65C02 OpCodes

MNE	OPERATION	*	REL	IMM	ABS	ZPG	ZPG,X	ABS,X	ABS,Y	(IND,X)	(IND),Y	(ABS)	ABS (IND,X)	ZPG,Y	CONDITION CODES						
			op cy by	op cy by	op cy by	op cy by	op cy by	op cy by	op cy by	op cy by	op cy by	op cy by	op cy by	op cy by	N	V		B	D	I	Z	C
BRA	Bra Always	2	80 2 2																			
BCC	Bra If C=0	2	90 2 2																			
BCS	Bra If C=1	2	B0 2 2																			
BPL	Bra If N=0	2	10 2 2																			
BMI	Bra If N=1	2	30 2 2																			
BVC	Bra If V=0	2	50 2 2																			
BVS	Bra If V=1	2	70 2 2																			
BNE	Bra If Z=0	2	D0 2 2																			
BEQ	Bra If Z=1	2	F0 2 2																			
JMP					4C 3 3							6C 6 3	7C 6 3									
JSR					20 6 3																	
			(ZPG)																			
STA	A > M		92 5 2		8D 4 3	85 3 2	95 4 2	9D 5 3	99 5 3	81 6 2	91 6 2											
LDA	M > A	1	B2 5 2	A9 2 2	AD 4 3	A5 3 2	B5 4 2	BD 4 3	B9 4 3	A1 6 2	B1 5 2				N						Z	
AND	A ^ M > A	1	32 5 2	29 2 2	2D 4 3	25 3 2	35 4 2	3D 4 3	39 4 3	21 6 2	31 5 2				N						Z	
ORA	A v M > A	1	12 5 2	09 2 2	0D 4 3	05 3 2	15 4 2	1D 4 3	19 4 3	01 6 2	11 5 2				N						Z	
EOR	A ◊ M > A	1	52 5 2	49 2 2	4D 4 3	45 3 2	55 4 2	5D 4 3	59 4 3	41 6 2	51 5 2				N						Z	
ADC	A + M + C > A	3	72 5 2	69 2 2	6D 4 3	65 3 2	75 4 2	7D 4 3	79 4 3	61 6 2	71 5 2				N	V					Z	C
CMP	A - M	1	D2 5 2	C9 2 2	CD 4 3	C5 3 2	D5 4 2	DD 4 3	D9 4 3	C1 6 2	D1 5 2				N						Z	C
SBC	A - M + C > A	3	F2 5 2	E9 2 2	ED 4 3	E5 3 2	F5 4 2	FD 4 3	59 4 3	E1 6 2	F1 5 2				N	V					Z	C
LDX	M > X	1		A2 2 2	AE 4 3	A6 3 2			BE 4 3					B6 4 2	N						Z	
CPX	X - M			E0 2 2	EC 4 3	E4 3 2									N						Z	C
STX	X > M				8E 4 3	86 3 2								96 4 2								
LDY	M > Y	1		A0 2 2	AC 4 3	A4 3 2	B4 4 2	BC 4 3							N						Z	
CPY	Y - M			C0 2 2	CC 4 3	C4 3 2									N						Z	C
STY	Y > M				8C 4 3	84 3 2	94 4 2															
BIT	A ^ M	4		89 2 2	2C 4 3	24 3 2	34 4 2	3C 4 3							m7	m6					Z	
TRB	-A ^ M > M	4			1C 6 3	14 5 2															Z	
TSB	A v M > M	4			0C 6 3	04 5 2															Z	
INC	M + 1 > M	1			EE 6 3	E6 5 2	F6 6 2	FE 6 3							N						Z	
DEC	M - 1 > M	1			CE 6 3	C6 5 2	D6 6 2	DE 6 3							N						Z	
STZ	0 > M				9Z 4 3	64 3 2	74 4 2	9E 5 3														
			ACCUM																			
ASL	C < ACC < 0	1	0A 2 1		OE 6 3	06 5 2	16 6 2	1E 6 3							N						Z	C
LSR	0 > ACC > C	1	4A 2 1		4E 6 3	46 5 2	56 6 2	5E 6 3							0						Z	C
ROL	C < ACC < C	1	2A 2 1		2E 6 3	26 5 2	36 6 2	3E 6 3							N						Z	C
ROR	C > ACC > C	1	6A 2 1		6E 6 3	66 5 2	76 6 2	7E 6 3							N						Z	C
			IMPLIED																			
INA	A + 1 > A		1A 2 1												N						Z	
DEA	A - 1 > A		3A 2 1												N						Z	
INX	X + 1 > X		E8 2 1												N						Z	
DEX	X - 1 > X		CA 2 1												N						Z	
INY	Y + 1 Y		C8 2 1												N						Z	
DEY	Y - 1 > Y		88 2 1												N						Z	
TAX	A > X		AA 2 1												N						Z	
TXA	X > A		8A 2 1												N						Z	
TAY	A > Y		A8 2 1												N						Z	
TYA	Y > A		98 2 1												N						Z	
TSX	S > X		BA 2 1												N						Z	
TXS	X > S		9A 2 1																			
PHA	A>Ms S-1>S		48 3 1																			
PLA	S+1>S MS>A		68 4 1												N						Z	
PHX	X > Ms S-1>S		DA 3 1																			
PLX	S+1>S Ms > X		FA 4 1																			
PHY	Y > Ms S-1>S		5A 3 1																			
PLY	S+1>S Ms > Y		7A 4 1																			
PHP	Stat>Ms S-1>S		08 3 1																			
PLP	S+1>S Ms>Stat		28 4 1												N	V		1	D	I	Z	C
SEC	1 > C		38 2 1																			1
CLC	0 > C		18 2 1																			0
SED	1 > D		F8 2 1																1			
CLD	0 > D		D8 2 1																0			
SEI	1 > I		78 2 1																	1		
CLI	0 > I		58 2 1																	0		
CLV	0 > V		B8 2 1													0						
BRK			00 7 1															1		1		
NOP			EA 2 1																			
RTI			40 6 1												N	V		1	D	I	Z	C
RTS			66 6 1																			

NOTES:
1. Add 1 cycle if page boundary is crossed.
2. Add 1 cycle if branch occurs to same page, 2 if different page.
3. Add 1 cycle if page boundary is crossed, and another if in decimal mode.
4. V bit equals M6 prior to execution, N bit equals M7 prior to execution