Sheet1

									LOWI	NIBBLE							
		X0	X1	X2	X3	X4	X5	X6	X7	X8	X9	XA	XB	XC	XD	XE	XF
	0X	BRK s	ORA (zp,x)	CLE	SEE	TSB zp	ORA zp	ASL zp	RMB0 zp	PHP s	ORA#	ASL A	TSY	TSB a	ORA a	ASL a	BBR0 r 0X
		7 6	5 5	2 1	2 1	4 4	3 3	4 4	4 4	3 2	2 2	1 1	1 1	5 5	4 4	5 5	4 3
	1X 2X	BPL/BNC r	ORA (zp),y	ORA (zp),z	BPL/BNC rr	TRB zp	ORA zp,x	ASL zp,x	RMB1 zp	CLC	ORA a,y	INC A	INZ	TRB a	ORA a,x	ASL/SFL a,x	BBR1 r
		2 2	5 5	5 5	3 3	4 4	3 3	4 4	4 4	1 1	4 4	1 1	1 1	5 5	4 4	5 5	4 3
		JSR a	AND (zp,x)	JSR (a)	JSR (a,x)	BIT zp	AND zp	ROL zp	RMB2 zp	PLP s	AND#	ROL A	TYS	BITa	AND a	ROL a	BBR2 r
		5 5	5 5	7 7	7 7	4 3	3 3	4 4	4 4	3 2	2 2	1 1	1 1	5 4	4 4	5 5	4 3
	3X	BMI/BNS r	AND (zp),y	AND (zp),z	BMI/BNS rr	BIT zp,x	AND zp,x	ROL zp,x	RMB3 zp	SEC	AND a,y	DEC A	DEZ	BIT a,x	AND a,x	ROL a,x	BBR3 r
		2 2	5 5	5 5	3 3	4 3	3 3	4 4	4 4	1 1	4 4	1 1	1 1	5 4	4 4	5 5	4 3
	4X	RTIs	XOR (zp,x)	NEG A	ASR A	ASR zp	XOR zp	LSR zp	RMB4 zp	PHA s	XOR#	LSR A	TAZ	JMP a	XOR a	LSR a	BBR4 r
		5 4	5 5	2 1	2 1	4 4	3 3	4 4	4 4	3 2	2 2	1 1	1 1	3 3	4 4	5 5	4 3
	5X	BVC r	XOR (zp),y	XOR (zp),z	BVC rr	ASR zp,x	XOR zp,x	LSR zp,x	RMB5 zp	CLI	XOR a,y	PHY s	TAB	AUG	XOR a,x	LSR/SFR a,x	BBR5 r
		2 2	5 5	5 5	3 3	4 4	3 3	4 4	4 4	1 1	4 4	3 2	1 1	4 1	4 4	5 5	4 3
	6X	RTS s	ADC (zp,x)	RTN#	BSR rr	STZ zp	ADC zp	ROR zp	RMB6 zp	PLA s	ADC #	ROR A	TZA	JMP (a)	ADC a	ROR a	BBR6 r
ш		4 3	5 5	7 4	5 5	3 3	3 3	4 4	4 4	3 2	2 2	1 1	1 1	5 5	4 4	5 5	4 3
펉	7X	BVS r	ADC (zp),y	ADC (zp),z	BVS rr	STZ zp,x	ADC zp,x	ROR zp,x	RMB7 zp	SEI	ADC a,y	PLYs	TBA	JMP (a,x)	ADC a,x	ROR a,x	BBR7 r
IIGH NIBBL	8X	2 2	5 5	5 5	3 3	3 3	3 3	4 4	4 4	2 1	4 4	3 2	1 1	5 5	4 4	5 5	4 3
		BRA r	STA (zp,x)	STA (d.SP),Y	BRA rr	STY zp	STA zp	STX zp	SMB0 zp	DEY	BIT#	TXA	STY a,x	STY a	STA a	STX a	BBS0 r
— <u>Ť</u>		2 2	5 5	6 5	3 3 BCC rr	3 3	3 3	3 3	4 4	TYA	2 2 STA a,y	TYC	4 4	4 4 STZ a	4 4 STA a,x	4 4	4 3
