6502 INSTRUCTIONS

		IKUCITUMO	
Modes	BEQ NVBDIZC	TSR NVBDIZC	SEC NUBDIZC
	Branch on EQual	Jump to SubRoutine	SuBtract with Carry
Modes	Lb ²⁺	AP6	IM2 Z3 Zx4 Ab4 Ax4+
Ip Implied	Lb.	нь	TWO TO SX . HP . HX
Ac Accumulator	ERK NVBDIZC	T DA NUBDIZC	Ay4+ Ix6 Iy5+
Lb Label LABEL		LoaD Accumulator	STA NUBDIZC
Im Immediate #\$12	BReaK		
z Zero Page \$12	I _P 7	Iм ² Z ³ Zx ⁴ дь ⁴ Ax ⁴⁺	STore Accumulator
Zx Zero Page,X \$12,X		Ay4+ Ix6 Iy5+	Z3 Zx4 Ab4 Ax5 Au5
Zy Zero Page, Y \$12,Y	CMP NUBDIZC	NVBDIZC	I×6 Ine
Ab Absolute \$1234 Ax Absolute,X \$1234,X	CoMPare accumulator		
Ay Absolute, Y \$1234, Y	TM2 73 7x4 Ab4 Ax4+	LoaD X register	TXS NVBDIZC
In Indirect (\$1234)	Au 4+ Ix6 Iu 5+	IM2 Z3 Zy4 Ab4 Ay4+	Transfer X to Stack
Ix Indirect,X (\$12,X)	H9 . 1x - 19 -		
Iy Indirect,Y (\$12),Y	NVBDIZC	DY NVBDIZC	IP-
	VI II	LoaD Y register	TNC NVBDIZC
ADC NVBDIZC	ComPare X register	IM2 Z3 Zx4 Ab4 Ax4+	INCrement memory
ADD with Carry	I _M 2 _Z 3 _{Ab} 4		
	- MIDDATA	LSR NVBDIZC	Z ⁵ Zx ⁶ Ab ⁶ Ax ⁷
Iм ² Z ³ Zх ⁴ дь ⁴ нх ⁴⁺	CPY NVBDIZC	Logical Shift Right	TAY NVBDIZC
Ay4+ Ix6 Iy5+	ComPare Y register	₆ 2 _Z 5 _{Z×} 6 _{6b} 6 _{6×} 7	
ANIA NURDIZC	I _M 2 _Z 3 _{Ab} 4		Transfer A to Y
	AM E 110	NOP NUBDIZC	Ip ²
bitwise AND with accumulator	njan NVBDIZC	No OPeration	
	DECrement memory		TYA NVBDIZC
ıм² д³ дх⁴ <u>н</u> ь⁴ нх⁴+	Z5 Zx6 Ab6 Ax7	Ip ²	Transfer Y to A
_{Ay} 4+ _{Ix} 6 _{Iy} 5+	Zo Zxo HPo HX	ORA NUBDIZC	Ip2
ASL NUBDIZC	ISTO NUBDIZC	bitwize OR with	
	CON	Accumulator	DEY NUBDIZC
Arithmetic Shift Left		Im2 Z3 Zx4 Ab4 Ax4+	DEcrement Y
_A 2 _Z 5 _{Zx} 6 _{Ab} 6 _{Ax} 7	Iм ² Z ³ Zx ⁴ <u>А</u> ь ⁴ Ах ⁴⁺	TM C SX HP HX	Ip ²
COLD MURDITAC	Ay4+ Ix6 Iy5+	Ay4+ Ix6 Iy5+	IP
		TAX NVBDIZC	INV NVBDIZC
test BITs	CIC NVBDIZC		
z ³ Ab ⁴	CLC MVBD12C	Transfer A to X	INcrement Y
Z ³ Ab⁴	CLear Carry		
Z ³ Ab ⁴ BPL NVBDIZC	CLear Carry Ip ²	Transfer A to X Ip ²	INcrement Y
Z ³ Ab ⁴ B2L NVBDIZC Branch on PLus	CLear Carry	Transfer A to X Ip ² TXA NVBDIZC	INCREMENT Y IP ² TSX NVBDIZC
Z ³ Ab ⁴ BPL NVBDIZC	CLear Carry Ip ²	Transfer A to X Ip ² TXA NVBDIZC Transfer X to A	INcrement Y Ip ² TSX NVBDIZC Transfer Stack to X
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺	CLear Carry Ip ² SEC NVBDIZC SEt Carry	Transfer A to X Ip ² TXA NVBDIZC	INCREMENT Y IP ² TSX NVBDIZC
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC	CLear Carry Ip ² SEC NVBDIZC SEt Carry	Transfer A to X Ip ² TXG NVBDIZC Transfer X to A Ip ²	INCREMENT Y IP ² ISX NUBDIZC Transfer Stack to X IP ²
