

EXECUTE SEQUENCE

	ADDR	MICROPROGRAM INSTRUCTIONS	JUMP
LDA	01 / 00	NONE.	IM > E 02
	01 / 01	MEM_REQ, READ, AC < DATA.	U > E 7F
	01 / 02	AC < OR.	U > E 7F
	01 / 7F	NONE.	IE_INT > B 20
LDS	02 / 00	NONE.	IM > E 02
	02 / 01	MEM_REQ, READ, SP < DATA.	U > E 7F
	02 / 02	SP < OR.	U > E 7F
	02 / 7F	NONE.	IE_INT > B 20
STA	03 / 00	NONE.	U > E 7F
	03 / 7F	MEM_REQ, WRITE, DATA < AC.	IE_INT > B 20
STS	04 / 00	NONE.	U > E 7F
	04 / 7F	MEM_REQ, WRITE, DATA < SP.	IE_INT > B 20
ADD	05 / 00	NONE.	IM > E 7F
	05 / 01	MEM_REQ, READ, OR < DATA.	U > E 7F
	05 / 7F	ALU: 011, AC < ALU, CF < CY, ALU_OV_EN.	IE_INT > B 20
ADC	06 / 00	NONE.	IM > E 7F
	06 / 01	MEM_REQ, READ, OR < DATA.	U > E 7F
	06 / 7F	ALU: 011, AC < ALU, CF < CY, ALU_OV_EN, ALU_CY_EN.	IE_INT > B 20
SUB	07 / 00	NONE.	IM > E 7F
	07 / 01	MEM_REQ, READ, OR < DATA.	U > E 7F
	07 / 7F	ALU: 010, AC < ALU, CF < CY, ALU_OV_EN.	IE_INT > B 20
SBC	08 / 00	NONE.	IM > E 7F
	08 / 01	MEM_REQ, READ, OR < DATA.	U > E 7F
	08 / 7F	ALU: 010, AC < ALU, CF < CY, ALU_OV_EN, ALU_CY_EN.	IE_INT > B 20
AND	09 / 00	NONE.	IM > E 7F
	09 / 01	MEM_REQ, READ, OR < DATA.	U > E 7F
	09 / 7F	ALU: 110, AC < ALU.	IE_INT > B 20

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	ADDR	MICROPROGRAM INSTRUCTIONS	JUMP
ORA	0A / 00	NONE.	IM > E 7F
	0A / 01	MEM_REQ, READ, OR < DATA.	U > E 7F
	0A / 7F	ALU: 101, AC < ALU.	IE_INT > B 20
XOR	0B / 00	NONE.	IM > E 7F
	0B / 01	MEM_REQ, READ, OR < DATA.	U > E 7F
	0B / 7F	ALU: 100, AC < ALU.	IE_INT > B 20
ISZ	0C / 00	MEM_REQ, READ, OR < DATA.	> E
	0C / 01	OR_INC.	> E
	0C / 02	MEM_REQ, WRITE, DATA < OR.	OR=0 > E 04
	0C / 03	SKIP_CLR.	U > B 00
	0C / 04	SKIP_SET.	U > B 00
DSZ	0D / 00	MEM_REQ, READ, OR < DATA.	> E
	0D / 01	OR_DEC.	> E
	0D / 02	MEM_REQ, WRITE, DATA < OR.	OR=0 > E 04
	0D / 03	SKIP_CLR.	U > B 00
	0D / 04	SKIP_SET.	U > B 00
JMP	0E / 00	NONE.	IM > E 7F
	0E / 01	MEM_REQ, READ, OR < DATA.	U > E 7F
	0E / 7F	PC < OR.	IE_INT > B 20
JOZ	0F / 00	NONE.	IM > E 02
	0F / 01	MEM_REQ, READ, OR < DATA.	> E
	0F / 02	NONE.	AC=0 > E 04
	0F / 03	NONE.	U > E 7F
	0F / 04	PC < OR.	U > E 7F
	0F / 7F	NONE.	IE_INT > B 20
JNZ	10 / 00	NONE.	IM > E 02
	10 / 01	MEM_REQ, READ, OR < DATA.	> E
	10 / 02	NONE.	AC=0 > E 04
	10 / 03	PC < OR.	U > E 7F
	10 / 04	NONE.	U > E 7F
	10 / 7F	NONE.	IE_INT > B 20