	9X	BCC r	STA (zp),y	STA (zp),z 5 5	3 3	STY zp,x	STA zp,x	STX zp,y 3 3	SMB1 zp	1 TA	4 4	TXS	STX a,y	4 4	4 4	STZ a,x	BBS1 r 4 3
	AX	LDY#	5 5 LDA (zp,x)	LDX#	LDZ#		3 3			TAY	LDA#	TAX	4 4 LDZ a		LDA a	4 4 LDX a	
		2 2	5 5	2 2	2 2	LDY zp 3 3	LDA zp 3 3	LDX zp 3 3	SMB2 zp 4	1 1 1	2 2	1 1 1	4 4	LDY a	4 4	4 4	BBS2 r 4 3
		BCS r	LDA (zp),y	LDA (zp),z	BCS rr	LDY zp,x	LDA zp,x	LDX zp,y	SMB3 zp	CLV	LDA a.v	TSX	LDZ a.x	LDY a.x	LDA a.x	LDX a,y	BBS3 r
	BX CX	2 2	5 5	5 5	3 3	3 3	3 3	3 3	4 4	1 1 1	4 4	1 1 1	4 4	4 4	4 4	4 4	4 3 BX
		CPY#	CMP (zp,x)	CPZ#	DEW zp	CPY zp	CMP zp	DEC zp	SMB4 zp	INY	CMP#	DEX	ASW a	CPY a	CMP a	DEC a	DDC4 r
		2 2	5 5	2 2	6 6	3 3	3 3	4 4	4 4	1 1 1	2 2	1 1 1	7 7	4 4	4 4	5 5	4 3 CX
	DX	BNE/BZC r	CMP (zp),y	CMP (zp),z	BNE/BZC rr	CPZ zp	CMP zp,x	DEC zp.x	SMB5 zp	CLD	CMP a.v	PHX s	PHZs	CPZ a	CMP a.x	DEC a.x	BBS5 r
		2 2	5 5	5 5	3 3	3 3	3 3	4 4	4 4	1 1 1	4 4	3 2	3 2	4 4	4 4	5 5	4 3 DX
	EX	CPX#	SBC (zp,x)	LDA (d.SP),Y	INW zp	CPX zp	SBC zp	INC zp	SMB6 zp	INX	SBC#	NOP	ROW a	CPXa	SBC a	INC a	BBS6 r
		2 2	5 5	6 5	6 6	3 3	3 3	4 4	4 4	1 1	2 2	1 1	7 7	4 4	4 4	5 5	4 3 EX
	FX	BEQ/BZS r	SBC (zp),y	SBC (zp),z	BEQ/BZS rr	PHW ##/s	SBC zp,x	INC zp,x	SMB7 zp	SED	SBC a,y	PLXs	PLZs	PHW a/s	SBC a.x	INC a,x	BBS7 r
		2 2	5 5	5 5	3 3	5 5	3 3	4 4	4 4	1 1	4 4	3 2	3 2	7 7	4 4	5 5	4 3 FX
		X0	X1	X2	X3	X4	X5	X6	X7	X8	X9	XA	ХВ	XC	XD	XE	XF
CE02 CE02			80 80	74 67	57 55	56 54	48 48	60 60	64 64	25 20	48 48	24 20	51 44	72 67	64 64	72 76	64 48
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OPCode							
Cycles on Original	Cycles on V-Version						

Cyan Numbers indicate potential additional cycles, like for branches

Darker Gray = 6502

Gray = added by 65C02

Lighter Gray = added by 65CE02

Average CPI	Average MIPS (1MHz)
65CE02: 3.531	65CE02: 0.283
65CE02 Core: 3.348	65CE02V: 0.299