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BVI NVBDIZC Branch on MInus	CLear Carry Ip ² SEC NVBDIZC SEt Carry	Transfer A to X Ip ² TXA NVBDIZC Transfer X to A Ip ² DEX NVBDIZC	INCREMENT Y IP ² ISX NUBDIZC Transfer Stack to X Ip ² PHG NUBDIZC
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC	CLear Carry Ip ² SIC NVBDIZC SEt Carry Ip ² NVBDIZC	Transfer A to X Ip ² IXA NVBDIZC Transfer X to A Ip ² DEX NVBDIZC DEcrement X	INCREMENT Y IP2 ISX NUBDIZC Transfer Stack to X IP2 III NUBDIZC Push Accumulator
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺	CLear Carry Ip ² SIC NVBDIZC SEt Carry Ip ² NVBDIZC CLear Interrupt	Transfer A to X Ip ² TXA NVBDIZC Transfer X to A Ip ² DEX NVBDIZC	INCREMENT Y IP ² ISX NUBDIZC Transfer Stack to X Ip ² PHG NUBDIZC
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC	CLear Carry Ip ² SIC NVBDIZC SEt Carry Ip ² NVBDIZC CLear Interrupt	Transfer A to X Ip ² TXA NVBDIZC Transfer X to A Ip ² DEX NVBDIZC DEcrement X Ip ²	INCREMENT Y IP ² ISX NVBDIZC Transfer Stack to X Ip ² NVBDIZC Push Accumulator Ip ³
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow	CLear Carry Ip ² SEC NUBDIZC SEt Carry Ip ² CLI NUBDIZC CLear Interrupt Ip ²	Transfer A to X Ip ² TXA NVBDIZC Transfer X to A Ip ² DEX NVBDIZC DEcrement X Ip ² INX NVBDIZC	INcrement Y Ip2 ISX NVBDIZC Transfer Stack to X Ip2 PHG NVBDIZC Push Accumulator Ip3 PLG NVBDIZC
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear	CLear Carry Ip ² SEC NVBDIZC SEt Carry Ip ² CLI NVBDIZC CLear Interrupt Ip ² SEI NVBDIZC	Transfer A to X Ip ² IXA NVBDIZC Transfer X to A Ip ² DEX NVBDIZC DEcrement X Ip ² IXX NVBDIZC INCREMENT X	INcrement Y Ip2 ISX NUBDIZC Transfer Stack to X Ip2 PH6 NVBDIZC PusH Accumulator Ip3 PL6 NUBDIZC Pull Accumulator
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow	CLear Carry Ip ² SEC NVBDIZC SET Carry Ip ² NVBDIZC CLear Interrupt Ip ² NVBDIZC SET NVBDIZC SET NVBDIZC	Transfer A to X Ip ² TXA NVBDIZC Transfer X to A Ip ² DEX NVBDIZC DEcrement X Ip ² INX NVBDIZC	INcrement Y Ip2 ISX NVBDIZC Transfer Stack to X Ip2 PHG NVBDIZC Push Accumulator Ip3 PLG NVBDIZC