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	ADDR	MICROPROGRAM INSTRUCTIONS	JUMP
JPL	11 / 00	NONE.	IM > E 02
	11 / 01	MEM_REQ, READ, OR < DATA.	> E
	11 / 02	NONE.	P > E 04
	11 / 03	NONE.	U > E 7F
	11 / 04	PC < OR.	U > E 7F
	11 / 7F	NONE.	IE_INT > B 20
JMI	12 / 00	NONE.	IM > E 02
	12 / 01	MEM_REQ, READ, OR < DATA.	> E
	12 / 02	NONE.	P > E 04
	12 / 03	PC < OR.	U > E 7F
	12 / 04	NONE.	U > E 7F
	12 / 7F	NONE.	IE_INT > B 20
JOC	13 / 00	NONE.	IM > E 02
	13 / 01	MEM_REQ, READ, OR < DATA.	> E
	13 / 02	NONE.	CF > E 04
	13 / 03	NONE.	U > E 7F
	13 / 04	PC < OR.	U > E 7F
	13 / 7F	NONE.	IE_INT > B 20
JNC	14 / 00	NONE.	IM > E 02
	14 / 01	MEM_REQ, READ, OR < DATA.	> E
	14 / 02	NONE.	CF > E 04
	14 / 03	PC < OR.	U > E 7F
	14 / 04	NONE.	U > E 7F
	14 / 7F	NONE.	IE_INT > B 20
JOV	15 / 00	NONE.	IM > E 02
	15 / 01	MEM_REQ, READ, OR < DATA.	> E
	15 / 02	NONE.	OVF > E 04
	15 / 03	NONE.	U > E 7F
	15 / 04	PC < OR.	U > E 7F
	15 / 7F	NONE.	IE_INT > B 20

EXECUTE SEQUENCE

	ADDR	MICROPROGRAM INSTRUCTIONS	JUMP
JNV	16 / 00	NONE.	IM > E 02
	16 / 01	MEM_REQ, READ, OR < DATA.	> E
	16 / 02	NONE.	OVF > E 04
	16 / 03	PC < OR.	U > E 7F
	16 / 04	NONE.	U > E 7F
	16 / 7F	NONE.	IE_INT > B 20
CSR	17 / 00	SP_DEC.	IM > E 02
	17 / 01	MEM_REQ, READ, OR < DATA.	> E
	17 / 02	AR < SP.	> E
	17 / 03	MEM_REQ, WRITE, DATA < PC.	U > E 7F
	17 / 7F	PC < OR.	IE_INT > B 20
INP	18 / 00	NONE.	U > E 7F
	18 / 7F	IO_REQ, READ, AC < DATA.	IE_INT > B 20
OUT	19 / 00	NONE.	U > E 7F
	19 / 7F	IO_REQ, WRITE, DATA < AC.	IE_INT > B 20
INC	1A / 00	OR < AC.	> E
	1A / 01	OR_INC.	U > E 7F
	1A / 7F	AC < OR.	IE_INT > B 20
DEC	1B / 00	OR < AC.	> E
	1B / 01	OR_DEC.	U > E 7F
	1B / 7F	AC < OR.	IE_INT > B 20
COM	1C / 00	ALU: 111, OR < ALU.	U > E 7F
	1C / 7F	ALU: 100, AC < ALU.	IE_INT > B 20
NEG	1D / 00	ALU: 000, OR < ALU.	U > E 7F
	1D / 7F	ALU: 001, AC < ALU.	IE_INT > B 20
SET	1E / 00	NONE.	U > E 7F
	1E / 7F	ALU: 111, AC < ALU.	IE_INT > B 20
CLR	1F / 00	NONE.	U > E 7F
	1F / 7F	ALU: 000, AC < ALU.	IE_INT > B 20

