

6502 - tsiraM Instruction set

Description	Op Code	Mnemonic	Assembly	Binary (in Hex)
Load the accumulator with a constant	A9	LDA	LDA #\$07	A9 07
Load the accumulator from memory	AD	LDA	LDA \$0010	AD 10 00
Store the accumulator in memory	8D	STA	STA \$0010	8D 10 00
Load the accumulator from X register	8A	TXA	TXA	8A
Load the accumulator from Y register	98	TYA	TYA	98
Add with carry: Adds contents of an address to the accumulator and keeps the result in the accumulator	6D	ADC	ADC \$0010	6D 10 00
Load the X register with a constant	A2	LDX	LDX #\$01	A2 01
Load the X register from memory	AE	LDX	LDX \$0010	AE 10 00
Load the X register from the accumulator	AA	TAX	TAX	AA
Load the Y register with a constant	A0	LDY	LDY #\$04	A0 04
Load the Y register from memory	AC	LDY	LDY \$0010	AC 10 00
Load the Y register from the accumulator	A8	TAY	TAY	A8
No Operation	EA	NOP	NOP	EA
Break	00	BRK	BRK	00
Compare a byte in memory to the X reg. Sets the Z (zero) flag if equal	EC	CPX	CPX \$0010	EC 10 00
Branch <i>n</i> bytes if Z flag = 0	D0	BNE	BNE \$EF	D0 EF
Increment the value of a byte from memory	EE	INC	INC \$0021	EE 21 00
System Calls (This is not part of original 6502 instruction set)				
If there is a #\$01 in the X register Print the integer in the Y register	FF	SYS	SYS	FF
*If there is a #\$02 in the X register Print the 0x00 terminated string stored at address in the Y register	FF	SYS	SYS	FF
If there is a #\$03 in the X register Print the 0x00 terminated string from the address in the operand	FF	SYS	SYS \$0010	FF 10 00