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺	CLear Carry Ip ² SEC NVBDIZC SEt Carry Ip ² CLI NVBDIZC CLear Interrupt Ip ² SEI NVBDIZC	Transfer A to X Ip ² IXA NVBDIZC Transfer X to A Ip ² DEX NVBDIZC DEcrement X Ip ² INX NVBDIZC INCREMENT X Ip ²	INcrement Y Ip2 ISX NUBDIZC Transfer Stack to X Ip2 PIG NUBDIZC Push Accumulator Ip3 PLG NUBDIZC Pull Accumulator Ip4
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC	CLear Carry Ip ² SIC NVBDIZC SEt Carry Ip ² CLEAR Interrupt Ip ² NVBDIZC CLear Interrupt Ip ² SIL NVBDIZC SET Interrupt Ip ²	Transfer A to X Ip2 TXA NVBDIZC Transfer X to A Ip2 DEX NVBDIZC DEcrement X Ip2 INX NVBDIZC INcrement X Ip2 ROL NVBDIZC	INcrement Y Ip2 ISX NUBDIZC Transfer Stack to X Ip2 PIG NUBDIZC Push Accumulator Ip3 PLG NUBDIZC Pull Accumulator Ip4 PHP NUBDIZC
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC Branch on oVerflow	CLear Carry Ip ² SIC NVBDIZC SEt Carry Ip ² CLI NVBDIZC CLear Interrupt Ip ² SII NVBDIZC SET Interrupt Ip ² SII NVBDIZC	Transfer A to X Ip2 IXA NVBDIZC Transfer X to A Ip2 DEX NVBDIZC DEcrement X Ip2 INX NVBDIZC INcrement X Ip2 ROL NVBDIZC ROtate Left	INcrement Y Ip2 ISX NUBDIZC Transfer Stack to X Ip2 PHG NUBDIZC Push Accumulator Ip3 PLG NUBDIZC Pull Accumulator Ip4 PHP NUBDIZC Push Processor
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BVI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set	CLear Carry Ip ² SEC NVBDIZC SEt Carry Ip ² CLI NVBDIZC CLear Interrupt Ip ² SEL NVBDIZC SET Interrupt Ip ² NVBDIZC SET Interrupt Ip ² CLEAR OVERFIOW	Transfer A to X Ip2 TXA NVBDIZC Transfer X to A Ip2 DEX NVBDIZC DEcrement X Ip2 INX NVBDIZC INcrement X Ip2 ROL NVBDIZC	INcrement Y Ip2 ISX NUBDIZC Transfer Stack to X Ip2 PH6 NVBDIZC Push Accumulator Ip3 PL6 NUBDIZC Pull Accumulator Ip4 PHP NUBDIZC Push Processor Status
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC Branch on oVerflow	CLear Carry Ip ² SIC NVBDIZC SEt Carry Ip ² CLI NVBDIZC CLear Interrupt Ip ² SII NVBDIZC SET Interrupt Ip ² SII NVBDIZC	Transfer A to X Ip ² TXA NVBDIZC Transfer X to A Ip ² DEX NVBDIZC DEcrement X Ip ² INX NVBDIZC INcrement X Ip ² ROL NVBDIZC ROtate Left A ² Z ⁵ Zx ⁶ Ab ⁶ Ax ⁷	INcrement Y Ip2 ISX NUBDIZC Transfer Stack to X Ip2 PHG NUBDIZC Push Accumulator Ip3 PLG NUBDIZC Pull Accumulator Ip4 PHP NUBDIZC Push Processor
