	PC=PC+1	
0xbc	MOV	MOV r3,r5	0xbc	-	r3	3	PC=PC+1	
0xc3	MOV	MOV r4,0xHI	0xc3HI	-	r4	4	PC=PC+2	
0xc2	MOV	MOV r4,A	0xc2	-	r4	3	PC=PC+1	
0xc8	MOV	MOV r4,B	0xc8	-	r4	3	PC=PC+1	
0xca	MOV	MOV r4, [0xHIJK]	0xcaHIJK	-	T,r4	7	PC=PC+3	
0xc9	MOV	MOV r4,[0xHI]	0xc9HI	-	r4	5	PC=PC+2	ZP
0xd1	MOV	MOV r4,r0	0xd1	-	r4	3	PC=PC+1	
0xd8	MOV	MOV r4,r1	0xd8	-	r4	3	PC=PC+1	
0xe1	MOV	MOV r4,r2	0xe1	-	r4	3	PC=PC+1	
0xe8	MOV	MOV r4,r3	0xe8	-	r4	3	PC=PC+1	
0xf9	MOV	MOV r4,r5	0xf9	-	r4	3	PC=PC+1	
0xc1	MOV	MOV r4r5,0xHIJK	0xc1HIJK	-	r4,r5	6	PC=PC+3	
0xc0	MOV	MOV r4r5,AB	0xc0	-	r5,r4	4	PC=PC+1	
0xd0	MOV	MOV r4r5,r0r1	0xd0	-	r5,r4	4	PC=PC+1	
0xe0	MOV	MOV r4r5,r2r3	0xe0	-	r5,r4	4	PC=PC+1	
0xc5	MOV	MOV r5,0xHI	0xc5HI	-	r5	4	PC=PC+2	
0xc4	MOV	MOV r5,A	0xc4	-	r5	3	PC=PC+1	
0xcc	MOV	MOV r5,B	0xcc	-	r5	3	PC=PC+1	
0xc7	MOV	MOV r5, [0xHIJK]	0xc7HIJK	-	T,r5	7	PC=PC+3	
0xc6	MOV	MOV r5,[0xHI]	0xc6HI	-	r5	5	PC=PC+2	ZP

0xd4	MOV	MOV r5,r0	0xd4	-	r5	3	PC=PC+1
0xdc	MOV	MOV r5,r1	0xdc	-	r5	3	PC=PC+1
0xe4	MOV	MOV r5,r2	0xe4	-	r5	3	PC=PC+1
0xec	MOV	MOV r5,r3	0xec	-	r5	3	PC=PC+1
0xf5	MOV	MOV r5,r4	0xf5	-	r5	3	PC=PC+1
0xda	NAND	NAND A,0xHI	0xdaHI	Z,C,N	B,A	5	PC=PC+2
0xba	NAND	NAND A,B	0xba	Z,C,N	A	3	PC=PC+1
0xff	NOP	NOP	0xff	-		2	PC=PC+1
0x9e	NOR	NOR A,0xHI	0x9eHI	Z,C,N	B,A	5	PC=PC+2
0x7e	NOR	NOR A,B	0x7e	Z,C,N	A	3	PC=PC+1
0xd7	NOT	NOT A	0xd7	Z,C,N	A	3	PC=PC+1
0xbb	OR	OR A,0xHI	0xbbHI	Z,C,N	B,A	5	PC=PC+2
0x9b	OR	OR A,B	0x9b	Z,C,N	A	3	PC=PC+1
0x2a	POP	POP A	0x2a	-	A	4	PC=PC+1
0x2e	POP	POP B	0x2e	-	B	4	PC=PC+1
0xaf	POP	POP F	0xaf	Z,C,N		4	PC=PC+1
0x3d	POP	POP T	0x3d	-	T	4	PC=PC+1
0x7a	POP	POP r0	0x7a	-	r0	4	PC=PC+1
0x5d	POP	POP r1	0x5d	-	r1	4	PC=PC+1
0x99	POP	POP r2	0x99	-	r2	4	PC=PC+1
0x8e	POP	POP r3	0x8e	-	r3	4	PC=PC+1
0xcb	POP	POP r4	0xcb	-	r4	4	PC=PC+1
0xcd	POP	POP r5	0xcd	-	r5	4	PC=PC+1
0x3c	PUSH	PUSH 0xHI	0x3cHI	-	T	6	PC=PC+2
0x2f	PUSH	PUSH A	0x2f	-		5	PC=PC+1
0x8f	PUSH	PUSH B	0x8f	-		5	PC=PC+1
0xae	PUSH	PUSH F	0xae	-		5	PC=PC+1
0x96	PUSH	PUSH r0	0x96	-		5	PC=PC+1
0x5e	PUSH	PUSH r1	0x5e	-		5	PC=PC+1
0xa5	PUSH	PUSH r2	0xa5	-		5	PC=PC+1
0x6e	PUSH	PUSH r3	0x6e	-		5	PC=PC+1
0xb5	PUSH	PUSH r4	0xb5	-		5	PC=PC+1
0x3e	PUSH	PUSH r5	0x3e	-		5	PC=PC+1
0xbe	PUSH_PC+1	PUSH_PC+1	0xbe	-	T	7	PC=PC+1
0x7f	RCL	RCL A	0x7f	Z,C,N	A	3	PC=PC+1
0xfd	RET	RET	0xfd	-		7	PC=PC+4
0x85	RETI	RETI	0x85	-	T	7	PC=PC+2
0xf0	SHL	SHL A	0xf0	Z,C,N	A	3	PC=PC+1
0x01	SUB	SUB A,0xHI	0x01HI	Z,C,N	B,A	5	PC=PC+2
0x41	SUB	SUB A,B	0x41	Z,C,N	A	3	PC=PC+1
0x11	SUB	SUB A,r0	0x11	Z,C,N	B,A	4	PC=PC+1
0x51	SUB	SUB A,r1	0x51	Z,C,N	B,A	4	PC=PC+1
0x21	SUB	SUB A,r2	0x21	Z,C,N	B,A	4	PC=PC+1
0x61	SUB	SUB A,r3	0x61	Z,C,N	B,A	4	PC=PC+1
0x31	SUB	SUB A,r4	0x31	Z,C,N	B,A	4	PC=PC+1
0x71	SUB	SUB A,r5	0x71	Z,C,N	B,A	4	PC=PC+1
0x05	SUBC	SUBC A,0xHI	0x05HI	Z,C,N	B,A	5	PC=PC+2

0x45	SUBC	SUBC A,B	0x45	Z,C,N	A	3	PC=PC+1
0x15	SUBC	SUBC A,r0	0x15	Z,C,N	B,A	4	PC=PC+1
0x55	SUBC	SUBC A,r1	0x55	Z,C,N	B,A	4	PC=PC+1
0x25	SUBC	SUBC A,r2	0x25	Z,C,N	B,A	4	PC=PC+1
0x65	SUBC	SUBC A,r3	0x65	Z,C,N	B,A	4	PC=PC+1
0x35	SUBC	SUBC A,r4	0x35	Z,C,N	B,A	4	PC=PC+1
0x75	SUBC	SUBC A,r5	0x75	Z,C,N	B,A	4	PC=PC+1
0xd9	XOR	XOR A,0xHI	0xd9HI	Z,C,N	B,A	5	PC=PC+2
0xb9	XOR	XOR A,B	0xb9	Z,C,N	A	3	PC=PC+1