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	ADDR	MICROPROGRAM INSTRUCTIONS	JUMP
SHL	20 / 00	NONE.	U > E 7F
	20 / 7F	SHL, CF < AC15.	IE_INT > B 20
LSR	21 / 00	NONE.	U > E 7F
	21 / 7F	LSR, CF < AC0.	IE_INT > B 20
ASR	22 / 00	NONE.	U > E 7F
	22 / 7F	ASR, CF < AC0.	IE_INT > B 20
ROL	23 / 00	NONE.	U > E 7F
	23 / 7F	ROL, CF < AC15.	IE_INT > B 20
ROR	24 / 00	NONE.	U > E 7F
	24 / 7F	ROR, CF < AC0.	IE_INT > B 20
LSW	25 / 00	NONE.	U > E 7F
	25 / 7F	AC < SR.	IE_INT > B 20
SCF	26 / 00	NONE.	U > E 7F
	26 / 7F	CF_SET.	IE_INT > B 20
CCF	27 / 00	NONE.	U > E 7F
	27 / 7F	CF_CLR.	IE_INT > B 20
PSA	28 / 00	SP_DEC.	> E
	28 / 01	AR < SP.	U > E 7F
	28 / 7F	MEM_REQ, WRITE, DATA < AC.	IE_INT > B 20
POA	29 / 00	AR < SP.	U > E 7F
	29 / 7F	MEM_REQ, READ, AC < DATA, SP_INC.	IE_INT > B 20
PSF	2A / 00	SP_DEC.	> E
	2A / 01	AR < SP.	U > E 7F
	2A / 7F	MEM_REQ, WRITE, DATA < FR.	IE_INT > B 20
POF	2B / 00	AR < SP.	U > E 7F
	2B / 7F	MEM_REQ, READ, FR < DATA, SP_INC.	IE_INT > B 20

EXECUTE SEQUENCE

	ADDR	MICROPROGRAM INSTRUCTIONS	JUMP
ENI	2C / 00	IE_SET.	U > B 00
DII	2D / 00	IE_CLR.	U > B 00
RTN	2E / 00	AR < SP.	U > E 7F
	2E / 7F	MEM_REQ, READ, PC < DATA, SP_INC.	IE_INT > B 20
RTI	2F / 00	AR < SP.	> E
	2F / 01	MEM_REQ, READ, FR < DATA, SP_INC.	> E
	2F / 02	AR < SP.	> E
	2F / 03	MEM_REQ, READ, AC < DATA, SP_INC.	> E
	2F / 04	AR < SP.	> E
	2F / 05	MEM_REQ, READ, PC < DATA, SP_INC, IE_SET.	U > B 00
NOP	30 / 00	NONE.	U > E 7F
	30 / 7F	NONE.	IE_INT > B 20
LDX	31 / 00	NONE.	IM > E 02
	31 / 01	MEM_REQ, READ, IX < DATA.	U > E 7F
	31 / 02	IX < OR.	U > E 7F
	31 / 7F	NONE.	IE_INT > B 20
LDY	32 / 00	NONE.	IM > E 02
	32 / 01	MEM_REQ, READ, IY < DATA.	U > E 7F
	32 / 02	IY < OR.	U > E 7F
	32 / 7F	NONE.	IE_INT > B 20
STX	33 / 00	NONE.	U > E 7F
	33 / 7F	MEM_REQ, WRITE, DATA < IX.	IE_INT > B 20
STY	34 / 00	NONE.	U > E 7F
	34 / 7F	MEM_REQ, WRITE, DATA < IY.	IE_INT > B 20
INX	35 / 00	OR < IX.	> E
	35 / 01	OR_INC.	U > E 7F
	35 / 7F	IX < OR.	IE_INT > B 20

EXECUTE SEQUENCE

	ADDR	MICROPROGRAM INSTRUCTIONS	JUMP
INX	36 / 00	OR < IY.	> E
	36 / 01	OR_INC.	U > E 7F
	36 / 7F	IY < OR.	IE_INT > B 20
INS	37 / 00	NONE.	U > E 7F
	37 / 7F	SP_INC.	IE_INT > B 20
DEX	38 / 00	OR < IX.	> E
	38 / 01	OR_DEC.	U > E 7F
	38 / 7F	IX < OR.	IE_INT > B 20
DEY	39 / 00	OR < IY.	> E
	39 / 01	OR_DEC.	U > E 7F
	39 / 7F	IY < OR.	IE_INT > B 20
DES	3A / 00	NONE.	U > E 7F
	3A / 7F	SP_DEC.	IE_INT > B 20
MAX	3B / 00	NONE.	U > E 7F
	3B / 7F	IX < AC.	IE_INT > B 20
MAY	3C / 00	NONE.	U > E 7F
	3C / 7F	IY < AC.	IE_INT > B 20
MAS	3D / 00	NONE.	U > E 7F
	3D / 7F	SP < AC.	IE_INT > B 20
MXA	3E / 00	NONE.	U > E 7F
	3E / 7F	AC < IX.	IE_INT > B 20
MYA	3F / 00	NONE.	U > E 7F
	3F / 7F	AC < IY.	IE_INT > B 20
MSA	40 / 00	NONE.	U > E 7F
	40 / 7F	AC < SP.	IE_INT > B 20