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set Lb ²⁺	CLear Carry Ip ² SIC NVBDIZC SEt Carry Ip ² NVBDIZC CLear Interrupt Ip ² NVBDIZC SET INTERRUPT Ip ² SI NVBDIZC SET INTERRUPT Ip ² CLear oVerflow Ip ²	Transfer A to X Ip ² IXA NVBDIZC Transfer X to A Ip ² DEX NVBDIZC DEcrement X Ip ² INX NVBDIZC INCREMENT X Ip ² ROL NVBDIZC ROtate Left A ² Z ⁵ Zx ⁶ Ab ⁶ Ax ⁷ ROR NVBDIZC	INcrement Y Ip2 ISX NVBDIZC Transfer Stack to X Ip2 IIII NVBDIZC Push Accumulator Ip3 PLA NVBDIZC Pull Accumulator Ip4 PIP NUBDIZC Push Processor Status Ip3
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set Lb ²⁺ BUS NVBDIZC	CLear Carry Ip2 SIC NVBDIZC SEt Carry Ip2 CLEAR Interrupt Ip2 SIC NVBDIZC CLear Interrupt Ip2 SIC NVBDIZC CLear OVERFIOW Ip2 CLD NVBDIZC	Transfer A to X Ip ² IXA NVBDIZC Transfer X to A Ip ² DEX NVBDIZC DECREMENT X Ip ² INX NVBDIZC INCREMENT X Ip ² ROL NVBDIZC ROtate Left A ² Z ⁵ Zx ⁶ Ab ⁶ Ax ⁷ ROR NVBDIZC ROtate Right	INcrement Y Ip2 ISX NUBDIZC Transfer Stack to X Ip2 PHG NUBDIZC Push Accumulator Ip3 PLG NUBDIZC Pull Accumulator Ip4 PHP NUBDIZC Push Processor Status Ip3 PLP NUBDIZC
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set Lb ²⁺ BCC NVBDIZC Branch on oVerflow Set Lb ²⁺ BCC NVBDIZC Branch on Carry	CLear Carry Ip ² SIC NVBDIZC SEt Carry Ip ² CLI NVBDIZC CLear Interrupt Ip ² SII NVBDIZC SET Interrupt Ip ² CLU NVBDIZC CLear oVerflow Ip ² CLD NVBDIZC CLear Decimal	Transfer A to X Ip ² IXA NVBDIZC Transfer X to A Ip ² DEX NVBDIZC DEcrement X Ip ² INX NVBDIZC INCREMENT X Ip ² ROL NVBDIZC ROtate Left A ² Z ⁵ Zx ⁶ Ab ⁶ Ax ⁷ ROR NVBDIZC	INcrement Y Ip2 ISX NVBDIZC Transfer Stack to X Ip2 IIII NVBDIZC Push Accumulator Ip3 PLA NVBDIZC Pull Accumulator Ip4 PIP NUBDIZC Push Processor Status Ip3
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set Lb ²⁺ BCC NVBDIZC	CLear Carry Ip ² SIC NVBDIZC SEt Carry Ip ² CLI NVBDIZC CLear Interrupt Ip ² SII NVBDIZC SET Interrupt Ip ² CLU NVBDIZC CLear oVerflow Ip ² CLD NVBDIZC CLear Decimal	Transfer A to X Ip2 IXA NVBDIZC Transfer X to A Ip2 DEX NVBDIZC DEcrement X Ip2 INX NVBDIZC INcrement X Ip2 ROL NVBDIZC ROtate Left A2 Z5 Zx6 Ab6 Ax7 ROR NVBDIZC ROtate Right A2 Z5 Zx6 Ab6 Ax7	INcrement Y Ip2 ISX NUBDIZC Transfer Stack to X Ip2 PH6 NUBDIZC Push Accumulator Ip3 PL6 NUBDIZC Pull Accumulator Ip4 PHP NUBDIZC Push Processor status Ip3 PLF NUBDIZC Pull Processor
