

Jeu d'instructions du nanoProcesseur

INSTRUCTION					CCR	ALU			
mnémonique	paramètre	ALU	Accu_load	data_wr	ZCVN	Oper1	Oper2	PC next	fonctions
STOREaddr	addr	-	-	V	-	-	-	+1	accu -> DATA(addr)
LOADconst	const	V	V	-	Z--N	const	-	+1	const -> accu
LOADaddr	addr	V	V	-	Z--N	DATA(addr)	-	+1	DATA(addr) -> accu
ANDconst	const	V	V	-	Z--N	accu	const	+1	accu and const -> accu
ANDaddr	addr	V	V	-	Z--N	accu	DATA(addr)	+1	accu and DATA(addr) -> accu
ORconst	const	V	V	-	Z--N	accu	const	+1	accu or const -> accu
ORaddr	addr	V	V	-	Z--N	accu	DATA(addr)	+1	accu or DATA(addr) -> accu
XORconst	const	V	V	-	Z--N	accu	const	+1	accu xor const -> accu
XORaddr	addr	V	V	-	Z--N	accu	DATA(addr)	+1	accu xor DATA(addr) -> accu
ROLaccu	-	V	V	-	ZC-N	accu	-	+1	rotation à gauche avec carry -> accu
RORaccu	-	V	V	-	ZC-N	accu	-	+1	rotation à droite avec carry -> accu
ADDconst	const	V	V	-	ZCVN	accu	const	+1	accu + const -> accu
ADDaddr	addr	V	V	-	ZCVN	accu	DATA(addr)	+1	accu + DATA(addr) -> accu
ADCconst	const	V	V	-	ZCVN	accu	const	+1	accu + const + carry -> accu
ADCaddr	addr	V	V	-	ZCVN	accu	DATA(addr)	+1	accu + DATA(addr) + carry -> accu
NEGaccu	-	V	V	-	Z--N	accu	-	+1	complément à 2 de accu -> accu
NEGconst	const	V	V	-	Z--N	const	-	+1	complément à 2 de const -> accu
NEGaddr	addr	V	V	-	Z--N	DATA(addr)	-	+1	complément à 2 de DATA(addr) -> accu
INCaccu	-	V	V	-	ZC-N	accu	-	+1	accu + 1 -> accu
INCaddr	addr	V	V	-	ZC-N	DATA(addr)	-	+1	DATA(addr) + 1 -> accu
DECaccu	-	V	V	-	ZC-N	accu	-	+1	accu -1 -> accu
DECaddr	addr	V	V	-	ZC-N	DATA(addr)	-	+1	DATA(addr) - 1 -> accu
SETC	-	V	-	-	-C--	-	-	+1	1 -> C
CLRC	-	V	-	-	-C--	-	-	+1	0 -> C
TRFNC	-	V	-	-	-C--	-	-	+1	N -> C
BZ0	addr	-	-	-	-	-	-	+1 / addr	si Z = 0 alors addr -> PC
BZ1	addr	-	-	-	-	-	-	+1 / addr	si Z = 1 alors addr -> PC
BC0	addr	-	-	-	-	-	-	+1 / addr	si C = 0 alors addr -> PC
BC1	addr	-	-	-	-	-	-	+1 / addr	si C = 1 alors addr -> PC
BV0	addr	-	-	-	-	-	-	+1 / addr	si V = 0 alors addr -> PC
BV1	addr	-	-	-	-	-	-	+1 / addr	si V = 1 alors addr -> PC
BN0	addr	-	-	-	-	-	-	+1 / addr	si N = 0 alors addr -> PC
BN1	addr	-	-	-	-	-	-	+1 / addr	si N = 1 alors addr -> PC
BRA	addr	-	-	-	-	-	-	addr	addr -> PC
NOP	addr	-	-	-	-	-	-	+1	-