

TABLE 13 — INSTRUCTION EXECUTION TIMES IN E CYCLES

	ADDRESSING MODE					
	Immediate	Direct	Extended	Indexed	Inherent	Relative
ABA	●	●	●	●	2	●
ABX	●	●	●	●	3	●
ADC	2	3	4	4	●	●
ADD	2	3	4	4	●	●
ADDD	4	5	6	6	●	●
AND	2	3	4	4	●	●
ASL	●	●	6	6	2	●
ASLD	●	●	●	●	3	●
ASR	●	●	6	6	2	●
BCC	●	●	●	●	●	3
BCS	●	●	●	●	●	3
BEQ	●	●	●	●	●	3
BGE	●	●	●	●	●	3
BGT	●	●	●	●	●	3
BHI	●	●	●	●	●	3
BHS	●	●	●	●	●	3
BIT	2	3	4	4	●	●
BLE	●	●	●	●	●	3
BLO	●	●	●	●	●	3
BLS	●	●	●	●	●	3
BLT	●	●	●	●	●	3
BMI	●	●	●	●	●	3
BNE	●	●	●	●	●	3
BPL	●	●	●	●	●	3
BRA	●	●	●	●	●	3
BRN	●	●	●	●	●	3
BSR	●	●	●	●	●	6
BVC	●	●	●	●	●	3
BVS	●	●	●	●	●	3
CBA	●	●	●	●	2	●
CLC	●	●	●	●	2	●
CLI	●	●	●	●	2	●
CLR	●	●	6	6	2	●
CLV	●	●	●	●	2	●
CMP	2	3	4	4	●	●
COM	●	●	6	6	2	●
CPX	4	5	6	6	●	●
DAA	●	●	●	●	2	●
DEC	●	●	6	6	2	●
DES	●	●	●	●	3	●
DEX	●	●	●	●	3	●
EOR	2	3	4	4	●	●
INC	●	●	6	6	●	●
INS	●	●	●	●	3	●

	ADDRESSING MODE					
	Immediate	Direct	Extended	Indexed	Inherent	Relative
INX	●	●	●	●	3	●
JMP	●	●	3	3	●	●
JSR	●	5	6	6	●	●
LDA	2	3	4	4	●	●
LDD	3	4	5	5	●	●
LDS	3	4	5	5	●	●
LDX	3	4	5	5	●	●
LSL	●	●	6	6	2	●
LSLD	●	●	●	●	3	●
LSR	●	●	6	6	2	●
LSRD	●	●	●	●	3	●
MUL	●	●	●	●	10	●
NEG	●	●	6	6	2	●
NOP	●	●	●	●	2	●
ORA	2	3	4	4	●	●
PSH	●	●	●	●	3	●
PSHX	●	●	●	●	4	●
PUL	●	●	●	●	4	●
PULX	●	●	●	●	5	●
ROL	●	●	6	6	2	●
ROR	●	●	6	6	2	●
RTI	●	●	●	●	10	●
RTS	●	●	●	●	5	●
SBA	●	●	●	●	2	●
SBC	2	3	4	4	●	●
SEC	●	●	●	●	2	●
SEI	●	●	●	●	2	●
SEV	●	●	●	●	2	●
STA	●	3	4	4	●	●
STD	●	4	5	5	●	●
STS	●	4	5	5	●	●
STX	●	4	5	5	●	●
SUB	2	3	4	4	●	●
SUBD	4	5	6	6	●	●
SWI	●	●	●	●	12	●
TAB	●	●	●	●	2	●
TAP	●	●	●	●	2	●
TBA	●	●	●	●	2	●
TPA	●	●	●	●	2	●
TST	●	●	6	6	2	●
TSX	●	●	●	●	3	●
TXS	●	●	●	●	3	●
WAI	●	●	●	●	9	●