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set Lb ²⁺ BCC NVBDIZC Branch on oVerflow Set Lb ²⁺ BCC NVBDIZC Branch on Carry	CLear Carry Ip ² SEC NVBDIZC SEt Carry Ip ² CLI NVBDIZC CLear Interrupt Ip ² SET NVBDIZC SET Interrupt Ip ² CLEAR OVERFIOW Ip ² CLEAR OVERFIOW Ip ² CLEAR DECIMAL Ip ²	Transfer A to X Ip2 IXA NVBDIZC Transfer X to A Ip2 DEX NVBDIZC DEcrement X Ip2 INX NVBDIZC INcrement X Ip2 ROL NVBDIZC ROtate Left A2 Z5 Zx6 Ab6 Ax7 ROR NVBDIZC ROtate Right A2 Z5 Zx6 Ab6 Ax7 RII NVBDIZC	INcrement Y Ip2 ISX NUBDIZC Transfer Stack to X Ip2 PHG NUBDIZC Push Accumulator Ip3 PLG NUBDIZC Pull Accumulator Ip4 PHP NUBDIZC Push Processor status Ip3 PLP NUBDIZC Push Processor Status Ip4
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set Lb ²⁺ BCC NVBDIZC	CLear Carry Ip2 SIC NVBDIZC SEt Carry Ip2 CLI NVBDIZC CLear Interrupt Ip2 SII NVBDIZC SET Interrupt Ip2 SII NVBDIZC CLear OVERFLOW Ip2 CLEAR OVERFLOW Ip2 CLEAR DECIMAL Ip2	Transfer A to X Ip ² IXA NVBDIZC Transfer X to A Ip ² DEX NVBDIZC DEcrement X Ip ² INX NVBDIZC INcrement X Ip ² ROL NVBDIZC ROtate Left A ² Z ⁵ Zx ⁶ Ab ⁶ Ax ⁷ ROR NVBDIZC ROtate Right A ² Z ⁵ Zx ⁶ Ab ⁶ Ax ⁷ RII NVBDIZC RETURN FROM	INcrement Y Ip2 ISX NUBDIZC Transfer Stack to X Ip2 PH6 NUBDIZC Push Accumulator Ip3 PL6 NUBDIZC Pull Accumulator Ip4 PHP NUBDIZC Push Processor status Ip3 PLF NUBDIZC Pull Processor
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NUBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set Lb ²⁺ BC NVBDIZC Branch on Carry Clear Lb ²⁺ BC NVBDIZC	CLear Carry Ip2 SIC NVBDIZC SEt Carry Ip2 CLI NVBDIZC CLear Interrupt Ip2 SII NVBDIZC SET Interrupt Ip2 SII NVBDIZC CLear OVERFLOW Ip2 CLEAR OVERFLOW Ip2 CLEAR DECIMAL Ip2	Transfer A to X Ip2 IXA NVBDIZC Transfer X to A Ip2 DEX NVBDIZC DEcrement X Ip2 INX NVBDIZC INcrement X Ip2 ROL NVBDIZC ROtate Left A2 Z5 Zx6 Ab6 Ax7 ROR NVBDIZC ROtate Right A2 Z5 Zx6 Ab6 Ax7 ROR NVBDIZC ROtate Right A2 Z5 Zx6 Ab6 Ax7 RII NVBDIZC RETurn from Interrupt	INcrement Y Ip2 ISX NUBDIZC Transfer Stack to X Ip2 PHA NUBDIZC Push Accumulator Ip3 PLA NUBDIZC Pull Accumulator Ip4 PHP NUBDIZC Push Processor status Ip3 PLP NUBDIZC Pull Processor Status Ip4 PLP NUBDIZC Pull Processor Status Ip4 NUBDIZC PULL Processor Status Ip4 NUBDIZC
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BVI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set Lb ²⁺ BCC NVBDIZC Branch on Carry Clear Lb ²⁺ BCS NVBDIZC Branch on Carry Clear Lb ²⁺ BCS NVBDIZC Branch on Carry Clear	CLear Carry Ip2 SIC NVBDIZC SEt Carry Ip2 CLEAR Interrupt Ip2 SIC NVBDIZC CLear Interrupt Ip2 SIC NVBDIZC SET INTERRUPT Ip2 CLEAR OVERFIOW Ip2 CLEAR DECIMAL Ip2 SID NVBDIZC CLEAR DECIMAL Ip2 SID NVBDIZC SET DECIMAL SED NVBDIZC SET DECIMAL	Transfer A to X Ip ² IXA NVBDIZC Transfer X to A Ip ² DEX NVBDIZC DEcrement X Ip ² INX NVBDIZC INcrement X Ip ² ROL NVBDIZC ROtate Left A ² Z ⁵ Zx ⁶ Ab ⁶ Ax ⁷ ROR NVBDIZC ROtate Right A ² Z ⁵ Zx ⁶ Ab ⁶ Ax ⁷ RII NVBDIZC RETURN FROM	INcrement Y Ip2 ISX NUBDIZC Transfer Stack to X Ip2 PHA NUBDIZC Push Accumulator Ip3 PLA NUBDIZC Pull Accumulator Ip4 PHP NUBDIZC Push Processor status Ip3 PLP NUBDIZC Pull Processor status Ip4 SIX NUBDIZC STore X register
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set Lb ²⁺ BCC NVBDIZC Branch on Carry Clear Lb ²⁺ BCC NVBDIZC Branch on Carry Clear Lb ²⁺ BCS NVBDIZC Branch on Carry Clear Lb ²⁺ BCS NVBDIZC	CLear Carry Ip2 SIC NVBDIZC SET Carry Ip2 CII NVBDIZC CLear Interrupt Ip2 SII NVBDIZC SET Interrupt Ip2 CIU NVBDIZC CLear oVerflow Ip2 CID NVBDIZC CLear Decimal Ip2 SID NVBDIZC CLear Decimal Ip2 SID NVBDIZC SET Decimal Ip2	Transfer A to X Ip2 IXA NVBDIZC Transfer X to A Ip2 DEX NVBDIZC DEcrement X Ip2 IXX NVBDIZC INCREMENT X Ip2 ROL NVBDIZC ROtate Left A2 Z5 Zx6 Ab6 Ax7 ROR NVBDIZC ROtate Right A2 Z5 Zx6 Ab6 Ax7 RIL NVBDIZC RETurn from Interrupt Ip6	INcrement Y Ip2 ISX NUBDIZC Transfer Stack to X Ip2 PHA NUBDIZC Push Accumulator Ip3 PLA NUBDIZC Pull Accumulator Ip4 PHP NUBDIZC Push Processor status Ip3 PLP NUBDIZC Pull Processor Status Ip4 PLP NUBDIZC Pull Processor Status Ip4 NUBDIZC PULL Processor Status Ip4 NUBDIZC
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set Lb ²⁺ BCC NVBDIZC Branch on Carry Clear Lb ²⁺ BCC NVBDIZC Branch on Carry Clear Lb ²⁺ BCS NVBDIZC Branch on Carry Clear Lb ²⁺ BCS NVBDIZC	CLear Carry Ip2 SIC NVBDIZC SET Carry Ip2 CII NVBDIZC CLear Interrupt Ip2 SII NVBDIZC SET Interrupt Ip2 CIU NVBDIZC CLear oVerflow Ip2 CID NVBDIZC CLear Decimal Ip2 SID NVBDIZC CLear Decimal Ip2 SID NVBDIZC SET Decimal Ip2	Transfer A to X Ip2 IXA NVBDIZC Transfer X to A Ip2 DEX NVBDIZC DEcrement X Ip2 INX NVBDIZC INcrement X Ip2 ROL NVBDIZC ROtate Left A2 z5 zx6 Ab6 Ax7 ROR NVBDIZC ROtate Right A2 z5 zx6 Ab6 Ax7 RIL NVBDIZC RETurn from Interrupt Ip6 RIS NVBDIZC	INcrement Y Ip2 ISX NVBDIZC Transfer Stack to X Ip2 IIII NVBDIZC Push Accumulator Ip3 PLA NVBDIZC Pull Accumulator Ip4 PIP NVBDIZC Push Processor status Ip3 PLP NVBDIZC Pull Processor status Ip4 SIX NVBDIZC STore X register Z3 Zy4 Ab4
BPL NVBDIZC Branch on PLus Lb2+ BMI NVBDIZC Branch on MInus Lb2+ BUC NVBDIZC Branch on oVerflow Clear Lb2+ BUS NVBDIZC Branch on oVerflow Set Lb2+ BFC NVBDIZC Branch on Carry Clear Lb2+ BFC NVBDIZC Branch on Carry Clear Lb2+ BFS NVBDIZC Branch on Carry Clear Lb2+ BFS NVBDIZC Branch on Carry Set Lb2+ BFS NVBDIZC Branch on Carry Set Lb2+	CLear Carry Ip2 SIC NVBDIZC SEt Carry Ip2 CLI NVBDIZC CLear Interrupt Ip2 SII NVBDIZC SET Interrupt Ip2 CLU NVBDIZC CLear oVerflow Ip2 CLD NVBDIZC CLear Decimal Ip2 SID NVBDIZC SET Decimal Ip2 SID NVBDIZC SET Decimal Ip2	Transfer A to X Ip2 IXA NVBDIZC Transfer X to A Ip2 DEX NVBDIZC DECREMENT X Ip2 INX NVBDIZC INCREMENT X Ip2 ROL NVBDIZC ROtate Left A2 Z5 Zx6 Ab6 Ax7 ROR NVBDIZC ROtate Right A2 Z5 Zx6 Ab6 Ax7 RII NVBDIZC RETurn from Interrupt Ip6 RIS NVBDIZC RETURN from	INcrement Y Ip2 ISX NUBDIZC Transfer Stack to X Ip2 IIII NUBDIZC Push Accumulator Ip3 PLA NUBDIZC Pull Accumulator Ip4 PIP NUBDIZC Push Processor status Ip3 PLP NUBDIZC Pull Processor status Ip4 SIX NUBDIZC STore X register Z3 Zy4 Ab4 SIY NUBDIZC
Z ³ Ab ⁴ BPL NVBDIZC Branch on PLus Lb ²⁺ BMI NVBDIZC Branch on MInus Lb ²⁺ BUC NVBDIZC Branch on oVerflow Clear Lb ²⁺ BUS NVBDIZC Branch on oVerflow Set Lb ²⁺ BCC NVBDIZC Branch on Carry Clear Lb ²⁺ BCC NVBDIZC Branch on Carry Clear Lb ²⁺ BCS NVBDIZC Branch on Carry Clear Lb ²⁺ BCS NVBDIZC	CLear Carry Ip2 SIC NVBDIZC SET Carry Ip2 CII NVBDIZC CLear Interrupt Ip2 SII NVBDIZC SET Interrupt Ip2 CIU NVBDIZC CLear oVerflow Ip2 CID NVBDIZC CLear Decimal Ip2 SID NVBDIZC CLear Decimal Ip2 SID NVBDIZC SET Decimal Ip2	Transfer A to X Ip2 IXA NVBDIZC Transfer X to A Ip2 DEX NVBDIZC DEcrement X Ip2 INX NVBDIZC INcrement X Ip2 ROL NVBDIZC ROtate Left A2 z5 zx6 Ab6 Ax7 ROR NVBDIZC ROtate Right A2 z5 zx6 Ab6 Ax7 RIL NVBDIZC RETurn from Interrupt Ip6 RIS NVBDIZC	INcrement Y Ip2 ISX NVBDIZC Transfer Stack to X Ip2 IIII NVBDIZC Push Accumulator Ip3 PLA NVBDIZC Pull Accumulator Ip4 PIP NVBDIZC Push Processor status Ip3 PLP NVBDIZC Pull Processor status Ip4 SIX NVBDIZC STore X register Z3 Zy4 Ab4

Flags (Right Upper corner): N=Negative, V=Overflow, B=Break, D=Decimal, I=Interrupt Disable, Z=Zero, C=Carry. Green flags are affected by the instruction.

Timing: The green number next to each mode is the number of CPU cycles for that addressing mode. A "+" means an extra cycle may be used (e.g. on page crossing).